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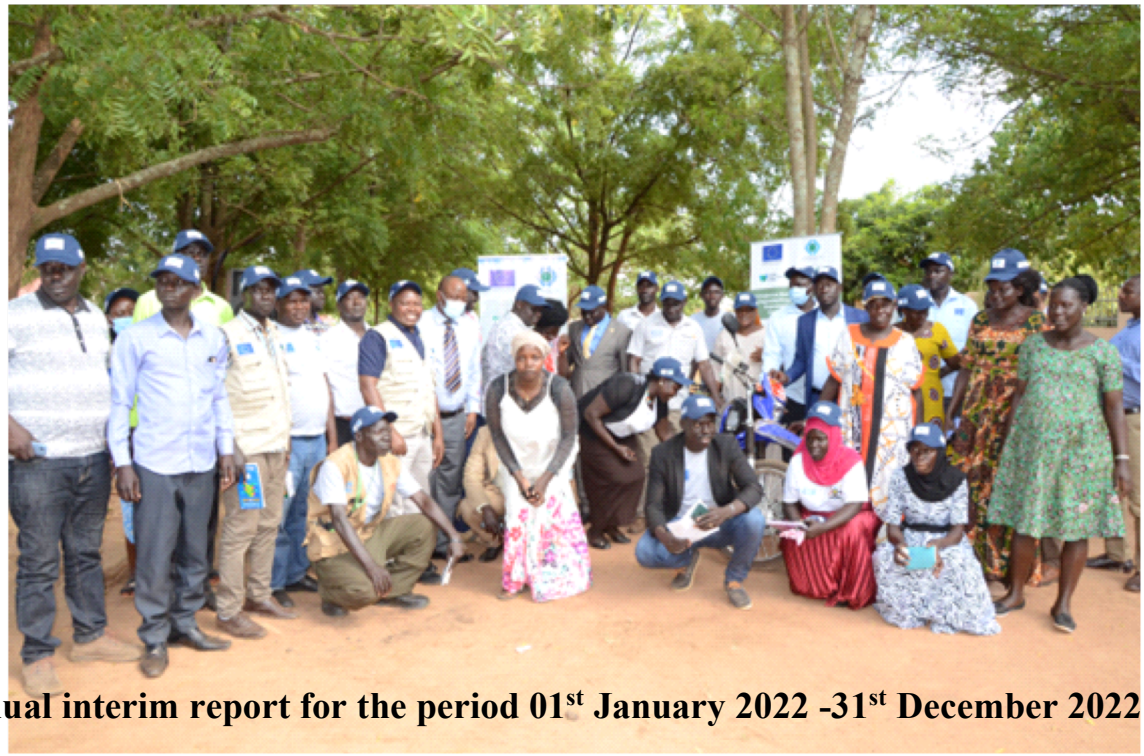
RESTORING AND CONSERVING DEGRADED FRAGILE ECOSYSTEMS FOR IMPROVED COMMUNITY LIVELIHOODS AMONG THE REFUGEE AND HOST COMMUNITIES OF WEST NILE AND THE MID-ALBERTINE RIFT

Action Grant No. T05-EUTF-HOA-UG-83-02



Annual interim report for the period 01st January 2022 -31st December 2022

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Wildlife Conservation Society

NatureUganda

eco Ecological Christian Organisation

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List of Acronyms

AF	Agroforestry
AMELAF	Activity Monitoring Evaluation Learning Adaptation Framework
CAO	Chief Administrative Officer
CAP	Community Action Plan
CBEWs	Community Based Extension Workers
CBO	Community Based Organisation
CCA	Community Conservation Agreements
CFR	Central Forest Reserve
CR	Critically Endangered
CSA	Climate Smart Agriculture
CSO	Civil Society Organisation
DD	Data Deficient
DFS	District Forestry Services
DLG	District Local Government
DNRO	District Natural Resources Officer
DQA	Data Quality Assurance
ECO	Ecological Christian Organisation
ESMF	Environment and Social Management Framework
ESSS	Environmental and Social Safeguard Standards
EU	European Union
EUD	European Union Delegation
FY	Financial year
GRM	Grievance Redress Mechanism
Ha/ha	Hectare
IP	Implementing Partner
KAP	Knowledge Attitude and Practises
LFR	Local Forest Reserve
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
MARR	Mid Albertine Rift Region
MoU	Memorandum of Understanding
MWE	Ministry of Water and Environment
NFA	National Forestry Authority
NGO	Non-Governmental Organization
NU	Nature Uganda
OPM	Office of Prime the Minister
PC	Project Coordinator
PCR	Project Completion report
RDC	Resident District Commissioner
RED	Responding to Increased Environmental and Natural Resources Degradation in the Refugee Hosting Districts of Uganda
SC	Settlement Commandant
SDA	Subsistence Daily Allowance

SLM	Sustainable Land Management
SMART	Spatial Monitoring and Reporting Tool
SMEs	Small and Medium Entrepreneurs
TESSA	Toolkit for Ecosystem Services Site-based Assessment
ToC	Theory of Change
ToTs	Training of Trainers
UBF	Uganda Biodiversity Trust Fund
UNHCR	United Nations High Commission for refugees
UWA	Uganda Wildlife Authority
WCS	Wildlife Conservation Society
WNR	West Nile Region

1. Action Description

#	Parameter	Data
1.1	Title of the action	**Restoring and conserving degraded fragile ecosystems for improved community livelihoods among the refugee and host communities of West Nile and the mid-Albertine Rift**
1.2	Name of Coordinator of the Grant Contract	Uganda Biodiversity Trust Fund (UBTF)
1.3	Name and title of the contact Person	Ivan Amanigaruhanga, Executive Director
1.4	Name of Beneficiaries and Affiliated Entities in the Action	1. Uganda Biodiversity Trust Fund (UBF) 2. Ecological Christian Organisation (ECO) 3. Nature Uganda (NU) 4. Wildlife Conservation Society (WCS)
1.5	Title of the Action	Restoring and conserving degraded fragile ecosystems for improved community livelihoods among the refugees and host communities of West Nile and the mid-Albertine Rift.
1.6	Action Grant No.	T05-EUTF-HOA-UG-83-02
1.7	Start date and End date of the reporting period	1st January 2022 and 31st December 2022
1.8	Target Country	Uganda
1.9	Final Beneficiaries &/or target groups	Refugees; Local Communities in the target areas, District Local Governments; National Forestry Authority; Uganda as a nation; and the global community. **The target groups include landowners and residents within the 15km buffer from the refugee settlements; and Vulnerable special groups (Women, Elderly, youth, and the physically handicapped).**
1.10	Country in which the activities take place	The Action is implemented in Uganda, targeting refugees and refugee host communities in the refugee hosting districts of Terego and Yumbe in the West Nile Region (WNR); and Kamwenge, Kikuube, and Kyegegwa in the Mid-Albertine Rift Region (MARR).
1.11	Action duration	**48 months**

2. Assessment of Implementation of Action Activities

2.1 Executive summary

A consortium composed of Uganda Biodiversity Trust Fund (UBF), Wildlife Conservation Society (WCS), Nature Uganda (NU), and Ecological Christian Organisation (ECO) is implementing a European Union funded project titled *"Restoring and conserving degraded fragile Ecosystems for improved community livelihoods among the refugee and host communities of West Nile Region and the Mid-Albertine rift."* The project began in December 2020 and is anticipated to end in December 2024. The project is part of the larger EU Action: "*Responding to Increased Environmental and Natural Resources Degradation in the Refugee Hosting Districts of Uganda (RED)." whose aim is to* address the impacts of rapid population growth on the environment, natural resources, and the livelihoods of the refugees and refugee hosting communities,

resulting from continuous inflow of refugees. The project's overall objective is *improved livelihoods and ecosystems resilience to the impacts of refugees and climate change in refugee hosting landscapes.*

The project has three targeted outcomes, namely:

1. Degraded forests, wetlands, savannah woodlands & other fragile ecosystems impacted by human activities in refugee hosting districts restored.
2. Landowners in refugee host communities supported to establish agroforestry enterprises and adopt Sustainable Land Management (SLM) practices.
3. Capacity of Local Governments (LG), Civil Society Organisations (CSOs), private sector companies, and local communities for effective uptake of climate change mitigation and environmental conservation measures strengthened.

This annual report gives the project performance for the financial year 2022. It is the second annual report since the signing of the project contract on December 7th of, 2020 between UBTF (coordinator) and the EU (contracting authority). The report presents undertakings, achievements against the targeted outputs, and lessons learned. The European Union, delegation in Uganda approved the change of reporting period originally starting from 8th to 7th December each year, to follow the calendar year.

Among others, the project has a) Mobilized and sensitized communities and farmers to adopt practices to build the resilience of agriculture and market access against climate change hazards and sustaining agricultural production; b) trained technical extension teams to provide extension service to ultimate beneficiaries of the project; c) equipped ultimate beneficiaries with knowledge and skills to integrate practices for building the resilience of agriculture to climate change and restoring agricultural productivity; d) Prepared and implemented plans to restore degraded wetlands; e) supplied inputs and facilitated activities to restore degraded and depleted natural resources including Central Forest Reserves and woodlands with desirable indigenous tree species. Local partners have been engaged in restoration activities, and platforms have been formed to enhance sharing of information.

The above interventions have resulted into:

- Planting and natural regeneration of 353 hectares of two degraded and deforested patches within the 15 km buffer from refugee settlements located in the Central Forest Reserves (CFR) of Mt Kei in Yumbe and Bugoma in Kibuube districts.
- Planting and natural regeneration of 711.6 hectares of small and medium woodlands scattered in farmlands outside the refugee settlements planted with indigenous tree species.
- 395 hectares of wetland are expected to be restored in the districts of Kamwenge (Rushango & Kajororo wetlands), Kyegegwa (Komuchwezi & Kyakatwanga) and Terego (Imvetre stream) based on concrete pillars installed on the demarcated wetland boundaries. This will however depend on stoppage of encroachment and destructive activities by the responsible districts as well as restoration activities carried out.
- 542 Hectares of woodlots were established to provide livelihoods (mainly fuelwood to reduce pressure from natural forests and woodlands) to the host communities and refugees in the settlements of Bidibidi, Imvepi, Rhino Camp, and Kyangwali.
- NFA being equipped with Twenty-one (21) Android phones, for the purpose of enhancing forest law enforcement and protection in the West Nile range targeting a total of nine (9) CFRs in West Nile Range (WNR) where the action/project is supporting the implementation.
- District Local Governments equipped to actively participate in monitoring and reporting about the project.
- Active participation of the Office of the Prime Minister (OPM) at the headquarter and settlement level fully involved in woodland restoration activities.
- Over 600 local people employed in woodlot establishment of which 62% were refugees.

- 38 Local government and responsible agencies staffs and ultimate beneficiaries equipped with knowledge and skills to integrate SLM/CSA/AF practices to restore agricultural productivity in degraded farmlands and build resilience of agriculture to climate change in refugee hosting communities.

2.1.1 Summary of achievements

Table 1 present the summary of physical outputs delivered by end of 2022. Section 2.2.1 and Annex 38, provide some details explaining the performance on each project output during the period under review.

Table 1: Summary of achievements of project outputs by 2022

#	Output	Life of project target	Partners and life of project targets.		Achievements on targets by year			Variance (Actual minus life of project)
			Name	**Target**	**2021**	**2022**	**Total**	
1.1	Ecological baseline on selected forests, wetlands, and savannah woodlands	1 Report	WCS	1 report	0	1	1	0
	Socio-economic baseline data on the targeted communities recorded	1 Report	WCS	1 report	0	1	1	0
1.2.1	Degraded forests restored and conserved	353 hectares planted with indigenous trees	WCS	353	0	353	353	0
1.2.2	Degraded woodlands restored and conserved	1744 hectares assisted to regenerate and or planted with indigenous trees	WCS	870	0	226.5	226.5	- 643.54
			ECO	581	0	484.1	484.1	-96.9
			NU	293		35	35	- 258
		600 beehives installed in selected natural woodlands as an incentive for their conservation	ECO	600	0	350	350	-250
1.2.3	Degraded wetlands and riverbank ecosystems restored and conserved	400 hectares planted with wetland species	NU	400	0	5	5	-395
		50 Kms of boundaries of targeted wetland ecosystem demarcated by installation of concrete pillars.	NU	50	0	39	39	-11
1.3	Law enforcement officers of NFA and districts, plus community-based monitors for the targeted ecosystems supported.	30 of NFA staff trained in law enforcement	WCS	30	0	25	25	- 5
		Number of groups of law enforcement initiatives (including collaborative management arrangements) formed and supported. to protect and regulate access to resources from targeted ecosystems	NU	0	0	0	0	
		26 staff of responsible bodies equipped with monitoring gadgets	WCS	26	0	26	26	0

1.4	Management and restoration plans developed and implemented	Management and restoration plan for targeted restoration sites developed	WCS	2	0	2	2	0
			NU	5	0	4	4	- 1
1.5	Management plans and Community Conservation Agreements between district LGs and communities for protecting targeted ecosystems developed 1.4 and 1.5 seem to be saying the same thing? Could we clarify by specifying which ecosystems we are referring to? Otherwise we merge them?	5 MoUs with district local governments developed	UBF	5	5	0	5	0
		MoUs with landowners developed	NU	0	0	0	0	
		Conservation agreements developed and signed with communities	ECO	5	0	5	5	0
			NU	3	0	0	0	-3
1.6	National Guidelines for selection of new refugee sites, monitoring, and measurement of the effectiveness of mitigation measures developed	Nationally adopted guidelines for planning and managing refugee settlements in an environmentally responsive manner	WCS	1	0	0	0	- 1
2.1	Grassroots NGOs, CBOs and Small and Medium Enterprises (SMEs) operating in the refugee hosting districts strengthened to support landowners and households to adopt Sustainable Land Management (SLM), Climate Smart Agriculture (CSA), and Agroforestry (AF) practices.	10 grass root NGOs, CBOs and SMEs staff with knowledge and skills in SLM practices	UBF	10	0	0	0	- 10
		10 grass root NGOs, CBOs and SMEs staff trained on SLM	UBF	10	0	0	0	- 10
2.2	Households are knowledgeable and skilled in SLM, CSA, and Agroforestry practices	420 Hectares of demonstration gardens established	WCS	220	0	6	6	- 214
			ECO	147	0	96	96	- 51
			NU	74	0	85	85	+ 11
		Households trained in CSA, SLM and agroforestry	WCS		0	1987	1987	
			ECO		0	224	224	
			NU		0	185	185	
2.3	Woodlots to increase tree cover in the landscapes to	182 Hectares woodlots established with fuel wood tree species	ECO	182	0	186	186	+ 4

	provide wood products established	360 Hectares of woodlots established in refugee settlements	UBF	360	0	223.5	223.5	- 136.5
			NU	35	0	35	35	0
2.4	Agroforestry enterprises, SLM and CSA practices established at landscape level	4580 Hectares under agroforestry / SLM / CSA practices	WCS	2272	0	0	0	- 2272
			ECO	1520	0	0	0	- 1520
			NU	765	0	0	0	- 765
		21 tree nurseries supported with irrigation infrastructure	UBF	21	0	0	0	- 21
2.5	Farmers and private sector capacity to apply appropriate technologies to improve post-harvest handling, storage and value addition built	200 farmers trained in good post-harvest handling practices and value addition.	UBF / EC	200	0	0	0	- 200
		8 private sector entrepreneurs trained to promote value addition and value chains	UBF	8	0	0	0	- 8
		8 value chain platforms formed to link value chain actors.	UBF	8	0	0	0	- 8
		15 Youth and women groups supported to enhance income generation	UBF	15	0	0	0	- 15
3.1	Grassroot NGOs, CBOs operating in targeted refugee hosting districts provide support to landowners and households to implement climate change and environmental mitigation measures	Two guidelines / measures on climate change adaptation, mitigation, environmental conservation and protection, community based natural resource management for use developed	WCS	2	1	1	2	0
		Local (LGs), Civil Society Organizations (CSOs) and private sector company staff trained	WCS	30	0	32	32	+2
3.2	Community members sensitised and trained in conservation and restoration of natural ecosystems.	Community members trained in conservation and restoration of natural ecosystems	WCS		0	309	309	
3.3	District Natural Resources Staff / change agents trained and equipped to provide extension services targeting climate change mitigation and adaptation activities.	5 computers to districts	WCS	5	0	5	5	0
		5 motorcycles to districts	UBF	6	0	6	6	0
3.4	Strengthen capacity of local level private	8 Private sectors supported with appropriate equipment	UBF	8	0	0	0	- 8

	sector and farmers with appropriate value addition and post-harvest handling technologies	for value addition and post-harvest handling						
		4 selected Agricultural value chains supported	UBF	4	0	0	0	- 4
3.5	A functional network & collaborative mechanism.	5 linkages and networks established by the project with CBOs. NGOs, SMEs and other networks	All	5	2	1	3	-2
		8 joint collaborative activities undertaken	All	8	0	1	0	-7
		12 stakeholders' meetings held	UBF	12	1	5	6	- 6
3.6	Opportunities for Stakeholder investment in activities responding to impacts of refugees on environment and livelihoods documented	One report on identified investment opportunities profiled	WCS	1	0	0	0	- 1
		One report on stakeholders investing in SLM, CSA, AF, Woodlot establishments, Postharvest handling, Value addition, etc	WCS	1	0	0	0	- 1

2.1.2 Summary of Beneficiaries

Table 2 presents a summary of the project beneficiaries as by close of 2022. The beneficiaries are recorded against the project implementing partner. Annex 2 (a PDF data form and Excel databases on beneficiaries) presents a sample list of beneficiaries extracted from the database in which the beneficiaries for different interventions are stored for reference and for use to carry out systematic monitoring.

Table 2: Summary of project beneficiaries reached by end of 2022 by each of the implementing partners

Partner	Districts	Female	Male	Total
WCS	Terego	240	280	520
	Yumbe	384	577	961
	Kamwenge	3	2	5
	Kikube	450	280	730
	Sub Total	**1080**	**1140**	**2220**
UBF	Terego	16	1	17
	Yumbe	27	4	31
	Kamwenge	11	1	12
	Kikube	8	1	9
	Kyegegwa	5	4	9
	Sub Total	**67**	**11**	**78**
NU	Terego	625	380	1005
	Kamwenge	137	133	270
	Kyegegwa	469	242	711
	Sub Total	**1231**	**755**	**1986**
ECO*	Terego	607	74	694
	Yumbe	448	73	532
	Sub Total	1055	147	1226
Total		**3433**	**2053**	**5510**

* The ECO total include institutional beneficiaries

Full-scale implementation focusing on targeted deliverables was accelerated in 2022 leading to achievements shown in table 1. Even where physical deliverables have not been registered in the table, the processes to deliver the physical deliverables in 2023 were almost complete by end of the year. The major area that had poor deliverables relates to outcome 2. However, the project has decided to contract local partners to support the project as a strategy to deliver the low outputs under scaling up Sustainable Land Management (SLM), Agroforestry (AF), and Climate Smart Agriculture (CSA) practices.

Based on the 2022 implementation momentum and the strategy put in place, it is expected that by end of 2023, the project is expected to be above 75% on all its planned target. This is on the assumption that there will be no serious environmental and or disease epidemic issues to disrupt the momentum.

2.1.3 Project contributions to the local, national, regional and global development agendas

At the local level, the above achievements are reducing on the degradation registered in the regions that was taking place within the 15 km radius from the refugee camps, within the hosting districts. A study by IBRD/ World Bank and FAO (2020) recorded that between 2014-2018, 64,660 ha of existing ecosystems (forests, wetlands, savannah woodlands and other fragile ecosystems) had been lost because of refugee influx in the project host districts. Similarly, World Bank and FAO (2020) stated that 64,272 ha of tropical forest, wetlands and woodlands had been degraded and lost between 2001-2017 within the 15 km buffer in the settlements of Kikuube, Kamwenge, and Kyegegwa Districts in Western Uganda.

The achievements in restoration activities are on course towards stabilizing the Above Ground Stock (AGB) in the targeted project areas that was said to have reduced to 2,183,132 tonnes and to 2,024,496 tonnes within the 15 km buffer in the target districts in West Nile and the Albertine Rift respectively (IBRD/ World Bank and FAO, 2020).

Other direct outcomes and impacts within the project areas include increased vegetation cover that contributes to the trapping of water and reduction of soil and water losses leading to improved environmental and ecosystem services. The increased vegetation will enable rural households to have sustainable access to natural resource products such as poles, fuel wood, and thatch for houses.

At the national level, this year's project achievements contribute to the Water and Environment Sector Response Plan for Refugees and Host Communities in Uganda (2019). The project achievements further contribute directly to the third National Development Plan (NDPIII) that aims at increasing the percentage of land area covered by forests to 15%, and land area covered by wetlands to 9.57% by 2024/25.

The project contributions to the NDP III also contribute to the achievement of the East African Community Vision 2050 goal to attain sustainable utilisation of natural resources, environment management and conservation with enhanced value addition; and the African Agenda 2063 goals 1 and 7. Towards the global commitment, the project achievements contribute to Uganda's commitment to the Bonn Challenge of restoring 2.5 million hectares of forest by 2035. It also contributes to the achievement of Sustainable Development Goals 13, 14, and 15; the Ramsar Convention 4th strategic agenda (2016-2024), and the UNFCCC target of zero net carbon emission by 2050.

Adjustments have been made to the log frame by adding new indicators and one activity as follows.

- Output indicator 1.2.4: Number of beehives installed to enhance protection of the conserved woodlands.
- Output indicator 1.3.5. Number of Kms of boundaries of targeted wetland ecosystem demarcated by installation of concrete pillars.
- Output indicator 1.4.2: Number of Community-Based and private Wetlands Management /restoration Plans implemented.
- Output indicator 2.4.2: Number of tree nurseries with established irrigation infrastructure to produce quality materials throughout the year.

- Output indicator 2.5.4: Number of youth and women groups supported to enhance income generation.
- Activity 2.4.2. Support 15 Youth and women groups activities to enhance income generation.

The rest of the adjustments are minor edits to make statements clearer. Editing was done as follows and changes reflected in the Logframe under section 2.3.

- Output 1.3 to read as law enforcement officers of NFA and districts, plus community-based monitors for the targeted ecosystems supported.
- Indicator 1.3.2 to read as "Number of groups of law enforcement initiatives (including collaborative management arrangements) formed and supported to protect and regulate access to resources from targeted ecosystems".
- Output 2.4 to read as Agroforestry enterprises, "SLM and CSA practices" established at landscape level.

2.1.4 Lessons and Challenges

I. Lessons learned

The project has learnt that activities leading to actual planting of trees for restoration of woodlands in the individual owned land encompass long processes. For example, to restore 974 Ha of woodlands, the project carried out general awareness raising of communities, identification and registration of interested individual community members with woodlands for planting indigenous tree species; inviting applications to restore the dedicated parcels of woodland sites; mapping and verification of the land and documentation of species of interest; determination of required inputs and procurement inputs. This process however leads to having very many beneficiaries with small, restored woodlands spread over wide landscapes. Connectivity for impact on ecosystem services will take very long to realize. To mitigate that, the project, in the subsequent years will use the small woodlands of indigenous trees as nuclei for scaling up at landscape level.

Planting trees for woodland restoration requires interventions to grow and manage the trees until they have attained sizes to escape damage by fires and domestic animals. This implies that carrying out activities to protect the seedlings and young trees, will initially reduce the existing vegetation for it to recover naturally in the later periods after planting. Restoration of woodlands focussing on the capacities of the farmers to plant and manage, as stated above, leads to scattered small pockets of wooded woodlands. In the West Nile region, majority of the owners of the larger woodlands to restore have limited financial capacities to plant and manage the planted trees and have not prioritized this intervention. Most landowners in the region can manage between 0.2023 Ha (½ acre) to 1 Ha (2.47 Ha). The project has tested engaging local partners to support the owners of large woodlands. These, with effective supervision, have shown potential to plant and manage larger woodlands in a short time. The challenge is on the required financial resources to support this initiative and inclusion of supervision in the project designs beyond the project period. Office of the Prime Minister and the owners of the planted trees recommend for supporting not only planting but most importantly growing the trees to a height they are able to escape damage from animals and fires.

The project learnt that there are two approaches to use in wetland management i.e., the active and the passive approach. The active approach involves physical intervention in which humans directly control site processes to restore, create, or enhance wetland systems and methods include re-contouring a site to the desired topography, changing the water flow with water control structures (i.e., weirs or culverts), intensive planting and seeding, intensive non-native species control, and bringing soils to the site to provide the proper substrate for native species. Most appropriate when a wetland is severely degraded or when goals cannot be achieved in any other way, as is the case with wetland creation and most enhancement. While the passive approach focuses on renewing wetland functions to remove the factors causing wetland degradation or loss and let nature do the work of re-establishing the wetland. Natural regeneration of wetland plant communities, natural decolonization by animals, and re-establishment of wetland hydrology and soils. Most appropriate when the degraded site still retains basic wetland characteristics, and the source of the degradation is an action that can be stopped. The benefits are low cost and a high degree of certainty. During the development of wetland restoration plans, encroachment and unknown

wetland boundaries were highlighted as the major contributors to wetland degradation and the most effective intervention mechanism was identified and fronted by the respective districts was the need to demarcate the wetland boundaries with concrete pillars so that the wetland boundaries are made known which in turn reduces encroachment while allowing for natural regeneration to take place.

II. Key challenges encountered

The key challenges faced during this reporting period and the corresponding mitigation measures are presented in Table 3. The challenges are aligned with the outputs that were affected and hence caused low deliverables. Beyond these operational challenges, the project experienced attitude and behavioural problems from local authorities. The local authorities have not effectively and independently participated in the monitoring and supervision of their project. Beneficiary farmers demand financial support in order to manage their investments. The project plans to engage the local authorities and beneficiaries to develop sustainability plans to ensure a smooth exit by implementing partners.

Table 3: Key challenges and mitigation measures

#	Challenge faced	Activity impacted	Mitigation measures
1	Prolonged drought especially in the West Nile region leading to delayed planting of trees.	1.2.1, 1.2.2, 1.2.3 2.2.2, 2.3.1	• The project will continue to promote the use of hydrogel especially with the tree planting projects to ensure moisture availability during the dry spell. • The project will also seek to take advantage of the first planting season, so that the establishments are not exposed to a prolonged dry spell
2	Limited local capacity to supply quality planting materials.	1.2.1, 1.2.2, 1.2.3 2.2.2, 2.3.1	• The project will adopt the practice of initiating supply requests on time, so that the local suppliers have ample time to prepare the required supplies. In addition, the project plans to build the capacity of local suppliers e.g owners of selected tree nursery beds by supporting them with solar irrigation infrastructure so that there are reliable and timely supplies of quality seedlings throughout the year
3	Serious fire outbreaks that are said to be a cultural practice and sometimes an act of malice.	1.2.1, 1.2.2, 2.2.2, 1.2.3 2.3.1	• The project will integrate budgets for managing fires e.g budgets to support strip weeding and establishment of boundary and in-between fire lines. • The project will take advantage of first planting season, so that by the time the fires are prevalent, tree establishments have attained a growth stage that's less susceptible to fire outbreaks
4	Ebola outbreak in Western Uganda hindering activities in the region.	1.2.3,	• The project Identified and engaged local partners to support the delivery of key activities at community level, where movements were permissible.
5	Pest infestations such as termites feeding on the planted seedlings.	1.2.1, 1.2.2, 1.2.3, 2.2.2, 2.3.1	• The project will integrate organic and inorganic methods to manage termites. • The project will also encourage planting tree species that are less susceptible to termites' damage
6	Hostility from wetland neighbouring communities during wetland demarcation exercise.	1.2.3	The project will apply more active and innovative ways of engaging ad using local political leaders during sensitization, awareness, and other key project activities.
7	Scattered encroachment in the CFRs (Mt Kei and Bugoma) resulting in unending illegal activities.	1.2.1	• The consortium will continue to strengthen and engage NFA and the Local Governments (LGs) most especially the politicians, to sensitize the encroachers on the social-economic, environmental and cultural values of these ecosystems. • Absorbing the encroachers in the implementation of the activities and also create alternative IGAs.
8	High expectation from the district local staff.	All activities	• The consortium will continue to hold consultative meetings with the district officials to understand how they can be better engaged.

2.1.5 Procurement of assets / equipment

In the implementation period for 2021 and 2022, the project has procured a number of goods and services. The assets and equipment registered are presented in annex 3. In terms of services, the project procured and engaged.

1. Three (3) vehicles, one for each of the three partners UBF, ECO & NU
2. Eight (8) motorcycles five (5) to the district, one (1) for UBF and two (2) for WCS
3. Procured fourteen (14) laptops 5 by NU, 7 by WCS and 2 by UBF
4. Procured two (2) Cameras
5. Video conferencing equipment
6. Procured three Projectors

Other major procurements include;

7. Seedlings used to restore forests, woodlands, and wetlands.
8. Seedlings used to establish woodlots and to implement Agroforestry, and Sustainable Land management.
9. Supply of reinforced concrete pillars installed on selected spots of selected wetlands.
10. Service providers to support planting of trees in central forest reserves, and woodlot establishment for woodland restoration.
11. Visibility materials like signposts, banners.

The project has also recruited new staff for new positions that were approved in the revised/adjusted T05-EUTF-HOA-UG-83-02 budget.

2.1.6 Financial summary and forecast

In 2022, the project was disbursed with € 1,038,356.5This amount was added to the € 317,862.75 brought forward from 2021 making a total of € 1,356,219.25 funds available for expenditure in 2022. Table 4 presents a summary of how the disbursed funds were shared and utilized by the consortium members in 2022. The table also includes the forecast for 2023. A detailed financial report for January-December 2022 for reference of how the funds were utilized is attached as annex 4.

Table 4. Summary of financial performance for 2022 and forecast for 2023

Implementing partner	*2022 approved budget (€)	*Expenditure (€)	Burn rate (%)	Carried forward to 2023 (€)	**Estimate for 2023 (€)
UBF	456,006.13	360,804.51	79%	108,723.54	633,904.43
WCS	422,587.35	338,199.24	80%	84,388.11	219,465.27
ECO	229,200.27	164,557.6	72%	64,642.67	350,042.88
NU	187,809.33	184,318.99	63%	3,490.34	459,991.57
Total	**1,295,603.08**	**1,047,880.34**	**80%**	**261,244.66**	**1,663,404.15**

**The approved budget and expenditure figures above include both EU contribution and co-financing*

*** includes the carried forward*

Total expenditure for the period from both EU funds and co-financing is € 1,047,880.34. Total co-finance from all partners is € 76,375.69 and expenditure from EU is 971,504.65. This total expenditure accounts for 71% of the total expenditure.

2.1.7 Co-financing

Since 2021 up to the end of 2022, the implementing partners have confined the project as shown in table 5 below.

Table 5. Co-financing of the project since 2021

Partner	Source	Year 1 – Amount	Year 2 – Amount	Total Amount Cofinance to-date (€)
UBF	USAID	7,675.31	38,578.59	46,253.90
WCS	Shell and WCS	63,243.86	27,114.19	90,358.05
ECO	GMZ & Maltiza International	6.767.93		6,767.93
NU	Nature Uganda	13,711.87	10,682.90	24,394.77
	Total	**91,398.96**	**76,375.69**	**167.774.65**

*Note: We noted that the EU contribution out of the total eligible expenditure recorded by EU in the year 1 financial report is 85% of the total expenditure. i.e 609,943.86 (717,581.01*85%). However, the actual amount spent out of EU funding was € 626,182 and € 91,398.97 was spent out of co-financing. The co-beneficiaries did not raise the whole 15% that is required for co-financing.*

However, as the consortium partners struggled to co-finance the project. They are facing challenges of achieving the co-financing requirement. The funding available that would be used to co-finance is in areas that are out the implementation area. The partners also have had some of their funding projects that they would have used to co-finance come to an end.

2.2 Results and Activities planned for the reporting period—January 1st to December 31st, 2022

2.2.1 Summary Assessment of results

Following the government decision to partially re-open the country from the stressful COVID-19 period and the associated lockdowns in August 2021, a review of plans to integrate the delayed activities was done and full-scale field level awareness rising, and project implementation started in February 2022. This year more focus has been on implementation of processes and actual physical delivery of major logframe outputs. Table 6 presents the performance against the output indicators and the self-assessment on the achievements.

Table 6: Project progress summary for the reporting period

<table>
<tr><th>Outcomes and Outputs</th><th>Target outputs 2022</th><th>Achievement of Results Against targets</th><th>Assessment of Results against Planned Activities</th></tr>
<tr><td colspan="4">Outcome 1: Degraded forests, wetlands, savannah woodlands & other fragile ecosystems impacted by human activities in refugee hosting districts restored.</td></tr>
<tr><td>1.1.a Socio-economic surveys carried out.
1.1.b Ecological surveys carried out</td><td>1.1.1 One (1) socio-economic survey report
1.1.2 One (1) Ecological survey report</td><td>1.1.1 and 1.1.2: The two reports were completed.</td><td>1.1.1 and 1.1.2: The two outputs were completed. This is achieved 100%. The reports contain baseline data covering the project regions. The baseline reports are provided as Annex 5 and 6 of this report.</td></tr>
<tr><td rowspan="3">1.2. Targeted, degraded ecosystems planted with site-specific species and or assisted to regenerate naturally</td><td>1.2.1: 353 hectares of forests enriched and assisted to regenerate.</td><td>1.2.1: 353 hectares was achieved.</td><td><u>1.2.1: Forests</u>: 100% of the planned degraded and deforested 353 hectares to plant / restore by 2024 was achieved. The restoration planting and assisted natural regeneration with native tree species based on the diagnostic study was done in degraded and deforested patches of Bugoma and Mt Kei CFRs located in the districts of Kikuube (71 ha) and Yumbe (282 ha) respectively. In FY 2023, the emphasis will be on the maintenance of the planted areas, i.e., beating up, as well as fire management to enable the planted trees to grow.</td></tr>
<tr><td>1.2.2: 1744 hectares of woodlands restored.</td><td>1.2.2: 711.6 hectares was achieved during the reporting period.
<table><tr><th>District</th><th>Number of beehives</th><th>Beneficiaries</th></tr><tr><td>Yumbe</td><td>125</td><td>7</td></tr><tr><td>Terego</td><td>225</td><td>12</td></tr><tr><td></td><td>350</td><td>19</td></tr></table></td><td><u>1.2.2: Woodlands</u>: 82% of the planned 870 Ha to be achieved in 2022 was achieved by planting 315.65 ha in Yumbe and 395.55 ha in Terego. A total of 711.6 Ha was planted as small woodlands scattered over a large landscape within the 15 km buffer because of limited farmers capacities in Yumbe and Terego districts. Farmers did not have enough household labour to distribute between agricultural activities and tree planting or management which often takes place at the same time. This left many planted woodlands under dense vegetation and therefore under threats from fires.
In addition, a total of 350 beehives were delivered to 18 male farmers and 1 institution that own natural woodlands to enhance their conservation. Terego received 225 beehives where 11 were received by male headed households and 1 institution while Yumbe received 125 beehives by 7 male headed households.</td></tr>
<tr><td>1.2.3: 400 hectares of wetland and riverbank ecosystems restored</td><td>1.2.3: 5 Hectares planted in 2022. Area identified for restoration is as follows:
<table><tr><th>District</th><th>Wetland</th><th>Area (ha)</th></tr><tr><td></td><td></td><td></td></tr></table></td><td><u>1.2.3 Wetlands</u>: Against the target of 230 hectares to be planted with indigenous tree species to enhance restoration in selected wetlands, only 5 Ha were planted. However, boundary demarcation, as part of restoration activities started for the wetlands of Komuchwezi and Kyakatwanga in Kyegegwa district, Rushango and Kajororo in Kamwenge district. A total of 310 reinforced concrete pillars were</td></tr>
</table>

<table>
<tr><th>Outcomes and Outputs</th><th>Target outputs 2022</th><th>Achievement of Results Against targets</th><th>Assessment of Results against Planned Activities</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td rowspan="2">Kyegegwa</td><td>Komuchwezi</td><td>78</td></tr>
<tr><td>Kyakatwanga</td><td>12</td></tr>
<tr><td rowspan="2">Kamwenge</td><td>Kajororo</td><td>150</td></tr>
<tr><td>Rushango</td><td>150</td></tr>
<tr><td>Terego</td><td>River Imvetre</td><td>5</td></tr>
<tr><td></td><td>Total acreage conserved</td><td>395</td></tr>
</table>
</td><td>manufactured and installed on the boundaries of the selected wetlands. Based on the demarcation done, it is postulated that a total of 390 Ha will be restored passively once the destructive activities are stopped by the districts. Demarcation of wetland boundaries was prioritized by the project districts as the most effective approach for restoration. In this case, reinforced concrete Pillars were installed at pressure points of the degraded wetlands. Enrichment planting of 5 hectares with 2325 indigenous tree species of Afzelia africana, Mahogany (Khaya grandfolia), Mvule (Milicia excelsa), Musizi (Maesopsis eminii) tree species and bamboo was done along the banks of Imvetre stream/river in Terego District (Annex report 7).
Delays in wetland revegetation activities is attributed to delays by districts to stop illegal activities and pre-prolonged long processes that are a prerequisite to start of restoration.</td></tr>
<tr><td rowspan="3">1.3 Law enforcement for the targeted ecosystems strengthened (Protection of restored ecosystems)</td><td>1.3.1: Number of districts and local communities supported to open boundaries of targeted ecosystems.</td><td>1.3.1: Two (2) districts were supported to open boundaries of 4 wetlands: Kamwenge (Rushango and Kajororo) and Kyegegwa (Komuchwezi and Kyakatwanga).</td><td>1.3.1 The project supported Kyegegwa and Kamwenge DLGs to demarcate 390 ha of four wetlands. Demarcation was guided by MWE maps (under detailed activity 1.2.3) which shows the sizes of the wetlands, the degraded patches. In addition, baseline wetland assessments were done to help measure recovery of wetlands restored (Annexes 5,6, 7,8).</td></tr>
<tr><td>1.3.2 a): Number of staff of responsible bodies equipped with monitoring gadgets.</td><td>1.3.2 a): NFA was supported with twenty-one (21) smart phones</td><td>1.3.2 a): Twenty-one (21) Android phones with SMART were given to NFA to enhance forest law enforcement and protection (Annex 9). These phones equipped with SMART will enable NFA staff to capture data in real time while doing monitoring patrols and reporting for effective forest law enforcement and timely management decisions.</td></tr>
<tr><td>1.3.2 b): Number of NFA staff trained in law enforcement.</td><td>1.3.2 b): 24 staff of NFA were trained. Include 6 from Terego and 7 from Yumbe and 8 from the range office and headquarters.</td><td>1.3.2 b): Twenty-four (24) NFA field staff members, including forest patrol men were trained to use the Spatial Monitoring and Reporting Tool (SMART) an application for use in forest law enforcement and protection.</td></tr>
<tr><td>1.4 Management and Restoration plans developed</td><td>1.4.1. Number of management and restoration plans for targeted Forests for</td><td>1.4.1: Two (2) restoration and management plans for patches of two targeted CFRs (Mt Kei and Bugoma CFRs) under restoration were prepared.</td><td>1.4.1: Delivery of this project output is at 80% because:
a) Restoration plans for the 2 targeted forests were prepared (Annexes 8 and 9).
b) The management and restoration plan for Rushango, and Kajororo, in Kamwenge; and Kyakatwanga, Komuchwezi, and Oruchinga in Kyegegwa district were prepared and validated by the District Task force. Implementation</td></tr>
</table>

Outcomes and Outputs	Target outputs 2022	Achievement of Results Against targets	Assessment of Results against Planned Activities
	restoration sites developed.		started by purchase of reinforced pillars and installation at field level (Annexes 10,11,12, 13). c) Preparation of management and restoration plans for Yelulu wetland and R. Enyau in Terego district in West Nile region (WNR) was started on. Preparing management and restoration plans especially for encroached wetlands is slow because of the necessary lengthy process involving assessment of resource use to include in planning, sensitization of communities who are often hostile to evictions, and agreeing to the boundary locations.
1.5 Management plans and Community Conservation Agreements between district LGs and communities for protecting targeted ecosystems developed	**1.5.1.** Five (5) MoUs with DLGs developed.	**1.5.1.** All the Five (5) MoUs with DLGs were developed and signed.	**1.5.1.** All the Five (5) MoUs with the District Local Governments of Kamwenge, Kyegegwa, Kikube, Yumbe, and Terego were developed, negotiated and signed in year one.
	1.5.2: Number of MoU with landowners developed.	**1.5.2:** 459 individuals' MoUs for conservation of woodlands, establishment of woodlots and implementation of SLM/AF practices developed.	**1.5.2:** CCA or individual private MoU are management instruments for wetlands and woodlands where communities and individuals agree to protect them. They clearly spell out the roles and responsibilities of each party regarding the interventions the project is implementing. The target of 60 MoU for 2022 was achieved over and above by developing and signing 186 MoU (82 in Terego and 104 in Yumbe). A total of **459** households (F-52, M- 400 and Institutions- 07) were involved and offered a total of 675.8 Ha to restore woodlands and establish woodlots.
	1.5.3: Number of conservation agreements developed and signed with communities	**1.5.3:** Five (5) Community Conservation agreements (CCA) (2 for Yumbe and 3 for Terego) signed (Annex 14). 5 wetland management plans developed.	**1.5.3:** All the planned 5 CCA for 2022 were signed by the districts and Sub-Counties on behalf of the communities supported and witnessed by ECO. The agreements aimed at restoring and conserving selected woodlands and establishment of woodlots in Terego and Yumbe districts. 2 community groups were formed in the Yelulu wetland catchment area in Terego district and the CCA process started. Preparation of MoU for protection of wetlands and riverines will be concluded in 2023.
1.6 National Guidelines for selection of new refugee sites, monitoring, and measurement of the	**1.6.1:** A Nationally adopted document with guidelines for planning and managing Refugee settlements in an	**1.6.1:** Planned for 2023.	**1.6.1:** Planned for 2023.

Outcomes and Outputs	Target outputs 2022	Achievement of Results Against targets	Assessment of Results against Planned Activities
effectiveness of mitigation measures developed	environmentally responsive manner		
Outcome 2: Landowners in refugee host communities supported to establish Agroforestry (AF) enterprises and adapt Sustainable Land Management (SLM) practices			
2.1 Grassroots NGOs, CBOs and Small and Medium Enterprises (SMEs) operating in the refugee hosting districts strengthened for services delivery & implementation / uptake SLM, AF, Climate Smart Agriculture (CSA), & Woodlot establishment at landscape level	**2.1.1:** 10 grass root NGOs, CBOs, SMEs with knowledge and skills in SLM practises	**2.1.1:** Zero.	**2.1.1:** Although zero results were registered, the process to train more than 10 CSOs and Training of Trainers (ToTs) is at 75% because 32 CBOs and SMEs have been selected for training in SLM/CSA/AF practices and ToRs to acquire consultant(s) to carry out the activity in March 2023 was completed. The cause of delays was mainly due to delays to recruiting ToTs expected to be part of the training. The process to recruit these is underway.
	2.1.2: 10 grass root NGOs, CBOs and SMEs benefitting from project support	**2.1.2:** 12 CBOs and SMEs benefitted from the project activities.	**2.1.2:** The expected number of beneficiary-CSO was achieved over and above 100% because 7 CBOs and 5 SMEs were engaged in the restoration of woodlands and targeted forests. These were: 1. West Nile- Community Action for Rural Development (WN-CARD), 2. Dragon Agroforestry Program (DAF-PRO), 3. The Victims Relief Alliance (TVRA), 4. African Volunteers Association (AVA), 5. Letani Investment Group Ltd, 6. Alfdos Foresters Company Ltd, 7. Waiga Rashid, 8. ECO Forestry Service Ltd, 9. Aparaka Tree seeddling Nursery Operators Association 10. Buhimba Farmers Union, 11. African Alliance for Green Environment Limited 12. Mabira Tree Nursery Association and 13. Dankik Enterprises Limited. The last four were involved in restoration of formerly encroached patches of Mt. Kei and Bugoma CFRs while the rest were involved in woodlot establishment for

<table>
<tr><th>Outcomes and Outputs</th><th>Target outputs 2022</th><th>Achievement of Results Against targets</th><th>Assessment of Results against Planned Activities</th></tr>
<tr><td></td><td></td><td></td><td>woodland restoration within and in the peripheries of Kyangwali, Bidibidi, Imvepi, and Rhino Camp settlements.</td></tr>
<tr><td rowspan="2">2.2 Farmers / Households are knowledgeable and skilled in SLM, CSA, and Agroforestry practices</td><td>2.2.2: 420 Hectares of demonstration gardens established.</td><td>2.2.2: Regarding demonstrations, only 16 ha out of 420 ha were established.</td><td>2.2.2: Farmers were trained on boundary planting using hedgerows of Vetiver slips, Calliandra calorthysus and Sesbania seeds, spp; scattered agroforestry technology; construction of check-dams (Fanya juu fanya chini). The percentage of women who participated in the training was lower than that of men. Women participation was higher for SLM/AF activities than for woodland and woodlot activities. This is because the SLM and AF interventions are integrated on small farmlands where women have ready access and control (Annex 15).</td></tr>
<tr><td>2.2.3: Number of households trained in CSA, SLM and AF</td><td>2.2.3: 2445 (54.6% M, and 45.4% F) farmers were trained and sensitized.
<table>
<tr><th>District</th><th>M</th><th>F</th><th>Total</th></tr>
<tr><td>Terego</td><td>440</td><td>340</td><td>780</td></tr>
<tr><td>Yumbe</td><td>456</td><td>508</td><td>964</td></tr>
<tr><td>Kikube</td><td>438</td><td>263</td><td>701</td></tr>
<tr><td>Total</td><td>1334</td><td>1111</td><td>2445</td></tr>
<tr><td>%</td><td>54.6</td><td>45.4</td><td></td></tr>
</table></td><td>2.2.3: Establishment of large sized demonstrations as originally envisaged was not achieved because of the hosts' lack of adequate capacity to effectively manage them. By the end of this reporting period, the focus remained on very small season-based demonstrations of 0.5 acres (0.202 Ha) to 1 Ha recommended by MAAIF. The small demonstrations established at sub-counties led to an achievement of 16 ha against target of 420 ha (3.8%). In 2023, the approach will change by working with blocks of farmers rather than individual small-scale farmers.

Out of the 2445 trained, 28 were district and project staff while the rest were farmers. Of the 28 trained, 11 were community-based extension workers and seven (7) of these were given bicycles to facilitate their field work (Annex 16). 185 people (82 females & 103 males) in Terego District were trained and are knowledgeable and skilled in Agroforestry practices.
NU worked in collaboration with NFA who took lead on the training of communities in agroforestry practices. The agroforestry practices that were carried out included boundary planting, strip planting, plot agroforestry and the scattered tree planting.</td></tr>
<tr><td rowspan="2">2.3 Woodlots to increase tree cover in landscapes to provide wood products established</td><td>2.3.1: Number of woodlots established with fuel wood tree species.</td><td>2.3.1: Woodlots were established on 192 household farmlands in Terego and Yumbe.</td><td rowspan="2">In 2022, the project targeted to establish 150 Ha of woodlots for household needs. A total of 223,300 woodlot seedling species of Pinus oocarpa, Grevillea robusta, Eucalyptus, Teak, Gmelina, and Giant Lira were distributed to 192 farmers (129 in Terego and 63 in Yumbe) resulting in an estimate of 186 Ha established (129.4 Ha in Terego, and 56.6 in Yumbe)</td></tr>
<tr><td>2.3.2: 182 Hectares of woodlots established</td><td>2.3.2: A total 444.6 Ha (56.6 Ha in Yumbe district and 129.4 Ha in Terego</td></tr>
</table>

Outcomes and Outputs	Target outputs 2022	Achievement of Results Against targets	Assessment of Results against Planned Activities
		district) against the life of the project target of 442 Ha were established.	In addition to the above, 223.5 Ha of mixed tree exotic and indigenous tree species woodlots for woodland restoration were established within and the surroundings of Kyangwali, Imvepi, Bidibidi, and Rhino camp settlements. Also 35 Ha of Otumbari Local Forest reserve for Terego district was planted with Eucalyptus species.
2.4 Agroforestry enterprises established at landscape level	**2.4.1:** 4,580 Hectares under SLM/ CSA/ Agroforestry	**2.4.1:** 187 Hectares i.e 51.2 Ha in Yumbe, 134.4 Ha in Terego, and 1.4 Ha Kikuube established on farmlands of farmers under output 2.2.3 above.	**2.4.1:** The achievement is only 4% of the life of the project target regarding scaling up of SLM/CSA/AF technologies. Adoptions have taken place in plots of land of between 0.202 to 1 Ha. Interventions promoted include Permanent Planting Basins (PPB), hedgerows, vegetative hedges/green walls, boundary marking, scatter tree planting and cut off drainages (fanya juu fanya kini). Scaling Up of SLM/CSA/AF has delayed because project put more attention to Outcome 1. A new approach has been devised to deliver the demonstrations and scaling up of SLM/CSA/AF practices in 2023. This will involve subcontracting CSOs as service providers. Though no irrigation infrastructure for nursery operators has been achieved, process to achieve this in 2022 was about 75%. Additional 27 nursery operators from Kikuube, Kyegegwa, and Kamwenge were trained on good nursery establishment and management practices (Annex 17). District Water Officers of Yumbe and Terego districts were engaged and have provided the Bills of Quantities (BoQs) for each site of the nursery operators trained in the two districts. BoQs will aid selection of those to be supported.
	2.4.2: Number of tree nurseries with irrigation infrastructure established	**2.4.2:** Planned for 2023.	**2.4.2:** Bills of Quantities (BoQs) to procure irrigation equipment for 15 nurseries were prepared. Final review will of the BoQs will lead to the completion of activity in 2023.
2.5 Farmers / households and private sector actors' capacity to apply appropriate technologies to improve post-	**2.5.1**: 200 farmers trained on good post-harvest handling practices and value addition.	Planned for 2023	Training of Civil Society Organizations by UBF delayed due to limited manpower
	2.5.2: 8 private sector entrepreneurs trained to	Planned for 2023	Processes leading to achievement of this output is at 70% because the commodities to support have been identified. These are Maize, Shea Nut, Balanites, Mango,

<table>
<tr><th>Outcomes and Outputs</th><th>Target outputs 2022</th><th>Achievement of Results Against targets</th><th>Assessment of Results against Planned Activities</th></tr>
<tr><td rowspan="2">harvest handling (storage and value addition) built.</td><td>promote value addition and value chains.</td><td></td><td>Cassava, Sesame, and Honey. The private entrepreneurs (individuals and groups) involved in value addition for nature-based enterprises have been identified and their needs assessed.</td></tr>
<tr><td>2.5.3: 4 value chain platforms formed to link value chain actors.</td><td>Planned for 2023</td><td>The training and platform formation will depend on the enterprises supported for value addition (3.4.3).</td></tr>
<tr><td colspan="4">Outcome 3: Capacity of LG, CSOs, private sector companies and local communities to effectively deliver & uptake climate change and environmental degradation</td></tr>
<tr><td rowspan="2">3.1 Grass root NGOs, CBOs operating in the refugee hosting districts provide support to landowners and households to implement climate change and environmental mitigation measures</td><td>3.1.1: Number of guidelines /measures on climate change adaptation, mitigation, environmental conservation and protection, community based natural resource management for use developed.</td><td>3.1.1: One (1) training manual developed.</td><td>3.1.1: The training manual was developed for use by Local Governments (LGs), and Civil Society Organizations (CSOs) in the project area and beyond to increase awareness at community level about climate change adaptation and mitigation as well as environmental conservation and protection (Annex 18).</td></tr>
<tr><td>3.1.2: Number of LGs, CSOs, and private sector company staff trained on climate change and environmental degradation</td><td>3.1.2: 32 district staff were trained on the use of the developed manual.
<table>
<tr><th rowspan="2">District</th><th colspan="2">2022 Achievements</th></tr>
<tr><th>Male</th><th>Female</th></tr>
<tr><td>Terego</td><td>7</td><td>1</td></tr>
<tr><td>Yumbe</td><td>9</td><td>0</td></tr>
<tr><td>Kamwenge</td><td>2</td><td>2</td></tr>
<tr><td>Kikube</td><td>7</td><td>1</td></tr>
<tr><td>Kyegegwa</td><td>3</td><td>0</td></tr>
<tr><td>Total</td><td>28</td><td>4</td></tr>
</table></td><td>3.1.2: Out of the 30 LG staff targeted participants for training in 2022,32 have been trained exceeding the set target by two. More CSOs staff will be part of the training scheduled in March 2023.</td></tr>
</table>

Outcomes and Outputs	Target outputs 2022	Achievement of Results Against targets	Assessment of Results against Planned Activities
3.2 Community members sensitised and trained by LGs, grassroots NGOs and CBOs, on conservation and restoration of natural ecosystems.	**3.2.1:** Number of community members trained in the conservation and restoration of natural ecosystems	**3.2.1:** The output is about the number of farmers trained by trained staff under 3.1 above. Capturing data on this will start in 2023	**3.2.1:** The compilation of the outputs of the trained staff under Output 3.1 will start in 2023.
3.3 District Natural Resources Staff / change agents trained & equipped to provide extension services targeting climate change mitigation and adaptation activities.	**3.3.2:** Number of LGs facilitated to provide extension services	**3.3.2:** Five (5) districts were facilitated each with a Motorcycle and a Laptop computer.	**3.3.2:** The project output has been met 100%. The procured items were delivered at high level organized regional meetings in Kikuube and Yumbe districts. The districts have been trained under output 3.1.
3.4 Capacity of private sector and farmers in Value addition and post-harvest handling built.	**3.4.1:** Number of Private sector and farmers supported with appropriate equipment for value addition and post-harvest handling.	**3.4.1: Deliverable planned for 2023.**	**3.4.1:** Processes leading to delivering the output is at 75%. The project change enterprise to focus on and chose to support value addition of enterprises that have direct relationships with restoration and conservation of biodiversity. The chosen enterprises are Processing of Oil and butter from Shea nut (*Vitellaria paradoxa* and Egyptian balsam (*Balanites aegyptiaca*), Mango juice processing, Honey processing, and Cassava processing. The chosen firms and or groups to support are: Mikiga enterprise, Nareo enterprise, Goboro shea butter, Nile bee enterprise, blessed bee processing project), and Cassava producer groups. These are in Yumbe and Terego districts Processes to support these has been supported by Uganda Industrial Research Institute (UIRI) that was engaged to assesses needs and provide BoQs for the needed equipment (Annex 19). Request for quotations for needed equipment was made and Bids received and are at evaluation level. Delay to support women groups was caused by their lack of knowledge and skills in preparation of business plans as a precursor for financial support. To mitigate this, the project will be conducting a capacity

Outcomes and Outputs	Target outputs 2022	Achievement of Results Against targets	Assessment of Results against Planned Activities
			building initiative aimed at equipping the targeted groups with the requisite business planning skills before grants to increase incomes are provided.
	3.4.2: Number of selected Agricultural value chains supported.	**3.4.2:** Five (5) value chains have been selected for support**.**	Post harvest handling support shall be provided in 2023 after installation of equipment for value addition. This will be after determination of the available balances on the finances
	3.4.3: 15 Youth and women groups supported to enhance income generation	**3.4.3:** Seventeen (17) Women and youth groups have been selected to benefit from business planning and enterprise development initiatives	**3.4.3:** The delay to train the selected Youth and Women groups was a result of their inability to provide Business Plans. The project has identified the need to train the selected groups in Business Enterprise Development and Planning as a prerequisite to identification of what to support to increase their incomes. ToRs to procure a consultant to undertake this were developed.
3.5 A functional network & collaborative mechanism (platforms, forums, steering committee) for CBOs, NGOs, and SMEs established.	**3.5.1:** Number of linkages and networks established by the project with CBOs. NGOs, SMEs and other networks	**3.5.1:** Two regional platforms to enhance networking and sharing information with CSOs and districts formed.	**3.5.1:** Four regional meetings have been held with Civil Society Organizations (CSOs) include review meetings after the formation (Annexes 20, 21, 22). The three meetings were: 1. Two in West Nile region the first being formation of platform and second one in December to review performance. 2. One in Mid Albertine Rift region in April where regional platform was formed. The second one will be done in January 2023.
	3.5.2: Number of joint collaborative activities undertaken.	**3.5.2:** The joint field collaborative visits held.	**3.5.2**: Joint field collaboration visits were held with Save the Children Fund and with the OPM and district staff mainly to assess performance of the project in regard to the establishment of woodlots for woodland restoration in Kyangwali, Rhino Camp, Imvepi, and Bidibidi refugee settlements (Annex 23, 24). The field visit involving the high-level district staff (the Chief Administrative officers, the district Local Council V chairpersons, representatives of the Local Council III, the women representatives, and the OPM staff was held, one in each of the two regions. The OPM Headquarters staff were supported to carry out joint field visit to supervise and monitor woodlot establishment for woodland restoration on going within and in the host communities close to the refugee settlements of Yumbe, Terego and Kukuube.

Outcomes and Outputs	Target outputs 2022	Achievement of Results Against targets	Assessment of Results against Planned Activities
	3.5.3: Number of stakeholders meetings held	**3.5.3:** Attended five stakeholder meetings with the Working Group on Energy and Environment (WorkGrEEn) coordinated by OPM.	**3.5.3:** The project is also networking with the National and settlement level Working Groups on Energy and Environment (WorkGrEEn). Representatives of the project Implementing Partners have participated in some of the monthly meetings.
3.6 Opportunities for Stakeholder investment in activities responding to impacts of refugees on environment and livelihoods documented	**3.6.1:** Identified investment opportunities profiled,	Implementation planned for 2023	No planned and or activities initiated for this period
	3.6.2: Stakeholders investing in SLM, CSA, AF, Woodlots, value addition, etc	Implementation planned for 2023	No planned and or activities initiated for this period

2.2.2 Narrative on progress of planned activities during the reporting period

This section presents how the project has performed against each planned activity in 2022. It provides planned tasks in 2022 and an assessment of what has been done. The presentation follows the logic framework in a cascading manner. On top is the outcome and below are the outputs, and the activities in a chronological order. The details present a description of what have been done, how and the assessment on whether the activity or output has been completed. All the uncompleted activities for 2022 were carried forward to 2023.

Outcome 1: Degraded forests, wetlands, savannah woodlands and other fragile ecosystems impacted by refugee settlements in refugee hosting districts restored.

Output 1.1: Socio-economic and ecological baseline survey report

Activity 1.1: Carry out socio-economic surveys.

The main focus in this reporting year was finalisation of Socio-economic survey and ecological survey reports that were prepared in 2021. Completing these studies and the reports had delayed as a result of Covid-19 that affected some of the field staff. Both reports were finalized and are annexed to this report. The socio-economic survey report also incorporates Knowledge Attitudes and Practices (KAP)and an assessment of the status of existing Sustainable Land Management practices and adoption potential. The latter two were initially expected to be separate reports but at implementation, it was determined that these are merged into one socio-economic report.

Output 1.2: Targeted ecosystems planted with site specific species

Activity 1.2.1: Carry out enrichment planting with site specific species and or assist forests to naturally regenerate and monitor to ensure survival of planted species.

Under this activity, the project worked closely with National Forestry Authority (NFA) and three NFA approved restoration contractors to restore the degraded and deforested patches of Mt. Kei and Bugoma Central Forest Reserves (CFRs) in Yumbe and Kikuube districts, respectively. The targeted patches were those that fell within the 15 km buffer of refugee settlements of Bidibidi and Kyangwali respectively. The two CFRs had been directly and indirectly impacted by both host communities and refugees through agricultural encroachments and destruction for wood products. Building on the existing general memorandum of understanding between NFA and WCS, the project easily secured NFA commitment to provide the necessary support during the restoration processes. NFA through a written commitment letter pledged to fully support the initiative. The commitment enabled the project to have the staff of NFA on a regular basis to closely work with project staff and supervise and monitor the progress of restoration activities.

The process of restoring the 353 hectares of degraded and deforested patches of allocated CFRs involved:

a) Working with NFA to mark the boundaries of the allocated patches to restore.
b) Carrying out a diagnostic study to match plant species and determine the required number of seedlings for 2 sites to restore.
c) Contracting service provider (s) to undertake forest restoration planting of the targeted sites.
d) Carrying out sensitisation meetings with the local government & local communities in areas adjacent forest restoration sites in Mt Kei CFR in Yumbe, and Bugoma CFR in Kikuube about the restoration of targeted sites.
e) Support the contracted service provider to undertake restoration planting and maintenance in the designated areas for a period of at least 1 year.
f) Carrying out supervision & monitoring of restoration activities, and the planted area for maintenance.

Diagnostic study

Handheld GPS units and smart phones on which a digital mapping tool using the Kobo application tool was uploaded, were used to map out degraded sites suitable for successful restoration. Observations and interactions with the local communities were also utilized to document human activities degrading the sites. Daubenmire method of canopy cover ranking, and frequency was employed for canopy cover estimates. Determining dominant remnant tree and invasive species was made possible by using random 56-meter radius plots, 6 in Mt. Kei and 14 in Bugoma sites. Based on observations, community interactions, and own judgment the key success factors for restoration of the mapped sites using an adapted framework provided in "The Restoration Diagnostic" (Hanson et al., 2015) were assessed.

Restoration diagnostic studies were meant to serve as assessments of the situation before intervention were done. This was to assist planners and restoration stakeholders in focusing on the essential success elements. The studies focused on restoration potential of the degraded sites in Mt. Kei and Bugoma Central Forest Reserves. During the study, the boundaries of mapped degraded patches were ascertained, the extent of degradation and human activities in the two sites were assessed and documented; and remnant and dominant tree species at the sites were identified to inform species matching decisions. Equally important, the extent of invasive plant species present in the sites earmarked for restoration were as well assessed. Existing tree nurseries close to the sites were also identified and profiled.

The study of the earmarked patch for restoration in Mt. Kei CFR showed that the selected site already had a mix of primary and secondary vegetation with a composition of 5-15% closed canopy cover and 85% open with thick fallows and crop gardens and scattered remnant trees associated with *Pennisetum unisetum, Imperata cylindrica* grasses and *Chromolaena odorata* shrub. The conclusion was to do intensive restoration planting with indigenous tree species but at a wider spacing of at least 5 x 6 m. In the case of the allotted patch in Bugoma CFR the study revealed that the selected site was about 40% degraded tropical high forest dominated by *Cynometra alexandri.* Although the 60% of the patches was open fallow, the choice of restoration was enrichment planting with desirable timber species. A detailed diagnostic study report for the two sites is attached as annex 25.

Procurement of restoration contractors

Through an open bidding by advertising the required support in the print media (New Vision newspaper on March 25, 2022) and with a reference to the WCS website, at https://uganda.wcs.org/Opportunities.aspx , for detailed terms of reference, 21 bidders applied to support restoration work in the two CFRs. Eventually, Buhimba Farmers Union (in partnership with African Alliance for green Environment Limited) was awarded contract to restore 71 hectares in Bugoma CFR, while Mabira Tree Nursery Association, and Dankik Enterprises Limited were awarded contracts to restore 282 hectares in Mt. Kei CFR. The contractual obligations included developing restoration management plans for the degraded and deforested patches, undertaking assisted natural regeneration (including planting indigenous tree seedlings on the degraded sites based on analyses of the previous tree species composition), and professionally maintain the restoration sites for one year to achieve the desired restoration outcome.

Stakeholder engagement

To ensure active participation of the communities and local government involvement, the project organized launches of the restoration program in the two sites whereby the district technical and political representatives in each region were invited to visit the sites. While at the sites, issues that needed their attention to facilitate restoration were brought to their attention and commitments for addressing them obtained. The field tours were held on the June 10th, 2022, to the Bugoma CFR (figure 1) and to Mt.

Kei CFRs on the June 16th, 2022 (figure 2). Participants included District political heads (LCVs and Resident district Commissioners) of Kikuube, Kamwenge, Kyegegwa, Terego, and Yumbe, the Chief Administrative Officers(CAOs), the district technical staff (Agriculture and Natural resources), the representatives of the communities at all levels (Councillors at LCV, LC IIIs) including women councillors of the closest sub-counties, the Project staff, the refuge Settlement Commandants (SC) representing the Office of the Prime Minister (OPM), and the members of the communities in the peripheries of the two CFRs. The leadership of the of the two regions and in particular the host districts committed to support the restoration programmes of the two CFRs and being available to promptly address any shortcomings.

To maintain the momentum of public awareness, 14 stakeholder engagement/sensitization meetings were conducted involving 309 (women were 110, and 199 men) local stakeholders/participants for both Mt Kei and Bugoma CFRs. The meetings focussed more on the importance of the two forests, the processes to restore them, dealing with the issues of communities, and participation of locals in the restoration programs.

Figure 1: Part of a joint field visit team to Bugoma CFR by Chairmen LCV and CAOs of Kamwenge, Kyegegwa, and Kikuube districts on the June 10th, 2022.

Figure 2: A joint field visit to Mt Kei led by LCV Chairmen of Terego and Yumbe, and Resident district Commissioner Yumbe District on June 16th, 2022. Above the chairman LCV Terego District while being emphatic on the required combined efforts by all regional leaders to stop destruction of natural resources

Location of sites and restoration progress

The maps in figures 3 and 4 shows the location of areas that were replanted with native tree species and or assisted to naturally regenerate in the Bugoma and Mt Kei CFRs by end of 2022.

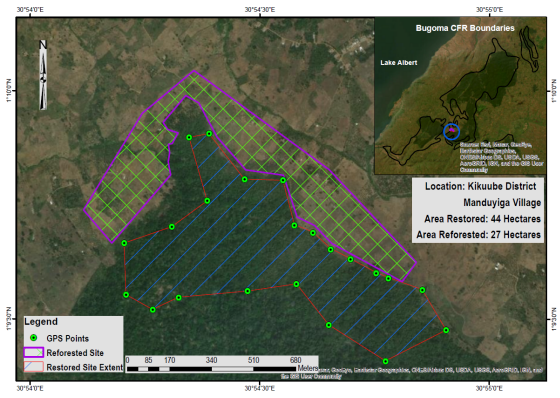


Figure 3: The above figure shows the delineated area for Bugoma CFR for forest restoration; Area delineated with pink is the completely deforested area whereas red delineates the degraded area with some tree cover

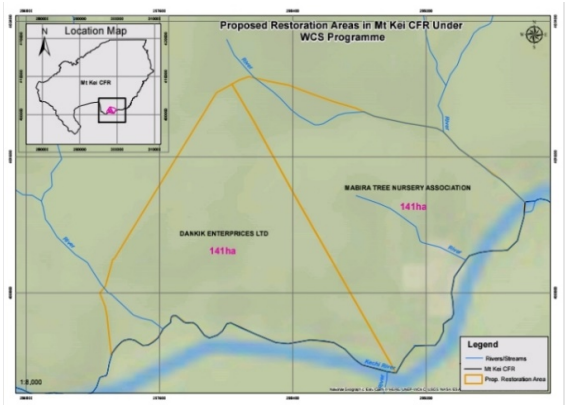


Figure 4: Location of the restoration patch in Mt. Kei Central Forest Reserve and the divisions shared by two restoration contractors

The patch of Mt. Kei Central Forest Reserve that has been planted by the project falls within the 15 Km boundary from the Bidibidi refugee settlement area. It is located in Midigo sub-county. It was formerly heavily encroached. Restoration by planting of the entire 282-hectare block was done along strips that were established five meters apart. During the restoration process, there was comparatively little bush clearance, and efforts were taken to safeguard the coppices, and existing seedlings and saplings in both Bugoma and Mt. Kei Central Forest Reserves (CFRs). Based on the preliminary diagnostic study, the following tree seedlings species were planted in Mt. Kei Central Forest Reserve; *Afzelia africana, Khaya spps, Markhamia lutea Albizia coriaria* and *Tamarindus indica.*

Restoration planting in Bugoma CFR was within the deforested 27-hectare forest block and was done along strips that were established five meters apart within the block. Forest gaps within the 44 hectares degraded block created by logging and/or charcoal burning were marked and later enriched with a mixture of the selected tree species. The planting density in these forest gaps was 3x3 meters. Based on the preliminary diagnostic surveys, the following tree seedlings species were planted; *Markhamia lutea, Khaya anthotheca, Milicia excelsa, Albizia zygia, Entandrophragma angolense, Prunus Africana, Warburgia ugandensis and Maesopsis eminii.* In addition, seeds of *Maesopsis eminii* and *Khaya anthotheca* were broadcast in the forest gaps to augment the planted seedlings. The seeds of the two species were selected because they were readily available.

The table 7 shows the number of seedlings that were planted in the two CFRs.

Table 7:Seedling planted in the Bugoma and Mt Kei CFR to facilitate restoration.

Central Forest Reserve	**Total area (Ha)**	**Number of seedlings**	**Number of species**
Bugoma	71	26,820	8
Mt Kei	282	112,800	5
Total	**353**	**139,620**	

Restoration supervision and monitoring

Six (6) joint supervision and monitoring trips to restoration sites were made by WCS and NFA, with three (3) visits to the site in Mt. Kei CFR and three (3) to the site in Bugoma CFR. While in these field visits, contractors were advised where improvements were required. The contractors were also helped to address challenges they were encountering especially where agricultural encroachment was still prevailing. Figures 5 and 6 shows observations on the establishing seedlings and discussion with the contractors while in the field.

Figure 5:Seedlings planted in a strip within the heavily deforested section of Mt. Kei CFR

Figure 6:The monitoring team comprising of WCS and NFA interacting with the field employees of the contractors in Mt. Kei

Activity 1.2.2 Carry out planting / enrichment planting with site specific species and or assist woodlands to naturally regenerate and monitor to ensure survival of planted species.

In 2022, woodland restoration took place on different types of land tenure systems. These include the Central Government Owned land set aside for refugee settlement (OPM land), Local government land set aside as Local Forest Reserves (LFRs), the privately owned land that was formerly occupied by refugees, and the communally owned also formally used by refugees and the private lands owned by host communities. In these tenure systems, three forms of restoration have taken place. Whereas FAO[1] define ecosystem restoration as "the process of halting and reversing degradation, resulting in improved ecosystem services and recovered biodiversity the woodland restoration adopted by project focused on restoration of woodland by planting indigenous tree species only. This aims at bringing back as much as original vegetation cover for future restoration of original biodiversity. The involved planting desirable (economic) tree species that will attract the owner to protect the planted area.

In this reporting period, WCS and ECO carried out restoration of woodlands through support to smallholder farmlands. Slight variation in approaches by WCS and ECO occurred in the way they:

i. Identified the woodlands: Both identified woodlands to restore in sub-counties within 15 Km from the refugee settlements (target clusters). However, because of the large size of sub-counties, the location of farmers supported are widespread over wide distances.
ii. Conducted sensitisation /awareness raising meetings: Both conducted sensitizations for communities/private owners to inform them about restoration of degraded woodlands. ECO went ahead to train identified farmers on how to prepare for tree planting/growing.
iii. Registration of interested individual farmers: WCS chose to register farmers at the organized sub-county level meetings through filling of a request for expression form to express interest for woodlands for restoration initiatives. This also led to widespread distribution of the farmers. On the other hand, ECO registered farmers in meetings held at community level meetings.
iv. Mapped and assessed land: Both mapped registered interested farmers and determined requirements for restoration and or conservation of new or additional identified sites. Information gathered included land conditions, estimated size of land, number of seedlings per species, spacing, management arrangements, labour and inputs, etc.
v. Purchase of required planting materials (seedlings and tools, labour). Both purchased seedlings and distributed them to registered beneficiaries. ECO also procured tools for some beneficiaries and met some labour costs of some.
vi. Identification, training and equip selected community monitors in monitoring skills to monitor regeneration of the restored areas.
vii. Provide required planting materials to the interested woodland community/private owner based on mutual understanding.
viii. Supporting planting/growing and maintenance of planted woodland sites through backstopping by project staff or external monitors
ix. Provide additional livelihood interventions to participating community groups or other farmers in the landscapes.
x. Monitoring and supervision of planting activities for woodland restoration.

Public awareness and selection of woodlands

WCS organized community meetings at which interested farmers were informed about the project intention to support restoration of degraded woodlands and sensitized them on values and threats of woodlands degradation, identified and registered farmers or communities interested in the support and grouped them according to their capacities. For this purpose, WCS held 26 community meetings (figure

[1] Principles for ecosystem restoration ©UNSPLASH/Joshua Fuller to guide the United Nations Decade 2021–2030

7 is one such meeting held) where 1,013 participants attended. Table 8 shows the details of attendance in each district of West Nile.

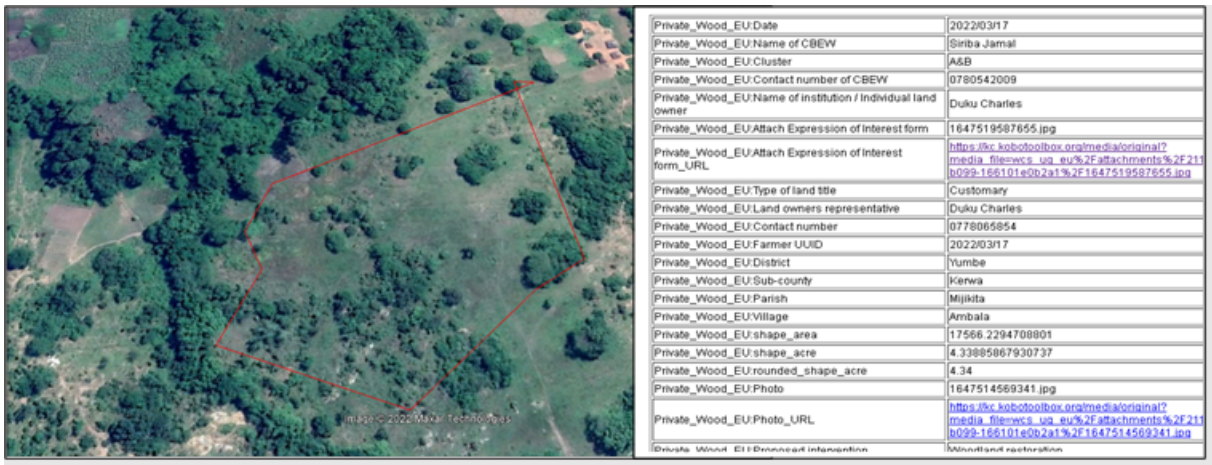
Table 8: Participation in awareness meetings in Terego and Yumbe district to support woodland restoration

Attendance	Yumbe district level	Terego district level	Sub-county level	Village level	Total
Number of meetings	1	1	12	12	26
Male attendance	17	10	120	468	615
Female attendance	1	3	16	378	398
Total attendance	18	13	136	846	1013
% of female	6	23	12	45	39
% of male	94	77	88	55	61

A total of 178 people/households filled out expression of interest forms to be supported on restoration of degraded woodlands. The interested farmers were grouped into different project area clusters for ease of backstopping, monitoring, and seedling delivery.

Figure 7: Community meeting held at a village in Drajini subcounty in Yumbe

Feld-based community extension workers visited the registered individuals and mapped 290.3 hectares of degraded woodlands outside of protected areas using kobo collect.



Private_Wood_EU:Date	2022/03/17
Private_Wood_EU:Name of CBEW	Siriba Jamal
Private_Wood_EU:Cluster	A&B
Private_Wood_EU:Contact number of CBEW	0780542009
Private_Wood_EU:Name of institution / Individual land owner	Duku Charles
Private_Wood_EU:Attach Expression of Interest form	1647519587655.jpg
Private_Wood_EU:Attach Expression of Interest form_URL	https://kc.kobotoolbox.org/media/original?media_file=wcs_ug_eu%2Fattachments%2F211b099-166101e0b2a1%2F1647519587655.jpg
Private_Wood_EU:Type of land title	Customary
Private_Wood_EU:Land owners representative	Duku Charles
Private_Wood_EU:Contact number	0778065854
Private_Wood_EU:Farmer UUID	2022/03/17
Private_Wood_EU:District	Yumbe
Private_Wood_EU:Sub-county	Kerwa
Private_Wood_EU:Parish	Mijikita
Private_Wood_EU:Village	Ambala
Private_Wood_EU:shape_area	17566.2294708801
Private_Wood_EU:shape_acre	4.33885867930737
Private_Wood_EU:rounded_shape_acre	4.34
Private_Wood_EU:Photo	1647514569341.jpg
Private_Wood_EU:Photo_URL	https://kc.kobotoolbox.org/media/original?media_file=wcs_ug_eu%2Fattachments%2F211b099-166101e0b2a1%2F1647514569341.jpg
Private_Wood_EU:Proposed intervention	Woodland restoration

Figure 8: A snapshot sample of a mapped degraded woodland area for an interested household in Yumbe for restoration, and other details collected using Kobo

On the other hand, Ecological Christian Organisation conducted 5 community dialogue meetings to sign the memorandum of understanding (3 in Terego, 2 in Yumbe), where a total of 210 farmers (comprised

of 5 females, and 205 males) presented a total of 675.8 Ha for woodland restoration/conservation and woodlot establishement In Terego, 411.67 Ha was identified in Terego while 264.148 Ha was identified in Yumbe. *Mapping selected sites*

After selection, the farmers were visited for mapping and assessment of needs according to capacity. Figure 8 is an example of the mapping done. During mapping exercise, the information that was collected included: a) general information about the land, such as location and size, b) ownership (individual/institutional private landowners)' details, c) the description of land parcels—the geo-shapes, the area/size, and degradation level and remaining trees or shrubs, d) and choice of three species to supply. In an interaction with the owners, the number of seedlings to give to each farmer visited were estimated.

Selection of tree seedling suppliers and delivery

Through a competitive approach, five suppliers (2 for WCS and 3 for ECO) to supply seedlings of selected species (including *Milicia excelsa*, *Markamia lutea*, Afzelia *africana*, Khaya *grandifolia*, *Albizia coriaria,* and *Vetelaria pradoxa* were selected following procedures of each institution. A total of 90,606 tree seedlings were purchased and distributed to 118 beneficiaries identified by WCS leading to an estimated planted area of 226.51 hectares on individual woodlands (59.75 ha planted in Terego and 166.76 ha hectares in Yumbe districts).

In the case of ECO, a total of 92,500 indigenous seedling species were procured and distributed to 235 farmers resulting into the restoration of Eventually, 484.1 Ha. Of these 215.6 Ha planted and (268.5 Ha conserved) owned by 43 farmers (39 males and 4 institutions) have been supported.

Challenges of the approach

During supervision and monitoring missions, the following were observed:

a) The patches planted by small-scale farmers were between 0.202 Ha and 2.0 Ha. The planted land size depended more on the capacity of the farmer especially in acquisition of additional labour.
b) Farmers had planted the seedlings, but majority had not managed the planted seedlings because of inadequate capacity to avail or hire labour.
c) Willingness of the farmer to be recruited in for support to restore the woodlands depended on availability of land further widening the scattered woodlands.
d) By end of December, some farmers had lost the investments through bush fires. Fire incident reports were to be compiled in 2023 as the fire season continued.
e) Monitoring visits to many and scattered farmlands was very demanding thus requiring a lot of resource allocations.
f) It has been observed that while the scattering has led to minimizing and supporting land free of conflict, connectivity of these small parcels is a challenge and impact at landscape level may take long to be realized. The planted seedlings were under threat of fires and natural death of seedlings due to overcrowding of undergrowth vegetation especially tall and dense grass, domestic roaming animals, termites and excessive dry spell.

Despite the identified challenges, the approach used has helped very many smallholder farmers to benefit from the project. This approach of restoration conservation will enable farmers to have access to fuel wood during pruning of the branches, sustainable harvesting of shrubs and other wood and non-wood products needed by households.

CONCLUSION ON PROGRESS OF WOODLAND RESTORATION

In the same way the medium and large-scale woodland owners demand for financial and materials support to be able to establish woodlots for woodland restoration and manage them (Output 2.3), small-scale farmland owners demand the same. The required support is needed to meet the labour costs during establishment and maintenance of replanted woodlands, and for purchase of materials such as farm tools. ECO distributed farmland preparation tools (hoes, pangas, strings, mattocks and slashers and tape measures). Consequently, on top of distributing agro inputs (seedlings and hydrogel), ECO distributed farm tools and engaged the youths to support farmland owners during planting. In this region, women do not own land for woodlands and hence none is a beneficiary.

For impactful purposes and restoration of large woodlands, the project will in the remaining period, focus on supporting larger woodlands (at least 5 Ha) and closer to each other. The approach will build around the already supported small-scale scattered woodlands. This consideration is premised on the examples below (restoration of woodlands through support to medium and large-scale woodlands).

The above three approaches applied by the three implementing partners has contributed 750.61 Ha towards woodland restoration in Terego and Yumbe and to Uganda generally. The approach used has helped very many farmers to benefit from the project scattered in project landscape. The scattered woodlots will in future enable surrounding communities and refugees to access the restored woodlands for fuel wood and other required wood materials needed by the households.

Activity 1.2.3. Carry out planting / enrichment planting with site specific species and or assist wetlands to naturally regenerate and monitor to ensure survival of planted species.

To implement this activity, the project planned to carry out the following sub-activities:

i. Select additional wetland/riverine in WNR
ii. Conduct feedback meetings for each of the MARR districts to finalise restoration targets and finalise the Ecosystem services assessments.
iii. Map wetland/riverine sites for restoration through stakeholder engagements.
iv. Assess and review areas for restoration based on restoration plan targets.
v. Mobilise and raise awareness of all stakeholders on the plans for restoration of selected wetlands/ riverine areas.
vi. Determine species appropriate for each of the sites.
vii. Purchase seedlings suitable for planting in wetlands/ riverbanks, and purchase of reinforced concrete pillars for wetland boundary marking.
viii. Conduct a Launch event for the restoration plans and their implementation.
ix. Identify, train and equip selected community monitors in monitoring skills (water quality, observation, binoculars) to monitor regeneration of the restored wetlands/ riverine sites)
x. Support planting of selected indigenous species in selected wetlands /river catchments and or promote natural regeneration in demarcated sites.
xi. Monitor the regeneration of sites and produce reports for action.

Selection of additional wetlands and riverbanks

In this reporting period, two field identification and assessment were conducted in West Nile Region (in Yumbe and Terego District) to identify and select wetlands/ Riverine for restoration/conservation. During the field visits, meetings were held with some of the consortium members, District natural resource officials from Terego and Yumbe districts, and the parish chiefs of the pre-selected sub-counties. In Terego District, the sub-counties that were visited included Odupi, Omugo and Bileafe while in Yumbe District the team Visited sites in Kuru sub-county but had discussions about other potential sites in Drajini Subcounty. The assessments led to selection of 2 wetland/riverine sites in Terego District that include Yelulu wetland and R. Enyau. Yelulu wetland was selected because it was the most permanent wetland existent within Terego District and it's a major water supply point for the

refugees hailing from Rhino camp and the host communities that surround the camp. River Enyau, which feeds into River Nile, was selected because it's the most dominant river in the district and most of the communities are dependent on it for different goods and services. Despite the relevance of the selected ecosystem, they continue to be degraded with anthropogenic factors such as sand mining, poor fishing methods, unsustainable agricultural practices among others.

Figure 9: The sites NU selected for wetland/riverine restoration in WNR. Yelulu wetland (left) and River Enyau broken banks (Right

Baseline ecological surveys

As part of wetland restoration, site specific ecological surveys were conducted in MARR in the previous year and annexes 26, 27, 28, 29, and 30 are reports on the findings. Reports from the site-specific assessments purposed to set the indicators for restoration of the selected sites were generated. Nine (9) feedback meetings were held at district and community level to validate these reports. The meetings included two (2) district meetings one held in each of the districts of Kyegegwa & Kamwenge; three (3) community meetings were held in *Sweswe, Kyakatwanga & Komuchwezi* wetlands in Kyegegwa District and four (4) community meetings held in the villages of *Bihanga I, Bihanga II, Buteraniro and Kajororo* in Kamwenge district. The meetings were purposed to share findings from the assessments reports for five taxa groups including plants, birds, mammals, herpetofauna and TESSA assessment and validate these results which were incorporated into the wetland restoration plans for Rushango and Kajororo wetlands in Kamwenge; and for Kyakatwanga, Komuchwezi, and Oruchinga/Sweswe wetlands in Kyegegwa. This paved way for finalisation of the wetland management plans.

Figure 10: District meetings were held to share feedback from assessments conducted in MARR and to also validate the developed wetland restoration plan. A meeting held in Kamwenge and to the right the District Taskforce committee poses for a group photo after meeting

Preparation of wetland restoration and management plans

Management/restoration plans for Rushango, and Kajororo wetlands in Kamwenge; and for Kyakatwanga, Komuchwezi, and Oruchinga of Sweswe wetlands in Kyegegwa were validated and are presented as annexes 10, 11, 12, and 13. The validation paved the way for the start of implementation.

Highlights in the management plans include the following:

a. Background information including general information on Kamwenge District and wetlands in general.
b. General information on biodiversity found within Kajororo wetland inclusive of Herpetofauna, mammals, birds and plants.
c. The observed threats and identified drivers of degradation to Kajororo wetland, the proposed actions/interventions/alternative options and the required resources to implement the actions.
d. The Vision, Mission, Goal and Objectives for Kajororo Wetland Restoration and the restoration process.
e. The restoration methodology and activities to be conducted at Kajororo wetland.
f. Costing of restoration actions/interventions/alternative options
g. Implementation arrangements /structures and the,
h. Monitoring and Evaluation of the Restoration Plan

Sensitization of Communities on wetland restoration

Wetland restoration activities involved mobilizing and conducting community sensitization and awareness raising meetings on plans for wetland restoration. Environmental literacy and public awareness are key in the conservation of natural resources, including wetlands. The responsibility of environmental education lies within the jurisdiction of the District Local councils and the department of natural resources as provided for under the local government act of 1997(Cap 243). Low levels of knowledge and awareness of environmental conservation have played a role in the continued wetland degradation. The DLGs of Kamwenge, Kyegegwa and Terego were supported to conduct public awareness meetings and a total of 22 meetings (19 community & 3 District) were conducted across the three districts. Figure 11 shows two of such meetings held. Table 9 shows a summary of participation in the various meetings.

Table 9: Sensitization of Communities on Wetland restoration activities

Parameter	Kamwenge District		Kyegegwa District		Terego District		Totals
	Community meetings	District & Subcounty meetings	Community meetings	District & Subcounty meetings	Community meetings	District & Subcounty meetings	
Number of meetings held	4	1	6	1	9	1	22
Total female attendance	126	7	239	3	110	4	489
Total Male attendance	120	17	448	21	243	38	887
Total attendance	246	24	687	24	353	42	1,376
% of female participation	51%	29%	35%	14%	31%	10%	36%

Figure 11: Community sensitisation meetings were conducted by NU to educate communities on environment sustainability and plans for restoration. Meeting in Kamwenge (Left) and meeting in Terego (Right)

Adopted wetland restoration approach

During the development of restoration plans, encroachment and unknown wetland boundaries were highlighted as the key factors escalating wetland degradation. The key intervention fronted to address the above challenges was the need to demarcate the wetlands with concrete pillars. From research studies conducted elsewhere, natural regeneration can take place if the factors causing wetland degradation or loss are removed and let nature do the work of re-establishing the wetland. This approach of wetland management is known as the "passive approach". The passive approach of wetland management is also most appropriate when the degraded site still retains basic wetland characteristics, and the source of the degradation is an action that can be stopped which is the case for all the NU wetland sites selected. It is on this note that NU adopted this wetland management approach since it is the most appropriate given that benefits are low cost and a high degree of certainty.

Launch to implement the wetland restoration plans

A launch to implement the wetland restoration plans for Komuchwezi, Kyakatwanga and Orucinga/Sweswe in Kyegegwa District was launched on 21st December 2022 by the Resident District Commissioner (RDC) Ms. Monica Karungi of Kyegegwa District (figure 12). The launch event was conducted in Kyakatwanga, Kyegegwa District and it was purposed to commence wetland demarcation where concrete boundary markers were to be installed at the pressure points of the wetlands to reduce the levels of encroachment. The launch to demarcate wetlands was attended 126 people (49 females, 77 males) who included key stakeholders such as the district technical and political wing, the subcounty leaders, community groups and resource users of the wetlands & media team. The launch was also used as a platform to sensitise communities on the value of the wetlands and the relevance of demarcating the boundaries of these wetlands, the communities were also taught some of the existing laws protecting wetlands and they need to promote and practice wise use of wetland for sustainability of the resource.

Figure 12: NU Launch events of implementation of wetland restoration plans (wetland demarcation) conducted in Kamwenge(Left) and Kyegegwa (Right). The RDCs in the respective District s officiated the events

Wetland boundary assessment, delineation/mapping and installation of boundary markers.

Wetland demarcation exercise involves scientifically defining the scope of wetland areas that was to be covered, physically marking and mapping the wetland boundaries. Wetland demarcation helps to trace the original wetland boundaries to be conserved and provides a basis for enforcing compliance to the wetland policies, legislation and regulations that will contribute to improving targeted wetland ecosystems by the end of the project. NU worked with and supported MWE and District Natural resources department who took lead in the wetland demarcation exercise that involved all the processes of community mobilization and sensitization, boundary assessment, delineation, mapping and installation of pillars. The activity commenced with public awareness meetings on habitat restoration in particular opening and marking boundaries of targeted sites. Other media platforms such as radio announces were used.

Boundary assessment, delineation/mapping and installation of boundary markers.

This activity was spearheaded by MWE and the District technical people from the Natural resources department including the District Natural Resources Officer, Senior Environment Officer, District Surveyor and the relevant community leaders. MWE took lead on the mapping exercise and using satellite imagery to trace the original wetland boundaries, five maps for the wetlands of Kyakatwanga, Komuchwezi, Sweswe, Oruchinga and Rushango were generated. These Wetland maps show the land use, land change patterns and the wetland status, indicative of determined sizes, patches and sizes of degraded areas, and the intact areas of the wetland sites.

Following the mapping exercise and boundary assessments, physical marking was done. Wetland-boundaries were marked using a WGS84 GPS coordinate system. Concrete reinforced pillars were erected. A total of 78 Ha of Komuchwezi was demarcated by installing 78 pillars, and 12 Ha were demarcated for Kyakatwanga using 12 pillarsin Kyegegwa district. In Kamwenge 300 Ha were demarcated for Rushango (150Ha) by planting 110 pillars and Kajororo (150Ha) by planting 110 pillars. In terms of Kilometres, 9 km & 30 km were demarcated for wetlands in Kyegegwa & Kamwenge districts respectively. The concrete pillars were placed at pressure points and at a distance of greater than or less than 100 m apart depending on the magnitude of encroachment. The pillars were also placed 30 m away from the highest water mark (recognizable area with wetland vegetation).

The method below was adopted to estimate the area recovered from/by the demarcation:

1 km = 1000m; 1 ha = 0.0001m^2

An assumption was made that if a wetland is demarcated from its highest watermark, the area of influence in recovery of the wetland will extend 100m. The assumption was based on the recovery of both fauna & flora. Similar wetland boundary deviation was estimated by Huising (2002) from aerial photography which is a suitable criterion for delineating wetlands. Based on this assumption acreage restored/conserved was computed as follows:

Acreage for demarcated wetlands in Kyegegwa(9km): = 9000*0.0001*100 = 90ha

Acreage for demarcated wetlands Kamwenge(30km): = 30000*0.0001*100 = 300ha

From the mapping done by MWE, NU was able to obtain the size and acreage of wetlands and their status shown in figures 13, 14, 15, 16, and 17. Further monitoring (satellite imagery and use of indicator species) of the demarcated area will be done to determine the recovery of fauna & flora and the extent of ecosystem recovery. Other restoration activities such as revegetation will be deployed in the next year.

Based on the assumptions above, a projection of 390 Ha will be restored once the stress factors (agricultural encroachment, livestock farming, illegal sand mining, etc) are removed by the district local authorities. An additional 5ha of wetland/riverine were planted with 2,325 seedlings of *Afzelia africana*, M*ilicia exclesa, Khaya grandifolia,* and *Maesopsis eminii* tree species and bamboo along the Imvetre

stream in Terego district. Following the validation of management plans, implementation started for Kajororo (figure 13) and Rushango (figure 14) wetlands in Kamwenge; and for Komuchwezi (figure 15), Kyakatwanga (figure 16), and Orukinga of Sweswe (figure 17) wetlands in Kyegegwa.

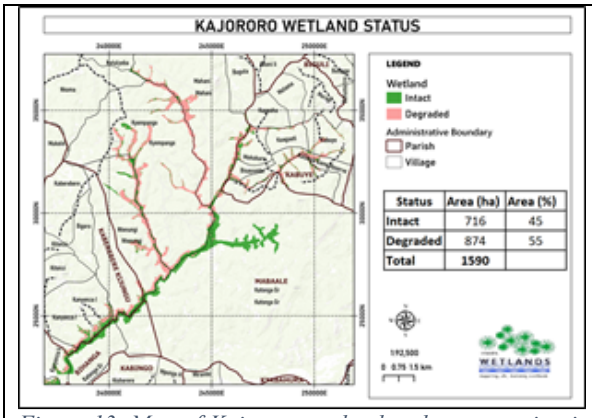


Figure 13. Map of Kajororo wetland under restoration in Kamwenge district

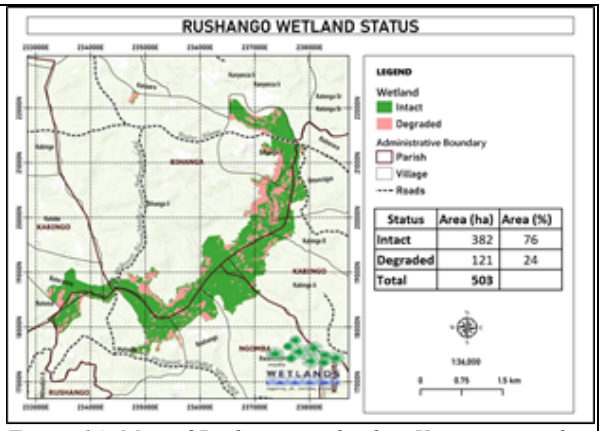


Figure 14. Map of Rushango wetland in Kamwenge under restoration

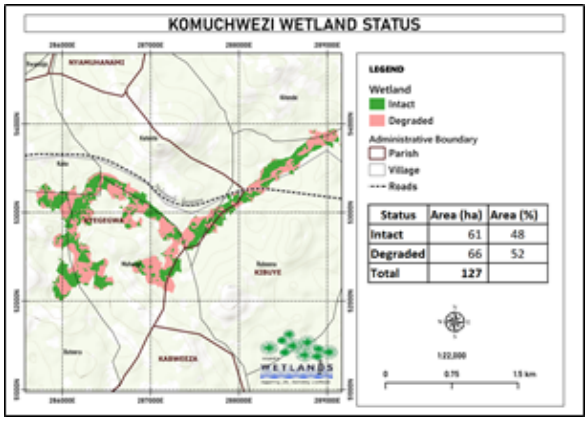


Figure 15. Map of Komuchwezi wetland in Kyegegwa under restoration.

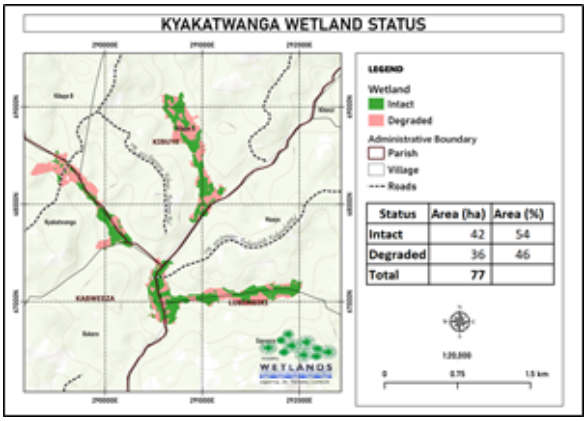


Figure 16. Map of Kyakatwanga wetland in Kyegegwa under restoration

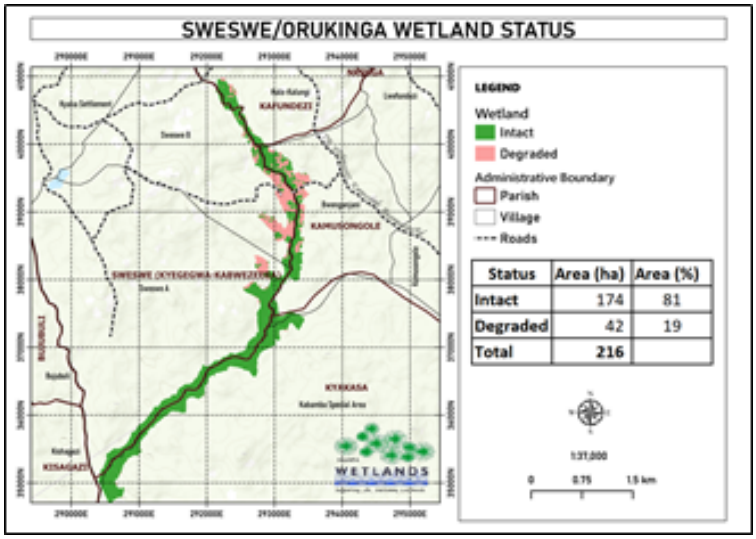


Figure 17. Map of Sweswe/Orukinga in Kyegegwa under restoration

Output 1.3 Law enforcement for the targeted ecosystems strengthened.

1.3.1 Support Districts, communities, and NFA to open and mark the boundaries of targeted ecosystems.

Under this activity, Kyegegwa and Kamwenge district local governments and communities were supported by the project to implement wetland protection interventions for the wetlands of Komuchwezi and Kyakatwanga in Kyegegwa District; and Rushango and Kajororo in Kamwenge District. Following the District procurement procedure, contractors (Detus Engineering & construction company Ltd in Kyegegwa and Gampe Associate Engineering &Services Ltd in Kamwenge) were selected to produce and supply 310 reinforced concrete pillars. The project supported/facilitated the production, supply, mapping, demarcation, and the installation of concrete pillars / boundary markers. Demarcation by installing reinforced concrete pillars was done for 78 ha for Komuchwezi, and 12 Ha for Kyakatwanga, 150 ha for Rushango &150 ha for Kajororo.

Figure 18: The Executive Directors of UBF and NU together with the District Environment Officer, Kamwenge District inspecting the concrete pillars made by Gampe Associate Engineering &Services Ltd for demarcation of boundaries of Rushango and Kajororo wetlands, Kamwenge district

The district of Kyegegwa was also supported to conduct three public awareness campaigns on habitat restoration, on opening and marking boundaries of targeted sites. A total of 490 (166 female and 324 males) people were sensitised. Meetings like those shown in figure 19 were held in Katente, Kiyuguya & Kyakatwanga villages. The communities in attendance came from the villages (Nyanga, Koka, Kyakakwanzi, Katende, Kyakatwanga, Rwobunyonyi and Koka) bordering the wetlands of Komuchwezi and Kyakatwanga. Others in attendance were wetland resource users, technical staff from the local government and the project. The meetings were used to educate the public on the values of wetlands as well as to train & promote the wise use of the wetlands. Awareness raising aimed at changing people's behaviour, attitudes, and practices for sustainable management of the wetlands.


Figure 19: Some of the participants of the conducted public awareness campaigns on habitat restoration in particular opening and marking boundaries of targeted sites.

Activity 1.3.2 Train and equip Districts and NFA to protect targeted forests, wetlands, and woodlands.

A. *Deliver the procured equipment to NFA and the district LG to enhance law enforcement.*

On behalf of the district natural resources departments, the project procured and delivered five (5) computers to the district chief administrative officers and district natural resources officers of Kamwenge, Kikuube, Kyegegwa, Terego, and Yumbe districts for purpose of proper monitoring, reporting, and management of districts natural resources. Additionally, the project provided android smartphones and monitoring tools to 21 NFA employees, including forest patrolmen (18M: 3F), for use in the SMART technology-based forest protection and law enforcement. Figure 20 shows the Country Director of WCS handover the Android smart phone with the SMART program to the representative of Executive Director of NFA.

Figure 20: Simon Nampindo, WCS Uganda Country Director handing over 21 android phones to NFA's Director of Natural Forests, Mr. Tom Rukundo at the NFA headquarters in Kampala in presence of NFA, UBF and WCS other staff

The table 10 shows the number of NFA staff and patrolmen equipped with android phones for forest protection law enforcement in NFA's West Nile Range, and the district DNROs equipped with computers.

Table 10: Number of NFA staff and patrolmen equipped with android phones for forest protection law enforcement in NFA's West Nile Range

District	NFA staff equipped with android phones for SMART use		NFA patrolmen equipped with android phones for SMART use		Districts DNROs equipped with computers	
	Male	Female	Male	Female	Male	Female

Terego	0	1	5	0	1	0
Yumbe	3	0	4	0	1	0
Kamwenge	0	0	0	0	1	0
Kikube	0	0	0	0	0	1
Kyegegwa	0	0	0	0	0	1
NFA range office in Arua	1	2	0	0	0	0
NFA Headquarter staff	5	0	0	0	0	0
Totals	**9**	**3**	**9**	**0**	**3**	**2**

B. *Training of NFA staff on the use of SMART application to enhance law enforcement.*

As part of enabling National Forestry Authority (NFA) to enhance forest law enforcement and protection, the project supported training of Twenty-five (25) NFA staff including forest patrol men have been trained in law enforcement and forest protection using SMART. Of these, nine (9) were staff of NFA targeted as users of Analysts/SMART administrator, i.e., managers (Range manager and Sector managers), and forest supervisors, and the rest (16) were NFA's patrolmen. Figure 21 shows a facilitator demonstrating to participants how to operate the phones. Ten (10) WCS Community-based Extension Workers, and project staff were also trained. Spatial monitoring and Reporting Tool is the abbreviation for SMART. It is a management information system with several tools for collecting information on field-based patrols in protected areas. It is used to collect, measure, and assess data to increase the efficiency of conservation activities for natural resources. The SMART partnership, which is made up of nine of the world's top conservation organizations, including the Wildlife Conservation Society (WCS), Worldwide Fund for Nature (WWF), Peace Parks Foundation, Wildlife Protection Solutions, Frankfurt Zoological Society, ZSL, North Carolina Zoo, Panthera, and Rewild, develops, maintains, and supports SMART.

For effective use of the SMART tool, the Smart Phones with the tool should be linked to SMART Connect server though a functional mobile internet to enable exporting of data from the phones to the server. Patrol data on the serves would then be analysed using computers for effective management decision on patrol and forest protection effort. NFA had the gap of not having computers to process patrol data and generate reports for effective management decision on forest patrol and protection, however, the project will be procuring three additional computers for use in SMART.

There are two sectors with a total of nine (9) CFRs in West Nile Range (WNR) where the action/project is supporting implementation of SMART. These include Mt. Kei Sector, with Mt. Kei, Kyakulia, Kulua, and Lodonga CFRs. In Maracha Sector, there are 5 CFRs which include Mt. Watti, Barituku, Otrevu, Enyau, and Suru. The project prioritised forest law enforcement training using SMART in West Nile because WCS had already provided SMART training to NFA staff in Mid-Western Uganda as part of the Albert REDD+ initiative, a carbon offset scheme financed by Shell Global.

The table 11 shows the number of NFA staff and patrolmen trained in the use of SMART in NFA's West Nile Range


Figure 21: Participants being guided by Peter Nsubuga, a WCS SMART instructor on using SMART mobile to collect data, at Mt. Kei CFR

Table 11. Number of NFA staff and patrolmen trained in the use of SMART in NFA's West Nile Range

District	**NFA staff trained**		**NFA patrolmen trained**	
	Male	**Female**	**Male**	**Female**
Terego	0	3	5	0
Yumbe	3	0	11	0
Kamwenge	0	0	0	0
Kikube	0	0	0	0
Kyegegwa	0	0	0	0
NFA range office in Arua	2	0	0	0
NFA Headquarter staff	0	1	0	0
Totals	**5**	**4**	**16**	**0**

Activity 1.3.3 Facilitate development of community-based mechanisms (Collaborative Management arrangements) to protect and regulate access to resources from targeted ecosystems.

The main planned activity was to conduct public awareness and sensitization sessions at parish level to raise awareness to the public on the laws, the needs for conserving and restoring the selected woodlands. This was integrated in the activities under 1.2.2 above. The project had already identified natural woodlands that could be protected for them to naturally regenerate and through open discussion with the public, the project sought to devise strategies for ensuring their protection. The devised strategy emphasizes supporting owners to mark and open the boundaries and secure their boundaries by planting indigenous tree species, but also support planted seedlings to ensure they grow into trees.

To make conserved and restored woodlands economically attractive and secure their long-term protection, the project is using a strategy of integrating beekeeping as an income generation from the conserved woodlands. A total of 2 trainings were organized to train farmers in apiary management. Figures 22 and 23 shows some of the training meetings held. As indicated in table 13, a total of 67 farmers comprised of 5 female and 57 male and 5 staff of selected institutions (Imvenga primary school, Bileafe and Drajini S/C) attended the training.

Table 12: Number of farmers trained in apiary management

Location	**Male**	**Female**	**Institutions**	**Total**
Yumbe	22	2	3	**27**
Terego	35	3	2	**40**
Total	57	5	5	**67**

Following inspection of proposed sites for conservation with apiary management, and prioritizing suitability of where the intervention could be started, 18 male household owned and 1 institution sites (7 in Yumbe and 12 in Terego) were selected. A total of 350 Beehives were procured for this purpose and the actual process of distribution and installation was completed in February 2023.

Figure 22: Apiary development expert demonstrating how to use a smoker during honey harvesting in Drajini S/C 30th/11/2022.

Figure 23: Training woodland farmers in apiary-Terego district in Omugo S/C on 1st / 12/2022.

Output 1.4 Management and restoration plans developed

Activity 1.4.1 Support responsible bodies (NFA and District Forestry Services -DFS) to develop restoration management plans for targeted forests

In the case of CFRs under restoration, the development of the restoration management plans was handled under activity 1.2.1. This is because the scope of work for the contractors restoring Bugoma and Mt. Kei Central Forest Reserves was expanded to include this activity. As a result, the contractors developed all the three restoration management plans for the degraded and deforested forest patches allotted. The restoration management plans are attached to this report.

Activity 1.4.2 Support district LGs, and Communities to develop Community Based Management (Restoration) plans for selected wetland ecosystems.

As highlighted under activity 1.2.3 above, five management plans were validated including three (3) for Kyegegwa wetlands and two (2) for Kamwenge Wetlands. Preparation of these plans involved facilitation of 9 dialogue meetings between communities and District Local Governments (DLGs) to identify issues and develop action plans. District Taskforce committees were formed to steer the entire process. Eventually the project supported 2 taskforce meetings held in Kamwenge and Kyegegwa to integrate in the draft restoration/ management plans biodiversity and ecosystem services results. The final management plan documents were validated at two district level meetings held in Kyegegwa and Kamwenge districts.

Activity 1.4.3 Support communities to implement the Community-Based Wetlands Management (restoration) Plans

In this reporting period, only identification of community groups was done, and these were from the villages of Aligoi and Yelulu both of which border Yelulu wetland, Terego district. The dialogue for developing Community Conservation Agreements (CCAs) will be part of developing restoration and management plans. The formulation of restoration management/ supervisory committees for Community Conservation Agreements (CCAs) will be undertaken during the implementation of the Restoration plans in the next reporting period.

Output 1.5 Management Plans and Community Conservation Agreements between District LGs and communities for protecting riverbanks and wetlands developed.

Activity 1.5.1 Support development of MoUs between District LGs and landowners (communities and private) for collaborative management of riverbanks / wetlands.

The five (5) Memoranda of Understanding MoUs to enable participation of the host districts in the implementation of the project were developed and signed in 2021. The other required MoUs fall under activity 1.5.2 and activity 1.5.3.

Activity 1.5.2 Support development of Community Conservation Agreements (CCAs) with selected communities for implementation of the targeted ecosystems (woodlands).

ECO identified several natural woodlands to conserve in the districts of Yumbe and Terego and supported districts and communities to develop Memoranda of Understanding (MOU) to safeguard the woodlands and keep managing them in their natural estate. In addition, ECO developed MoUs with farmers hosting demonstrations. Table 13 shows the different Community Conservation Agreements ECO supported in developing and signing in the period of Jan-Dec 2022.

Table 13: Summary of signed MoUs per District disaggregated by gender

District	Sub-county	Gender		
		Male	Female	Institutions
Yumbe	Drajini	94	7	3
	Kuru	66	17	1
Terego	Omugo	79	10	0
	Odupi	43	6	1
	Bileafe	111	12	1
	Uriama	7	0	1
Total		400	52	7

Activity 1.5.3 Develop MoUs with private landowners to implement riverbank / wetland restoration and protection interventions

NU will support development MoUs between the districts and landowners neighbouring targeted wetlands and riverbanks to ensure their protection. In MARR, the targeted wetlands for restoration are Rushango and Kajororo in Kamwenge district, and Kyakatwanga, Orukinga, and Komuchwezi in Kyegegwa district. No riverbank is targeted in this region.

In WNR, rivers Enyau, and the streams of Imvetre and Ore have been identified for protection and restoration of broken banks. These are the key rivers/streams that have more or less permanent waters although their volumes also reduce significantly in the dry seasons. Protection of the riverbanks will mainly be by planting/growing indigenous trees and bamboo at the boundary and in the buffer zone of the banks. Protection started by planting of 5 Ha strip along the bordering area of Imvetre stream in Omugo sub-county, Terego district. In the strip along the stream, enrichment planting of 2,325 seedlings of species of Bamboo, Mahogany, *Afzelia africana, Milicia excelsa* (Mvule) and *Maesopsis eminii* tree species was done.

The process to identify owners of farmlands through which the selected rivers/stream traverse will commence in 2023. Boundaries of the rivers/stream will be determined jointly with the district local government.

OUTCOME 2: Landowners in refugee host communities supported to adopt agroforestry enterprises, and adapt Sustainable Land Management (SLM), and Climate Smart Agriculture (CSA) practices.

Output 2.1 Grassroots NGOs, CBOs and Small and Medium Enterprises (SMEs) operating in the refugee hosting districts strengthened to support landowners and households to adopt SLM, CSA, and AF practices.

Activity 2.1.1 Strengthen coordination and collaboration of CSOs, NGOs, and SMEs for service delivery and implementation/uptake SLM, CSA, AF, and Woodlot establishment at landscape level

In a bid to plan for an effective training, the project has maintained contact with the 43 NGOs & CBOs identified in 2021. These are operating in the project landscapes around the six refugee settlements of Rwamwanja, Kyegegwa, Kyangwali, Bidibidi, Imvepi, and Rhino Camp. To prepare a tailored training program that addresses the challenge they face in delivery of services in areas of Sustainable Land Management (SLM), Climate Smart Agriculture (CSA), and Agroforestry (AF), structured requests were sent to each of them to fill. They were all asked to provide information on areas that should be emphasized during the training and, only 13 responded. Based on the limited response, the project focussed more on the priorities under Outcome 1. As a result of implementing partners to engage the CSOs in scaling up the SLM/CSA/AF practices in 2023, a retarining of these has been considered urgent. As such trainings covering a wide range of topics under SLM, CSA, and AF practices have been rganized. A procurement process to identify a qualified consultant to carry out the training had started and the trainings in the two regions will be done in the 1st or 2nd Quarter of 2023.

Output 2.2. Households are knowledgeable and skilled in SLM, CSA, and Agroforestry practices.

Activity 2.2.1. Identify and train community-based trainers,

In preparation for scaling up, the project planned to identify and train community-based trainers as project extension workers. Two categories were considered, and these were: Community Based Extension Workers (CBEWs) who are the staff of the project; and b) Training of Trainers (ToTs). Seven (7) CBEWs were identified in 2021. These together with 26 local government extension and project staff were trained by agricultural and land management experts hired by the project. The experts developed a training manual on Sustainable Land Management (SLM) and Climate Smart Agriculture (CSA) for community-based extension workers and used it to carry out the training. A total of 33 CBEWs (28 M and 5 F) were trained. Both the Training manual and training report are annexed to this report.

Figures 24 and 25 shows the trainees preparing and making Permanent Planting Basins, a key climate smart agriculture intervention to minimize tillage of land during cropping. The training covered principles of SLM and CSA practices including their need and different technologies applied in Uganda. Other topics covered included: Crop Rotation, Fallowing, Organic Fertilization, Conservation Agriculture, Soil and water Conservation, Mulching, Contour Farming, Contour Furrows, Rainwater harvesting, Stone lining, Grass Strips, and Water retention ditches. Participants also learnt how to use the soil test kit to determine the fertility of the soil.

On the hand, figure 27 shows pictures of healthy maize and beans growing in the demonstrations of permanent planting basins in Kyangwali and Yumbe districts in August 2022 respectively.

Figure 24: Participants clearing the site meant for demonstration of SLM / CSA practice in Lori Subcounty in Yumbe district

Figure 25: The SLM/CSA specialist demonstrating how to make permanent plant basins at Dodo Village in Lori Subcounty in Yumbe district

Figure 26: Left was one of the maize demo gardens in Kyangwali Sub- County in Kikuube district in Sept 2022, while right was one of the beans demo-garden in Yumbe district in Aug 2022

The trained Community-Based Extension Workers (CBEWs) were after the training equipped to effectively carry out their work including supporting the establishment of demonstration gardens in the project area. Eachof the 7 CBEWs was supported with a bicycle for field mobility, a smartphone with the Kobo Toolbox app installed so they can report on all of the allocated fieldwork, and provision of other field gear.

The trained project and selected LG staff used their acquired knowledge and skills to train farmers to host demonstrations and scaling up some of the selected practices under SLM, CSA and AF. For example, in collaboration with LGs, the project engaged some of the selected staff to lead on the training of communities in agroforestry practices. The agroforestry practices that the communities are being trained on include boundary planting, strip planting, internal line agroforestry and the scattered tree planting.

Activity 2.2.2. Establish demonstrations for good practices of SLM, AF, CSAs, and post-harvest handling.

As part of enabling scaling up of the SLM, CSA, and AF practices, the project is targeting to establish at least 420 Ha under demonstrations where farmers can be taken to learn how to implement the different technologies and their benefits. A total of 180.0 Ha was earmarked for establishment in 2022 by ECO (100 Ha and 2000 m), NU (74 Ha), and WCS (6 Ha). Table 14 shows farmers trained in SLM and AF

technologies and the hectares of land where the promoted technologies have been established. SLM technologies promoted include cut off drainage or check dams, green walling, and grass bands demonstrations. Agroforestry (AF) hedgerows with *Calliandra calothyrsus* and *Sesbania sesban* for soil improvement were integrated in the gardens with the promoted SLM practices. A total of 3000 m of grass bands, and other SLM interventions and the Agroforestry are currently established in 96 Ha (96% of ECO target) of 224 farmlands. In the same farmlands, Grevillea *robusta* an Agroforestry tree species has been planted in the gardens in scattered arrangements but also on the boundaries of gardens. Figure 26 shows the grass bands of Vetiver grass and the check dams promoted in the districts of Terego and Yumbe.

Table 14: Acreage of SLM and AF demonstrations established by ECO

District	No. of SLM/AF farmers trained	Land (Ha)
Terego	113 (Male-90, Female- 21, Insti-2)	47.6
Yumbe	111 (Male-92, Female-18, Institutions -1	48.4
Total	224 Farmlands, 3000m grass bunds	96

Figure 27: Demonstration of Vetiver grass hedgerows and check dams (water retention ditches) in Bileafe Subcounty, Terego District

On the other hand, NU established Agroforestry practices including boundary planting, strip planting, boundary and the scattered tree planting) in a total of 85 Ha of farmlands in Terego District. These are hosted by 188 farmers of which 90 are female while 98 are male. WCS established Thirty (30) demonstration gardens of Permanent Planting Basins, recommended cropping methodologies with relevant agro inputs, crop rotation, and mulching in a total of 6 Ha farmlands in the districts of Kikuube (1.41 Ha), Yumbe (2.83 Ha), and Terego (1.82 Ha). Smaller demonstrations of ½ an acre (0.202 Ha) was preferred because they require lesser establishment and management costs compared to bigger ones.

Out of the total annual target of 180 Ha for 2022, 187 Ha was achieved. Demonstrations larger than 0.5 acres (0.202 Ha) have been avoided because of the envisaged cost of maintaining them which a farmer may not afford. A strategy to consider block farmlands as a unit to demonstrate SLM/CSA/AF practices

has been contemplated and will be tested as part of scaling up in 2023. Success of this approach is postulated to make greater impact at landscape level and therefore attract farmers for adoption.

Activity 2.2.3. Conduct public awareness campaigns to sensitize farmers about CSA, SLM, and AF practices.

Public awareness campaigns are viewed by the project as one way of encouraging adoption of SLM/CSA/AF practices. It is premised on the assumption that there is already adequate knowledge and existing practices in the project operational areas to learn from. Therefore, the project preferred carrying out public campaigns to sensitize farmers and communities on SLM/CSA/AF practices as one way of accelerating adoption of the practices.

Thus, in this reporting period, a number of public awareness campaign have been conducted by implementing partners. These included radio talk show programs and public meetings. Of the 12 public awareness raising campaigns targeted by ECO in 2022, 10 were conducted including five (5) through community radio dialogues and another through community trainings held in Omugo, Odupi, and Bileafe sub-counties of Terego district and Drajini and Kuru of Yumbe district to sensitise farmers on AF and SLM practices. Table 15 shows the attendance of the community radio dialogues (excludes the listeners who tuned in from the public domain) while table 16 shows attendance. The meetings held helped to identify interested farmers that were subsequently engaged to host the demonstrations established under activity 2.2.2 above.

Table 15: Attendance of community radio dialogues

Gender	Yumbe			Terego				Overall Total
	Drajini	Kuru	Total	Omugo	Odupi	Bileafe	Total	All districts
M	13	28	41	10	24	18	52	93
F	2	9	11	3	3	1	7	18
Total	15	37	52	13	27	19	59	111

Table 16: Attendance of meetings for scaling up SLM/AF practices through community trainings

Gender	Yumbe			Terego				Overall total
	Drajini	Kuru	Total	Omugo	Odupi	Bileafe	Total	All districts
M	61	31	92	45	16	29	90	182
F	10	8	18	5	6	10	21	39
Institution	1		1		1	1	2	3
Total	72	39	111	50	23	40	113	224

Regarding farmer reach using the demonstration gardens on SLM/CSA, demo-host farmers' records show that 1,987 people (976M, 1011F) interacted with the demo-host farmers to learn more about the demonstrated CSA and SLM practices. Table 17 shows farmer reach using the CSA and SLM demo-

gardens supported by WCS, as well as the number of people who interacted with the demo-host farmers. Follow-ups with these will be done to check if they have adopted the practices they learnt.

Table 17: Distribution of CSA and SLM demo-gardens in the project area under WCS as well as the number of people who interacted with the demo-host farmers

District	Sub counties	# demo-gardens sites established	Farmers that have visited the sites		Totals
			Male	Female	
Yumbe	Kerwa and Wandi	3	100	127	841
	Midigo	3	60	92	
	Kori and Koki	4	87	140	
	Odravo and Ladongo	4	97	138	
Terego	Odupi and Dragini	4	109	85	446
	Odupi (Lower Rhino camp)	5	101	151	
Kikube	Kyangwali	7	422	278	700
Total		**30**	**976**	**1,011**	**1,987**

Also, around the selected wetlands and riverbanks under restoration by NU, more communities were trained in agroforestry practices and restoration of ecosystems. Local partners (NFA and district staff) supported the trainings in the landscapes of Otumbari LFR and Yelulu wetland in Odupi sub-county, Terego district. In these landscapes, 185 people (82 females & 103 males) have been reached with the promoted agroforestry technologies. Pictures in figure 28 shows the NFA and district staff training farmers in Odupi sub-county. The trainings were aimed at enabling more farmers to adopt the appropriate SLM and Agroforestry technologies for increased household income and increased land productivity and climate change resilience. The selected farmers from the identified community groups were profiled and assessed to determine the size of land available for agroforestry households.

Figure 28: NFA sector Manager Ms. Forde Betty and Forest Officer Mr. Tabule Magnon took lead on training the farmers on AF practices. (Left-Right: Theoretical session on AF and its advantages, lining and required spacing, pitting, planting and spot weeding)

The trained farmers were from 5 community groups hailing from the villages of Joyia, Manipi-Odupi, Yelulu, Aligoi and Manipi Boroa were further supported with agroforestry tree seedlings of both fruit and indigenous tree seedlings. The supported community groups are registered as CBOs at the subcounty level. These community groups comprise of farmers that were affected/displaced by the ongoing restoration activities in Otumbari LFR & Yelulu wetland catchment. Tree species that were distributed to the farmers included *Mangifera indic*a (Mango), *Citrus sinensis* (Oranges), P*ersea*

americana (Avacado), *Artocarpus heterophyllus* (Jack Fruit), *Milicia excelsa* (Mvule), *Melia volkensi* (Giant Lira), Mahogany, *Grevillea robusta*, Neem tree and Vitellaria paradoxa (Shea nut). The acreage established under agroforestry practices is 85 ha (including the 74 Ha that was the target under demonstrations). The agroforestry practices adopted by the farmers included boundary planting, strip planting, plot agroforestry and the scattered tree planting.

Output 2.3 Woodlots to increase tree cover in the landscapes to provide wood products established

Activity 2.3.1 Support landowners to plant trees in woodlot formations.

The life of project target regarding establishment of woodlots is 182 hectares (Ha) for future sources of fuel wood, building materials and for any other wood related enterprise. However, after guidance from European Union Delegation office (EUD) an additional 360 Ha were set aside as additional woodlots to be established within and in the surroundings of refugee settlements. Out of the target of 182 Ha, 186 Ha were achieved in 2022. The process involved identifying individual farmers /institutions with land and interested in woodlots and these were identified at organized community meetings. The interested farmers and institutions were registered, and followed up to assess the land, agree with the owners the species of interest and carry-on hands-on training on how to prepare the land.

Training/sensitization

Prior to selection and support to establish 150 Ha that had been targeted for 2022, community meetings were organized for those who are interested in woodlot establishment. Specifically for this intervention. Five (5) farmer sensitization/ training meetings (3 in Terego, 2 in Yumbe) were conducted. The sensitization centred on how to prepare to establish woodlots for different objectives, on how to grow seedlings into trees, general management and protection of established woodlots. A total of 222 farmers (comprised of 45 females and 177 males) attended the five meetings.

Woodlot establishment

A total of 223,300 woodlot seedling species of *Pinus oocarpa, Grevillea robusta*, Eucalyptus, Teak, *Gmelina arborea*, and Giant Lira were procured from 3 nursery operators in August- October 2022 and distributed to 192 farmers (129 from Terego and 63 from Yumbe). The farmers planted the trees resulting in establishment of 186 Ha woodlots. Therefore, the project target of 182 Ha was met in 2022. All these woodlots have indigenous tree species of either Mahogany or Afezeria africana planted as boundary trees to demarcate the farmlands. In the remaining period, the project will focus more on replanting to replace the dead one as a result of fires and or with low survival rates, and also support maintenance. Most beneficiaries were male headed (182 males, 6 females and 4 institution). Women participation remains very low given the cultural norms that limit them from owning land while institutions are constrained with continued management resources.

Supervision and monitoring

Field supervision and monitoring coupled with skilling on maintenance of the growing seedlings has been and will continue in 2023 to ensure that the growing trees are healthy and able to survive the initial harsh conditions. Field inspections and backstopping in Yumbe and Tergo districts were conducted with help of 11 recruited ToTs as well as periodic IP staff. Like under the woodland restoration, the field monitoring visits found out that woodlot revealed that majority of the farmers had left the trees to grow under dense vegetation cover a condition attributed to limited labour and farm implements for proper planting and management of the planted trees. Other identified threats are prolonged and very hot drought period, termite destructions, and roaming domestic animals. Nevertheless, all farmers were strongly encouraged to carry out spot/strip or total weeding, create fire lines to protect the trees from wildfires.

A field visit to woodlot farmlands conducted in January 2023 established that, the survival rate was was below 60% for all the woodlot farmers. The field visit found out that some farmers had lost about 93 Ha of established woodlots in a number of fire incidences, animal destruction, termite infestation and

the prolonged drought. This survival rate even after fires was high for Teak and Gmelina species. Pine and eucalyptus were observed to be prone to prolonged drought, termites and fires.

Woodlot establishment for woodland for restoration and supply of products to refugees

On the other hand, UBF engaged OPM Settlement Commandants and district government staff to identify privately, communally, and institutional owned woodlands larger than 10 Ha for support by establishing woodlots for woodland restoration within and on the periphery of refugee settlements. The intention was to establish larger woodlots for woodland restoration. In these sites a mix of indigenous and exotic tree species have been planted. The exotic species are the fast-growing species for future controlled harvesting and indigenous canopy tree species that are expected to remain unused by the communities to enhance woodland restoration. The objective of woodland restoration objective will be achieved through regulation of harvest of trees for firewood and building poles. The fast-growing exotic *Gmelina arborea* and *Mellia volkensii* species were planted in large numbers to:

a. Ensure fast tree cover close up in three to five years and impact felt in a shorter period.
b. Provide nursing services to slower growing indigenous canopy species so that they also grow fast.
c. Provide required wood products (poles and firewood) in a sustainable way. The species coppices and with controlled harvesting can continually provide poles and firewood.

The selection approach led to identification of 14 farmlands totaling 245.5 Ha around the refugee settlements of Kyangwali, Bidibidi, Imvepi, and Rhino camp and as presented in table 18.

Table 18: Large farmlands selected for woodland restoration within the refugee and surroundings

Name of refugee settlement	**#**	**Ownership of the land**	**Identified (Ha)**	**Achieved (Ha)**
Bidibidi – Yumbe district	1	Waiga Rashid	25	**20**
	2	Anyandru Elly Moses	10	11.4
	3	Bariti Ratib Musa	20	8
		Total	**55**	**39.4**
Rhino camp- Terego district	1	Candia Denis	10	10.3
	2	Anzo Jacob	20	**26.6**
	3	Oluba community land	30	**30.2**
		Total	**60**	**67.1**
Imvepi- Terego district	1	Aliga John	30	**32.7**
	2	Itirima Natal	5	**4.9**
	3	Bandua Isaac	25	**25**
	4	Obiga Samuel	20	**20**
		Total	**80**	**82.6**
Kyangwali-Kikuube district	1	Bagonza Vicent	10	**2.8**
	2	Nyesigire Christopher	2.5	**0.6**
	3	Gambanda William	5	**0.5**
	4	OPM resettlement	30	**30.5**
		Total	**47.5**	**34.4**
All settlements		**Overall**	**242.5**	**223.5**

Because of the size and noting that the capacity of owners to afforest the identified large chunks of woodlands for restoration was inadequate, 8 Civil Society Organizations (CSOs) and Small and Medium Scale Entrepreneurs (SMEs) were procured (through a procurement process involving advertising in the target districts) to support woodlot establishment. The eight service providers where able to successfully accomplish the planting of allocated targets leading to an achievement of 92.2% of the identified land within one month. 189.2 Ha of woodlots for woodland restoration was established in in Terego and Yumbe districts while 34.4 ha was established within and outside Kyangwali settlement.

A total of 247,000 seedlings were purchased and distributed by four seedling suppliers. Table 19 shows how the seedlings were distributed.

Table 19. Seedling distributed to each beneficiary of woodland

Beneficiary	Afzeria africana	Bamboo	Gmelina arborea	Melia Volkensii	Khaya spp	Maesop eminii	Milicia excelsa	Neem	Shea Nut	Teak	Terminalia	Total
Aliga John	731		19,931	6,581	656		300	1,463	750	1,706		32,119
Anyandru Moses	218		5,491	2,436	182		145	218	182	923		9,795
Anzo Jacob	400		12,417	2,250	333		267	-	333	2,500		18,500
Bagonza Vicent			6,632	1,895	316	237	237				158	9,474
Bandua Isaac	609		16,609	5,484	547		250	1,219	625	1,422		26,766
Bariti Ratib	436		10,982	4,873	364		291	436	364	1,845		19,591
Candia Denis	200		6,208	1,125	167		133	-	167	1,250		9,250
Gambanda William			3,316	947	158	118	118				79	4,737
Itirima Natal	122		3,322	1,097	109		50	244	125	284		5,353
Nyesigire Christopher			1,658	474	79	59	59				39	2,368
Obiga Samuel	488		13,288	4,388	438		200	975	500	1,138		21,413
Oluba Comm	600		18,625	3,375	500		400	-	500	3,750		27,750
Kyangwali		500	19,895	5,684	947	711	711				474	28,921
Waiga Rashid	545		13,727	6,091	455		364	545	455	2,307		24,489
Total	4,350	500	152100	46,700	5,250	1,125	3525	5,100	4,000	17,125	750	240,525

A planting design of mixing indigenous slow/canopy species with exotic fast-growing species (composed of any of these Gmelina, Giant lira or Neem) was developed for use by all the service providers (Annex 32). Indigenous species were to be spaced at a distance of at least 12 m apart. Leading to a total of 69 canopy/slower growing trees planted in each hectare. The indigenous species planted in the Terego and Yumbe mixed woodlots include African oak (*Afzeria africana*), Mahogany (*Khaya grandifolia*), Mvule (*Milicia excelsa*), and Shea Nut (*Vitellaria paradoxa*). The fast-growing species planted in each hectare was set at 1,042 seedlings. The species planted were the fast-growing exotic species of Gamhar (*Gmelina arborea*), Giant lira (*Melia Volkensii*), Neem (*Azadirachta indica*), and Teak (Tectona grandis).

To ensure successful woodlot establishment for woodland restoration is undertaken by the contracted service providers in a shortest possible time, intensive monitoring visits were carried out. Figures 29 to 34 shows some of the pictures of the monitoring visits to expedite start of contract implementation. Annexes 33 presents a report on the selection of the sites, while annexes 34, and 35 are the field monitoring visits undertaken to ensure timely completeness and quality assurance during establishment. Another joint field visit involved the Save the Children Fund and is reported in annex 23.

Figure 29: Mr William Aiso, Assistant Settlement Commandant Bidibidi Settlement, meeting Mr. Bariti Ratib Musa and brother in the 20 Ha land set aside for woodland restoration in August 2022

Figure 30: UBF project staff meeting part of the refugee members employed to open and plant trees at Bariti Ratib Musa land for restoration by Dragon Agroforestry program-a local CBO

Figure 31: UBF team meeting the Director of Letani Investment at Aliga John 30 Ha land where land clearance had stated for restoration

Figure 32: UBF team guided by Mr. Mbaguta Denis, Settlement Commandant for Rhino Camp settlement and Headman for Alfados Foresters company contracted to plant 30 Ha on Oluba Community for woodland restoration.

Figure 33: Director of Alfados showing UBF team the 20 Ha of Anzo Jacob land land under clearance for restoration in Sepetmber 2022

Figure 34: The director ECO Forestry Technical Services showing UBF team the progress of pitting in the 30 Ha piece of Kyangwali refugee settlement land allocated for restoration

In Albertine Rift, the indigenous species planted were Mahogany (*Khaya anthotheca*), Mvule (*Milicia excelsa*), Musizi (Maesopsis eminii), and Terminalia Sp while the exotic fast-growing species planted were *Gmelina arborea*, and *Melia volkensii* and bamboo on the boundary.

This mixed design excluded Teak and bamboo. Teak was given in limited quantities and planted as separate woodlots because it apparently grows better as a mono crop and has characteristics of destroying all other vegetation where it is planted. Bamboo was planted in pressure points of Kyangwali settlement to separate the refugee settlement land from the land occupied by army.

Service providers were encouraged to employ both host community members and refugees in the planting of seedlings with emphasis to have more numbers from the refugees. Table 20 shows information extracted from contractors' reports showing that a total of 603 people of which 62 % were refugees were employed in the planting of the seedlings in the woodlands.

Table 20: Number of people employed during planting of trees in large woodlands

Name of contractor	Name of beneficiary	Number of refugees employed	Number of host community members employed
DKAW Agroforestry	Waiga Rashid	83	84
Dragon Agroforestry Program	Bariti Ratib Musa	25	3
	Anyandru Moses	52	3
Letani Investments Ltd	Aliga John	42	21
	Itirima Natal	12	25
West Nile CARD	Bandua Isaac	29	25
	Obiga Samuel	42	0
Alfados Foresters Company LtD	Oluba (community land)	30	2
	Anzo Jacob	16	15
The Victims Relief Alliance	Candia Denis	13	17
ECO-Technical Forestry Services	Kyangwali (OPM Land)	30	4
African Volunteers Association	Bagonza Vicent	0	10
	Nyesigire Christopher	0	10
	Gambanda William	0	10
Total = 603		**374**	**229**

The original contracts for the contracted service providers focussed on establishment and minimal maintenance (spot weeding only) aiming at minimizing disturbance of existing vegetation. However, the rainy season of October-November in West Nile, there was rapid growth and dense grasses that engulfed the planted trees threatening the investments with eminent fires. By the time the contracts were varied to include strip weeding and fire line opening, the grass was very dry. This attracted malicious fires that burnt 54% of the establishments (Annex 36).

The approach of identifying large chunks of woodlands and engagement of local partners as service providers has demonstrated that large outputs on woodland restoration can be achieved in the shortest possible time. It creates impact that is visible at landscape levels. It eases, supervision, monitoring and inspection. However, it requires intensive supervision and monitoring by the project staff, the local government staffs, and the OPM settlement staff. It also requires substantial investments during establishment and maintenance. Although costings for this approach have not been compared with the approach of smallholder farmers to discern cost effectiveness and efficiency, this approach seems to lead to a smaller unit cost. Because of its vivid impactful advantages and achievement in the shortest possible, the approach will be scaled up in 2023 and applied in the implementation of other interventions.

Woodlot establishment in the Terego District Local Forest Reserve

The project, through Nature Uganda and following request by the Terego district Local government, Otumbari Local Forest Reserve was planted for commercial wood production. Figure 35 shows a meeting where a decision to support establishment of woodlot in Otumbari LFR was made. Otumbari LFR is found in Otumbari Parish of Odupi sub-county, Terego District. The LFR which measures 80 ha and was heavily encroached on by the farmers from neighbouring communities who were mainly carrying out unsustainable agricultural practices, collecting fuelwood and unregulated livestock grazing

that led to the conversion of over 40 ha of the forest into farmland. Other drivers of the forest loss included huge demands for fuelwood including charcoal and urbanization.

The Terego District LG has a shortage of places to access wood products required by the local government and therefore seized the opportunity of the project to replant Otumbari LFR with commercial Eucalyptus species for supply of required wood products. The woodlot establishment in Otumbari LFR contributed to the implementation of the District Action Plan of Terego District. The process involved assessment of the degraded LFR (figure 36), mapping of 40 hectares for replanting with both plantation and indigenous tree species as guided by the District Natural Resources Department, and sensitization of communities that had used the section for agriculture. Out of the 40 hectares, 35 Ha were planted with commercial Eucalyptus tree species while the five (5) were planted with indigenous tree species to protect the Imvetre stream.

Figure 35: NU team having a stakeholder meeting with the District Executive Committee (DEC) of Terego

Figure 36: NU team together with the District, subcounty and local council leaders and the regional Environmental police during the field assessment of the degraded section of Otumbari converted to farmland

Sensitization of affected communities

Before woodlot establishment commenced, there was need to sensitise the communities that were users and beneficiaries of the reserve who would be who would be affected by replanting activities. During the sensitisation meetings, stakeholders from the lower local government, the sub-county of Odupi sub-county, the district especially the Natural Resource Committee Members and forest encroachers/users were engaged and sensitised on the plans for woodlot establishment. A total of 14 meetings (2 were District meetings and 12 community level) were held and were attended by 420 people (166 females+ 254 males). The meetings and participation is presented in table 21.

Table 21: Participation of Males and Females in community sensitisation meetings on restoration activities

Parameter	Terego District meetings		Totals
	Community	District & Subcounty	
Number of meetings held	12	2	14
Total female attendance	158	8	166
Total Male attendance	208	46	254
Total attendance	366	54	420
% of female participation	43%	15%	40%

Woodlot establishment

The project supported preparation of the land, procured the seedlings, planting of the seedlings and monitored the development of the trees to ensure successful woodlot establishment. Figure 37 shows the area of Otumbari that was planted with trees. The planting activities was done by a contracted a CBO called Aparaka Tree Seedling Nursery Operators Association (hereafter called Aparaka) as service providers to supply tree planting materials, land preparation and carry out tree planting. Aparaka employed fifteen (15) of its technical staffs and Ten (10) support staffs as Nursery and plantation technicians, as well as Logistics officer and casual laborers. The CBO planted 40 ha. Of these, 35 ha were planted with clonal eucalyptus while 5 ha were planted with indigenous tree species including Mahogany (*Khaya grandifolia*), *Afzelia africana*, Muvule, and *Maesopsis eminii* to restore the degraded Imvetre stream riverine.

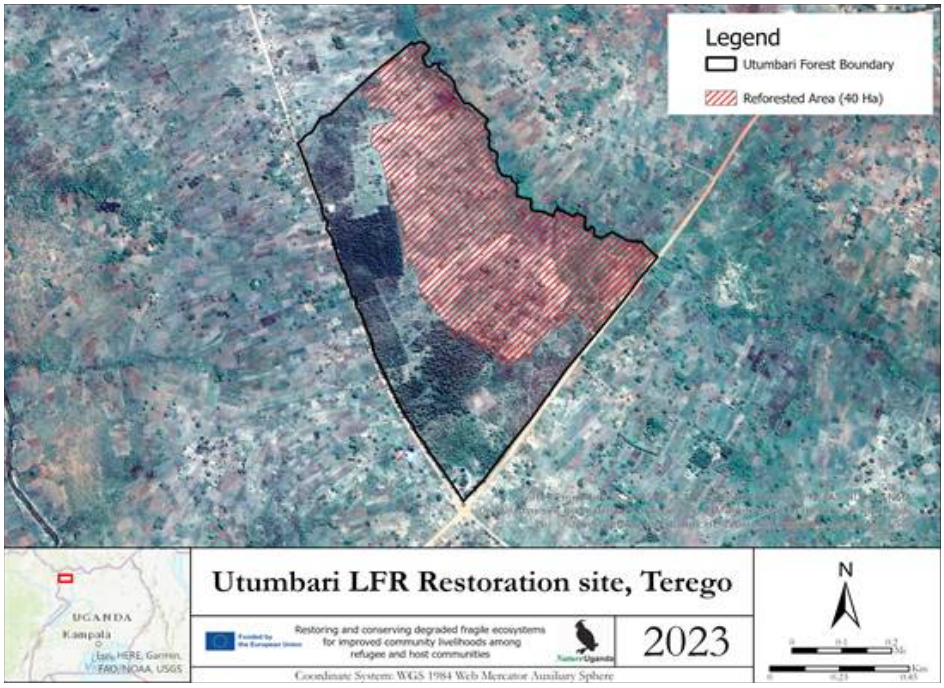


Figure 37. Woodlot established in Utumbari Local Forest Reserve, Terego district

Monitoring of survival was done by Aparaka for 3 months. Also, NU carried out three monitoring visits to the site to assess progress of executing the contract and tree survival. During the monitoring, it was

discovered that termites were destroying the planted trees leading to survival percentage of less than 60% when the trees were just about two months old. Management of termites was achieved by use of the NEMA recommended chemicals.

Output 2.4. Agroforestry enterprises established at landscape level

This output has been revised to read as **Agroforestry enterprises, SLM and CSA practices established at landscape level**. The number of indicators has also been increased to two. These are:

- Indicator 2.4.1: Number of Hectares under agroforestry/SLM/CSA/AF practices
- Indicator 2.4.2: Number of tree nurseries supported with irrigation infrastructure

The output intention is to support farmers interested in identified agroforestry enterprises but also to deliberately scale-up Agroforestry and SLM/CSA practices at landscape level. The target over the entire life of the project is to scale up selected practices in 4580 Ha of farmlands. Although the implementation was planned to start in 2022, monitoring revealed that the adoption level of the demonstrated practices was still low. Originally, it was assumed that farmers would adopt on their own after the trainings. The main challenge observed during monitoring is that farmers require continuous backstopping in order for them to adopt the practices learned at the demonstrations and during the trainings. The scaling up is expected to be accelerated in 2023 with involvement of civil society organizations.

Activity 2.4.1 Engage beneficiary communities and experts to identify appropriate AF enterprises to promote in each district

Following delays in implementation of activities related to scaling up AF enterprises, SLM and CSA practices, two regional stakeholder meetings held in West Nile Region on 14th December 2022 and in MARR on 12th January 2023(11th Jan) identified priority technologies to promote in each district. The technologies and targets were set for each district and table 22 presents the summary.

Table 22: SLM/AF technologies and target estimates for implementation in each district

#	AF/SLM/CSA Technology	Target in Ha					Total
		Kamwenge	Kyegegwa	Kikuube	Yumbe	Terego	
1	Alley cropping	300	100	100	200	200	900
2	Boundary Tree planting	100	0	100	100	100	400
3	Strip agroforestry with fruit trees	0	0	100	100	100	300
4	Avenue tree planting (along roads)	200	0	0	0	0	200
5	Contour hedgerows of fodder shrubs and grass	100	200	0	200	200	700
6	Terraces	0	100	0	0	0	100
7	Trenches/Check dams with grass/fodder shrubs	100	100	0	200	200	600
8	Woodlots especially on hills	0	500	200	0	0	700
9	Permanent Planting Basins	200	0	500	200	200	1100
	Total target	**1000**	**1000**	**1000**	**1000**	**1000**	**5000**

The above set targets will be the main focus for delivery in 2023.

Activity 2.4.2 Support selected trees nursery operators to produce quality agroforestry planting materials throughout the year

The project target is to support 21 tree nurseries with solar powered irrigation infrastructure to enable timely seedling production and thus meet the required supplies. By end of February 2022, 62 private tree nurseries existing in project operation were identified (27 in MARR and 35 in WNR) and trained in good nursery practices . In December 2021, 38 nursery operators for WNR region were trained at Yumbe district headquarters and in April 2022, twenty-seven (27) nursery operators from MARR were trained in Fort Portal. Training was achieved in collaboration with NFA. A training report for nursery operators in MARR is annexed as annex 17.

Figure 38: Nursery operators in MAAR being trained on different types of grafting

A process to select nurseries to support with small-scale irrigation infrastructure to enable the nursery operators produce seedlings on a sustainable basis started is on-going. The trained nursery operators were asked to make proposals on what they want to be supported on using a structured form. The received applications were evaluated against the criteria on the form. Evaluation team observed that the evaluation for WNR could not be completed without technical information on water needs and bills of quantities to access sustainable water supplies.

District Water engineers for Terego and Yumbe district were engaged to visit all the identified nurseries and provide recommendations on water sources to irrigate the nursery throughout the year and the bills of quantities required to enable the nurseries access permanent water for irrigation. Reports on water needs for each nursery were received in December 2022 and are due for review to select those nurseries to support with solar powered irrigation infrastructure in 2023.

Activity 2.4.3 Support landowners at landscape level to "scale up" appropriate agroforestry trees for the selected enterprises and SLM and CSA practices.

Under this activity, the project targets to scale up SLM, CSA, and AF practices covering 4,580 Ha of farmlands. Attention to this activity aimed at enabling farmers adopt and integrate SLM, CSA, and AF practices were less emphasized leading to poor performance on this activity and the generally on the entire output. This was because priority was put on acceleration of restoration and conservation activities under Outcome 1. A strategy has been devised to ensure that the project target of scaling up CSA, AF, and SLM practices is met in 2023. The strategy is to engage Civil Society Organizations (CSOs) operating in the two regions and experienced in implementation of selected practices under table 15 above. All CSOs organization will be trained on the selected SLM/CSA practices and monitored to ensure effective delivery of the services.

Output 2.5 Farmers and private sector capacity to apply appropriate technologies to improve post-harvest handling, storage and value addition built.

The project considers this output as an incentive for farmers and communities to get involved in restoration of degraded ecosystems and adoption of SLM, CSA, and AF practices. It is assumed that adding value to products especially those related to conservation of natural resources and restored land will create sustainable markets and therefore encourage investments in the restoration, conservation and adoption of SLM, CSA, and AF practices to sustain land productivity and build resilience against climate change. As such the project is emphasizing adding value to enterprises related to natural resources-based products and Agroforestry. The selected enterprises to add value are Processing of Oil and butter from Shea Nut (*Vitellaria paradoxa* and Egyptian balsam (*Balanites aegyptiaca*), processing of Mango juice, production and processing of Honey processing, and processing of Cassava into quality honey, and post-harvest handling and packaging of Sesame.

Activity 2.5.1. Train farmers and private sector actors on good post-harvest handling practices and value addition

Training of farmers was delayed until finalization of enterprises for project support. Now that the enterprises have been decided upon, training will be organized in 2023 with aim of supplying quality raw materials to value addition industries the project will support. The materials and tools to provide to demonstrate good post-harvest handling will be decided upon during the training.

Activity 2.5.2 Support formation and operationalization of value chain platforms for farmers to create linkages with private sector for selected agricultural enterprises.

This activity will be achieved during and after the training under activity 2.5.1 above.

OUTCOME 3: Capacity of LGs, CSOs, private sector companies and local communities for effective uptake of climate change and environmental degradation mitigation measures strengthened.

Output 3.1: Grass root NGOs, CBOs operating in the refugee hosting districts PROVIDE support to landowners and households to implement climate change and environmental mitigation measures.

Activity 3.1.1 Develop guidelines/measures on climate change adaptation, mitigation, environmental conservation and protection, community based natural resource management for use by NGOs, and CBOs in the project areas.

Part of project funds were used t to develop a simple well-illustrated reference training guide on climate change adaptation, mitigation, environmental conservation and protection that will be used by relevant staff from local governments (LGs), Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs) and Community-Based Extension Workers (CBEWs) when training and raising awareness on climate change adaptation, mitigation, environmental conservation and protection in refugee settlements, refugee hosting communities, and beyond. The guide is attached as attached as a word version, annex 21. Once reviewed and approved by the EU, the guide will be further designed and printed for dissemination.

Activity 3.1.2 Train/sensitize grass root NGOs, CBOs to support implementation of climate change and environmental degradation mitigation measures.

The project conducted two regional trainings on use of the developed guideline on climate change adaptation, mitigation, environmental conservation and protection. The West Nile training was conducted on 13-14th September 2022 at Rosevilla Hotel in Arua City. The Western Uganda training was conducted on 15-16th September 2022 at Hoima Resort Hotel, Hoima City.

A total of 32 participants (28M, 4F) attended trainings (17 in West Nile and 15 in Mid Albertine region). Participants in these trainings included CBEWs, WCS project staff, partners from the district local government and Civil Society Organisations. The training covered the following topics: Introduction to the training & how to use the manual, concepts of climate change and environment, climate change and environmental degradation in refugee host districts of Uganda, Mitigation of climate change, Mitigation of environmental degradation, Adaptation options, key climate change and environment degradation issues in refugee host districts - feasible solutions, and Climate change and environment safeguards. During the training, participants identified threats of climate change and environmental degradation, drivers and challenges of land degradation and climate change in their respective districts. They hence validated the findings of the preliminary needs assessment that preceded the training. Feedback on the draft manual prepared under activity 3.1.1 was obtained. These were incorporated in the final training manual/guide.

Output 3.2 Community members sensitized and trained by LGs, grassroot NGOs and CBOs, on conservation and restoration of natural ecosystems.

Under output 3.2, only activity 3.2.1 was conducted.

Activity 3.2.1 Train and equip LG departments to provide extension services and outreach activities

The training was covered under activity 3.1.2. The project districts were equipped each with a motorcycle and a computer to facilitate the districts to monitor and report about the project to their councils, and communities. The equipment was handed over at organized regional meetings. The handover ceremony

was used to launch implementation of the project and increase visibility at regional level. Motorcycles and computers were received by the Chief administrative Officers and was witnessed by the LCV chairmen and other technical staff and district and sub-county politicians. The handover ceremonies were held on 10th June and 16th June 2022 at Kikuube and Yumbe district headquarters. The Kikuube ceremony was attended by CAOs, LCV Chairmen or their representatives, the DNROs, the LCV women councillors, the LCIII Chairmen or their representatives and the women councillors from the districts of Kamwenge, Kyegegwa, and Kikuube. The same category of participants attended the handover ceremony at Yumbe district from the district of Terego. At all the meetings, the settlement commandants or their representatives for five refugee settlements also attended the meetings. Figures 39 to 42 shows some of the exciting moments during the handover ceremonies.

Figure 39: The Chairman LCV Kamwenge district, the CAO of Kikuube district and the Ag. DNRO Kyegegwa district receiving and testing the project supplied motorcycles at a handover ceremony at Kikuube district on June 10th, 2022. They are for use in the respective

Figure 40: The Chairman LCV Terego district and the DNRO Yumbe district testing the project supplied motorcycles at handover ceremony on June 16th, 2022. Looking on is the Chairman LCV Yumbe, Yumbe CAO, and Yumbe RDC

Figure 41: The three CAOs of Kamwenge, Kyegegwa, and Kikuube signing a commitment board to support project implemented.

Figure 42: The CAO Yumbe district receiving the keys for the allocated motorcycle and the agreement to use the motorcycle for the project purpose.

Output 3.4 Strengthen capacity of local level private sector and farmers with appropriate value addition and post-harvest handling technologies.

Activity 3.4.1 Support selected private sector and farmers with appropriate technologies to demonstrate good post-harvest handling and value addition.

As mentioned under output 2.5 above, the projects' selected enterprises to add value are: Processing of Oil and butter from Shea Nut (*Vitellaria paradoxa* and Egyptian balsam (*Balanites aegyptiaca*), processing of Mango juice, production and processing of Honey processing, and processing of Cassava into quality honey, and post-harvest handling and packaging of Sesame. Following this selection, the UBF with support of Uganda Industrial Research Institute (UIRI), the government agency responsible for industrial research, carried out field assessment to the Districts of Yumbe and Terego to assess the conditions of the local cottage industries that had been identified earlier (annex 37). The assessment team visited groups and

individuals and determined the needs as shown in table below. A detailed summary of identified cottages to be supported is presented in table 23.

Table 23: Value addition cottage industries identified for project support

Name of cottage industry visited	**Recommended equipment or materials to supply (include type, capacity, or numbers where needed)**
Mikiga Nutrition & Education Centre located in Kei Sub County Yumbe district, manually converts 70 Tons of mango into 260 Kgs of fresh and Sterilized Mango Slices per season and 55 kg of dried mango slices are packaged per season.	Mango Juice Processing Line (1 line)
	Support with Certification process of UNBS
	Support in setting up a Quality Control Laboratory that can also support in the region.
	The support shall convert the Un utilized fresh mangoes 69,685 kg into Juice and other products, increase Output of fresh & sterilized Packaged Mango Food Slices shall increase, Output of Dry Packaged Mango Slices, and create more employment opportunities for both skilled and unskilled personnel.
	Recommended to be supported with machine that crushes, Filters, Homogenizes, Pasteurize the juice. This shall be accompanied by steeled Holding Tanks and Heat Exchangers, and Capping Machines.
Goboro Shea Butter Processing Project in Kochi Sub County, Yumbe district converts 1 Ton of Shea nut into 0.7 kg of Shea butter using Cold press equipment that is insufficient.	Recommended to have a modern Shea butter processing line, training in cosmetics and soap production and be Certified by UNBS. Presently, Un collected and not utilized Shea nut shall be put to use because of availability of Machinery. The support will enable them to collect/buy at least 10 Tons of Shea nuts instead of 1 Ton being collected now in a season., produce quality Shea butter (Grade A) and produce other added products like Lotions, Creams, Bathing Soap etc).
	Project should purchase a Crusher with expelling and filtering facilities.
Natural Resources Oil (NAREO) located in Odravu Sub County, Owolo Parish, Yumbe district. Processes Balanites Aegyptiaca into Balanites oil, 20 litres in a season using and insufficient cold press equipment. And Shea Butter, approx. 3 Tons per season are produced. Processessing of oils from other trees namely Uciki (Amarula tree) Abirit (Ximenia spp. tree) has also started producing Lotions	Have potential to process 100 kg of Shea butter in 8 hours but the equipment keeps breaking down and uses 2 filters but can use 4 filters. Recommended to have a Modern Shea butter processing line. Support a line or technology that processes Balanites oil, Amarula seed oil & Ximenia spp into quality oil and juice for wine making and training in cosmetics, soap production, and Briquette making. Will also need certification by UNBS. Project to supply. Crusher/ Expellers and Filters), and a Generator.
	The support will increase collection and buying of More Shea nut shall be collected in the season and processed into Shea butter. This support will result into increased value addition shall create more employment opportunities (skilled and non-skilled) for the women and youth in the region hence poverty reduction.
Blessed Bee for Life Trade Post (BBLTP located Yumbe Town Council, Charanga Paris, Yumbe District. Has modern equipment that processes 500 Tons of Honey per season 1.5 of wax Tons per season and 500 Kg of propolis. venom, not yet doing it but has machinery.	Needs support in training of farmers at the site in Quality Control and Quality Assurance as well as a production line to use the wax to produce cosmetics, and Soap Processing facilities. He also needs support in certification of products with UNBS. Support by the project shall help by adding other products like lotions, creams and Soap.
	Support should help in equipment that create a secondary processing of honey products into Honey venom, Tinctures and Propolis. Honey venom use in the regin will contribute to prevention of death from snake bites common in the region and Uganda in general.

Nile Bee Enterprises located in Yumbe Town Council, Yumbe district. Produce poor quality honey and wax because the company lacks Honey processing equipment and adequate space for carrying out honey processing.	Support should help in equipment that create a secondary processing of honey products into Honey venom, Tinctures and Propolis. Honey venom use in the region will contribute to prevention of death from snake bites common in the region and Uganda in general.
Needs skilling in general honey processing and value addition and support in certification of products with UNBS.	Support is needed in acquisition of Honey Processing line, that has facilities for Pressing, Filtering and Pre-heating, Filling and Capping. The support will increase both Quality & Quantity of honey being produced. The income shall be expanded by producing other products including lotions, cosmetics and soap.
Alionzi Cassava Farmers Group located in Omugo Sub County, Bura Parish, Terego district. Use hands to peel and cut cassava into chips that are dried to produce cassava flour. The group produces 1 to 1,5 tons of cassava flour. Cassava produced is not of high grade for other products such as confectionary products and start.	Need support in form of a Small-scale cassava chipping machine linked to a small Cassava Flour Processing Line to produce quality flow and Starch. They also need Tarpaulins to dry and store the cassava.
Unregistered group of Sesame production and processing in Omugo sub-county, Terego district. Mannually Produce Sesame paste mixed with ground nuts for home consumption.	Need support to set up a Sesame Processing Line for export beyond the region. They also need support in form of Tarpaulins to reduce post-harvest losses and quality goods.

Following the assessment, UIRI was tasked to prepare the specifications of the proposed equipment and the specifications were sent to a short of potential suppliers provided by UIRI. Three bidders returned their quotations in December 2022 but could not be evaluated due to lack of a technical staff on UBF. UBF needed an additional and independent minded staff to enable UBF understand the report and the bids. The evaluation will be done in January and procurement be done in first or second quarter of 2023.

Activity 3.4.2 Support Youth and women groups activities to enhance income generation.

Realizing that the project needed to ensure that women and youth benefit from the funding, the project considered supporting women and youth groups. The project is targeting 15 women and youth groups within the project landscape being supported to increase incomes from the activities already involved in. By the end of the reporting period, 26 groups from the districts of Terego (20) and six groups in Yumbe had been profiled. The identified groups were in July 2022 given a structured template to prepare business plans for their income generating activities. The project needed these plans in order to make decision on which activity to support. However, very few returned the form with scanty information (3 groups).

The project has now decided to carry out training of the groups on enterprise selection and business planning. The business plans for each group will be key outputs during the training. The project will use these to provide the financial support.

Output 3.5 A functional network & collaborative mechanism

Activity 3.5.1 Establish linkages with existing networks, mandated institutions, and between mandated institutions and local actors to strengthen coordination and collaboration.

In this reporting period, the project signed a memorandum of understanding with OPM to open the way to start implementing in the refugee settlements. The signed MoU enabled the project to get linked to the

wider networks of Stakeholders implementing activities of livelihoods and Environment within the refugee settlements and the host communities.

In addition to this, the project mobilized the Civil Society Organizations (CSOs) operating within the operational areas of the project in the two project regions. Inception meetings with them on how to increase networking, collaboration, and information sharing were held in April 2022. The inception meetings recommended for creating of regional project platforms to be held twice a year through which issues and information regarding the project will be discussed. The end of 2022 platform meetings were held in Arua and Fort-Portal in December 2022 and January 2023. At these last meetings, it was recommended that local partners be engaged in scaling up the SLM/CSA/AF practices which were lagging behind in implementation.

Output 3.6 Opportunities for Stakeholder investment in activities responding to impacts of refugees on environment and livelihoods documented.

The activities under this output were planned for implementation in 2023.

2.3 Logframe Matrix updated

Table 16 is a matrix showing the project's logical framework (Logframe). It incorporates the minor adjustment made to the logframe mentioned under the summary section above. The minor adjustments were made on output indicators under output 1.2, 1.3, 1.4, 2.4 and 2.5 by adding the new indicators and one activity as shown below. Elaboration is made on 2.4.2 and 2.5.4 because these activities were part of project design but the indicators had not been included in the first log-frame. The other new indicators were added during project implementation in 2022 to reflect what the project is doing.

- Output indicator 2.4.2: Number of tree nurseries with irrigation infrastructure established to produce quality materials throughout the year. At design, the project recognized that nursery establishment and management operations in the drought prone areas are grossly affected by lack of permanent water sources. It therefore provided a budget to support 21 nursery operators with solar powered irrigation infrastructure to ensure sustainable production of planting materials. This target was missing in the logframe and hence the inclusion now.
- Output indicator 3.4.3: Number of youth and women groups supported to enhance income generation. The project also provides for support of 15 selected women and youth groups to improve income generation from the activities involved in. This output had missed out in the logframe.

Adjustments have been made to the log frame by adding new indicators and one activity as follows.

- Output indicator 1.2.4: Number of beehives installed to enhance protection of the conserved woodlands.
- Output indicator 1.3.5. Number of Kms of boundaries of targeted wetland ecosystem demarcated by installation of concrete pillars.
- Output indicator 1.4.2: Number of Community-Based and private Wetlands Management /restoration Plans implemented.
- Output indicator 2.4.2: Number of tree nurseries with established irrigation infrastructure to produce quality materials throughout the year.
- Output indicator 2.5.4: Number of youth and women groups supported to enhance income generation.
- Activity 2.4.2. Support 15 Youth and women groups activities to enhance income generation.

The rest of the adjustments are minor edits to make the statements clearer and reflect what the project is actually implementing. The added information in the edited phrases are in inverted commas " ".

- Output 1.3 adjusted to read as Strengthen law enforcement of "NFA, districts and communities" (Protection of restored ecosystems) for the targeted ecosystems. This is an improved statement that previously was read as: Law enforcement (Protection of restored ecosystems) for the targeted ecosystems strengthened. The idea was to be clear on the targeted stakeholders for strengthening with law enforcement.
- Indicator 1.3.2 to read as Number of groups of law enforcement initiatives "including collaborative management arrangements" formed and supported "to protect and regulate access to resources from targeted ecosystems". This has been improved from the original statement read as: Indicator 1.3.2: Number of groups of law enforcement initiatives formed and supported. The idea is to ensure integration of activities at community level aimed at encouraging and or discouraging degradation and destruction of selected ecosystem resources.
- Output 2.4 to read as Agroforestry enterprises, "SLM and CSA practices" established at landscape level. It was previously stated as: Agroforestry enterprises established at landscape level. It was adjusted to provide for scaling up and meet the project target of 4,580 hectares as additional agroforestry and SLM practices adopted. This is an addition to the acreage under demonstrations (420 Ha).

The adjusted logframe is herein presented as table 24.

2.3.1 Impacts and Outcome Results

Table 24: The adjusted project Log-frame

Results chain	*Indicator*	*Baseline (2020)* *(value & reference year)*	*Target (2024)* *(value & reference year)*	*Source and mean of verification*	*Assumptions and Risk*
Impact: Improved ecosystems and livelihoods in refugee hosting landscapes	**Indicator 1:** % point change of vegetation cover in project area as a proxy for reduced pressures on ecosystems and biodiversity	50,231 ha of degraded tropical forest and savannah woodland, and 19,730 ha (in Northern Uganda) of degraded wetlands and riverbanks are available for restoration in 0-15 km radius of refugee settlements in Northern and Western Uganda ((World Bank and FAO, 2020)	10% decrease in loss and degradation of forests, wetlands, savannah woodlands, and other ecological systems in target refugee hosting landscapes, over 4 years.	Analysis of satellite images of vegetation cover change in the project sites; Field observations; Project Reports	Local Governments and NFA maintain management presence in gazetted forest reserves.
	Indicator 2: % of Households (disaggregated by gender, age, urban/rural, refugee/host community, and disability) with improved livelihoods in the project area	51% of refugees and 14% of host community households need livelihoods support	10 % Households in target refugee hosting communities with increased access to livelihood opportunities by end of Action	Field observations/ Project Reports; Socio-Economic / Basic Needs Survey (BNS) reports at the start and end of action	Households of selected communities adopt the promoted practices and enterprises.
Outcome 1: Degraded forests, wetlands, savannah woodlands and other fragile ecosystems impacted by refugee settlement in refugee hosting districts restored.	**Indicator 1.1**: % point change in area of lost and degraded forests, wetlands, savannah woodlands and riverine ecosystems restored	Degradation for refugee hosting districts in northern Uganda between 2014-2018 within 15 km buffer was 64,660 ha (IBRD/ World Bank and FAO, 2020). 64, 272 ha of tropical forest, wetlands and woodlands degraded and lost between 2001-2017 in settlements and 15 km buffer in Kikuube, Kamwenge, and Kyegegwa Districts in Western Uganda (World Bank and FAO, 2020).	At Least 3 % of lost and degraded forests, wetlands, savannah woodlands, and other fragile ecosystems within 15 km buffer of key settlements in target refugee hosting districts in Uganda restored by end of Action.	Field measurements/ Project Reports	Districts and sub-county local authorities will support restoration of selected degraded woodlands, wetlands, and river systems and will prevail over the communities using the ecosystems to support restoration activities.

Results chain	*Indicator*	*Baseline (2020)* *(value & reference year)*	*Target (2024)* *(value & reference year)*	*Source and mean of verification*	*Assumptions and Risk*
	Indicator 1.2: % increase in species composition in each of the targeted ecosystems (forests, wetlands, woodlands)	Baseline survey to assess the species composition of forests, wetlands, Savannah woodlands, and 2 fragile ecosystems	5% increase from Baseline over 4 years	Ecological / biodiversity survey reports covering key taxa (Plants, Mammals, and birds) in targeted landscapes at the start and end of action	Local Governments and NFA maintain management presence in gazetted forest reserves
	Indicator 1.3: % point change in Above Ground Biomass (AGB) stock change in restored forests and savannah woodlands	AGB stock loss (2014-2018) within the 15 km buffer was 2,183,132 tonnes in northern Uganda refugee hosting districts (IBRD/ World Bank and FAO, 2020).	5 % reduction in AGB loss in northern Uganda refugee hosting districts by end of project with reference to the Baseline	Biomass survey reports	Local authorities and communities enforce the laws and regulations to protect the restored/ conserved areas.
		AGB stock loss (2000-2017) within the 15 km buffer was 2,024,496 tonnes in target refugee hosting districts (Kikuube, Kamwenge, and Kyegegwa) of western Uganda (World Bank and FAO, 2020).	5 % reduction in AGB loss in Western Uganda refugee hosting districts by end of the project with reference to the Baseline	Biomass survey reports	Local authorities and communities enforce the laws and regulations to protect the restored/ conserved areas.
Outcome 2: Landowners in refugee host communities supported to adopt agroforestry enterprises, and adapt Sustainable Land Management (SLM), and Climate Smart Agriculture (CSA) practices	Indicator 2.1: % increase of landowners practicing sustainable land management (SLM) practices	Only 33 percent of refugee and 27 percent of host community households had training in good agricultural practices (GAP) in 2018 (Uganda Country RRP, 2019-2020). *However, Baseline survey will be conducted at beginning of action to determine the specifics to build on.*	10 % increase from baseline levels of landowners practicing agroforestry and SLM practices by end of Action	Socio-Economic / Basic Needs Survey (BNS) reports at the start and end of action -Field observations/ Project Reports	Youth and Women will access land for this purpose Landowners in host communities have positive attitudes towards and adopt the promoted SLM practices such agroforestry; planting and caring for woodlots/trees.
	Indicator 2.2: % point change in area under SLM and CSA practices	Baseline survey to be conducted at beginning of action	10% hectare increase from baseline levels of land under agroforestry and SLM practices disintegrated by	Field observations/ Project Reports	

Results chain	*Indicator*	*Baseline (2020)* *(value & reference year)*	*Target (2024)* *(value & reference year)*	*Source and mean of verification*	*Assumptions and Risk*
			gender by end of Action		
	Number of households generating income from SLM practices	Baseline survey to be conducted at beginning of action	Proportion of households generating income from SLM increased by 10% from baseline levels by end of Action	Economic data within socio-economic/well-being surveys	Households appreciate and adopt selected SLM based enterprises.
Outcome 3: Capacity of Local Governments (LG), Civil Society Organizations (CSOs), private sector companies and local communities to effectively deliver & uptake climate change and environmental degradation mitigation measures strengthened	Indicator 3.1: Percentage of community members expressing a positive attitude towards conservation and restoration of natural resources	Baseline survey to be conducted at beginning of action	Proportion of households expressing positive attitudes increased by 10 percent from baseline levels by end of Action	Socio-economic assessment surveys and District environment reports	The awareness raising and sensitization activities will enable communities appreciate the negative effects of losing the ecosystems to their socio-economic wellbeing. Key local partners and stakeholders will be willing to apply knowledge and commit more resources to adoption of interventions for mitigating climate change and environmental degradation.
	Indicator 3.2: Percentage of Households in refugee hosting communities applying climate change and environmental degradation mitigation guidelines/measures	Baseline survey to be conducted at beginning of action	Proportion of households applying the guidelines/ measures increased by 20 percent from baseline levels by end of action	Status of climate change adaptation and mitigation data within socio-economic/ well-being surveys	

2.3.2 Outputs

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
OUTCOME 1: Degraded forests, wetlands, savannah woodlands and other fragile ecosystems impacted by refugee settlement in refugee hosting districts restored.	**Output 1.1a:** Ecological baseline data on selected forests, wetlands, and savannah woodlands	**Indicator 1.1a:** Number of Ecological Baseline reports in place	Impacts of refugees and climate change on forests, wetlands, woodlands, and other fragile ecosystems in the project area not well known; Status/trends of biodiversity within targeted ecosystems not well known or documented.	Baseline study report on biodiversity/ ecological data on selected taxa (plants, mammals, birds)	Baselines report, and site-specific characterization reports	Communities and local authorities support biophysical characterization of selected ecosystems.
	Output 1.1b: Socio-economic baseline data on the targeted communities recorded (livelihood assets, existing on-farm SLM, CSA, AF, and woodlots practices in the project area recorded and KAP indicators)	Indicator 1.1b: Number of socio-economic and KAP baseline reports in place	Impacts of refugees and climate change on hots communities in the project area not well known; Declining sources of biomass energy wood evidenced by long distance covered to collect good firewood as well as poor quality of wood used for fuel (MWE 2019) Knowledge, Attitudes and Practices towards mitigating or adapting to effects of refugee impacts on livelihoods and natural resources not documented	Baseline study report on the socio-economic & KAP indicators	Baseline report	none
	Output 1.2: Targeted degraded ecosystems planted with site specific species and or assisted to regenerate naturally	**Indicator 1.2.1:** Number of hectares of forests enriched and assisted to regenerate	77, 579 tree cover lost, while 64,660 of forests, woodland, bushland, and cropland degraded and lost in 15km buffer zone of settlements in Northern Uganda between 2014 and 2018	353 hectares of natural forests	Field measurements; Project reports & maps, Field observations	Local Governments and NFA maintain management presence in gazetted forest reserves

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
		Indicator 1.2.2: Number of hectares of woodlands restored	High rates of woodland degradation due to encroachment and over-exploitation	1744 ha of woodlands	Field measurements; Project reports & maps, Field observations	Large landowners and communal land management structures favour woodland restoration
		Indicator 1.2.3: Number of hectares of wetlands and riverbank ecosystems restored	High rates of wetland loss and degradation due to encroachment and over-exploitation	400 ha of wetlands and riverbanks	Field measurements; Project reports & maps, Field observations	Local Governments & NEMA evict encroachers and promote wetland wise use practices
		Indicator 1.2.4. Number of beehives installed in selected natural woodlands for conservation	To be established	600 beehives installed	Project reports	Owners of the identified woodlands appreciate beekeeping as an incentive for their conservation
		Indicator 1.2.5. Number of Kms of boundaries of targeted wetland ecosystem demarcated by installation of concrete pillars.	To be established	To be established	Project reports	
	Output 1.3: Strengthen law enforcement of "NFA, districts and communities" (Protection of restored ecosystems) for the targeted ecosystems.	Indicator 1.3.1: Number of NFA staff trained in law enforcement	Initial field fact assessment findings report	Law enforcement staff of two central forest reserves	Project reports	
		Indicator 1.3.2: Number of groups of law enforcement initiatives (including collaborative management arrangements) formed and supported to protect and regulate access to resources from targeted ecosystems".	Initial field fact assessment findings report	Existing Collaborative Forest management groups of two Central Forest Reserves	Project reports	Communities appreciate benefits of protecting the restoring degraded ecosystems
		Indicator 1.3.3: Number of staff of responsible bodies equipped with monitoring gadgets	Initial field fact assessment findings report	Selected staff of two central forest reserves	Project reports	
	Output 1.4: Management and	Indicator 1.4.1: Number of management and restoration	Initial field fact assessment findings report	All selected ecosystems restored	Annual reports	Communities actively participate in planning

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
	restoration plans developed	plans for targeted restoration sites developed				meetings and field activities.
		Indicator 1.4.2: Number of Community-Based and private Wetlands Management /restoration Plans implemented.	Initial field fact assessment findings report	All selected ecosystems restored	Annual reports	Communities actively participate in planning meetings and field activities.
	Output 1.5 Management Plans and Community Conservation Agreements between District LGs and communities for protecting riverbanks and wetlands developed	Indicator 1.5.1: Number of MoUs with district local governments developed	Initial field fact assessment findings report	Five MoUs	MoUs and Annual reports	
		Indicator 1.5.1: Number of MoUs with landowners developed	Initial field fact assessment findings report	All landholdings supported	MoUs and Annual reports	
		Indicator 1.5.2: Number of conservation agreements developed and signed with communities	Initial field fact assessment findings report	All communities surrounding the sites restored	MoUs and Annual reports	
	Output 1.6 National Guideline for selection of new refugee sites, monitoring, and measurement of the effectiveness of mitigation measures developed	Indicator 1.6.1: A Nationally adopted Guidelines for planning and managing Refugee settlements in an environmentally responsive manner	Planning for and management of Refugee settlements not sufficiently responsive to environmentally standards and principles	ONE Nationally adopted Guidelines for planning and managing Refugee settlements in an environmentally responsive manner	Guideline for selection of new refugee sites/settlements	National level mandated institutions (OPM, NEMA) approve the Guidelines.
OUTCOME 2: Landowners in refugee host communities supported to adopt agroforestry enterprises, and adapt Sustainable	**Output 2.1:** Grassroots NGOs, CBOs and Small and Medium Enterprises (SMEs) operating in the refugee hosting districts strengthened to support landowners and households to adopt	Indicator 2.1.1: Number of grass root NGOs, CBOs and SMEs staff with knowledge and skills in SLM practices	Baseline assessment studies	10 grass root NGOs, CBOs, NGOs	Training needs assessment and annual reports	There are NGOs and CBOs with resources to leverage on to scale-up promoted interventions.
		Indicator 2.1.2: Number of grass root NGOs, CBOs and SMEs staff trained on SLM	Baseline assessment studies	10 grass root NGOs, CBOs and SMEs benefitting from project support	Field observations, Project Reports	

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
Land Management (SLM), and Climate Smart Agriculture (CSA) practices	SLM, CSA, and AF practices.					
	Output 2.2: Households are knowledgeable and skilled in SLM, CSA, and Agroforestry practices	Indicator 2.2.1: % of households knowledgeable in and practicing SLM, CSA and AF	Baseline survey to be conducted at beginning of action	10% increase from Baseline over 4 years	Survey reports	There are households with skills and adopted SLM, CSA, and AF practices to build on.
		Indicator 2.2.2: Number Hectares of demonstration gardens established	Initial field fact assessment findings report	420 ha of Agroforestry, SLM, and CSA practices	Monitoring and annual reports	Farmers will set aside land to establish demonstrations and allow others to learn from these.
		Indicator 2.2.3: Number of households trained in CSA, SLM and agroforestry	Initial field fact assessment findings report	200 people trained in Climate Smart Agriculture (CSA) practices	Field observations, Project Reports	Farmer willingness to train in the practices
	Output 2.3: Woodlots to increase tree cover in the landscapes to provide wood products established	Indicator 2.3.1: Number of woodlots established with fuel wood tree species	Initial field fact assessment findings report	At least 100	Annual reports	Project will engage individual land sizes not exceeding 2 ha
		Indicator 2.3.2: Number of Hectares of woodlots established	Baseline survey to be conducted at beginning of action	182 hectares of woodlots planted	Field measurements, Project Reports	None
	Output 2.4: Agroforestry enterprises SLM and CSA practices established at landscape level	Indicator 2.4.1: Number of Hectares under agroforestry/SLM/CSA practices	Baseline survey to be conducted at beginning of action	4,580 hectares of additional agroforestry and SLM/CSA practices adopted	Field observations, Project Reports	Farmers willing to integrate selected agroforestry trees in the cropping systems.
		Indicator 2.4.2: Number of tree nurseries with established irrigation infrastructure to produce quality materials throughout the year.	Field assessment report data	21 irrigation infrastructure established	Project reports	Permanent water sources accessible or can be constructed within the project budget

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
	Output 2.5: Farmers and private sector capacity to apply appropriate technologies to improve post-harvest handling, storage and value addition built	Indicator 2.5.1: Number of farmers trained on good post-harvest handling practices and value addition.	Poor economic returns from agricultural produce due to post harvesting losses, low prices and weak marketing chains coupled with limited knowledge about affordable technologies for value addition and reducing post-harvest losses.	200 people trained in value addition /value chains and post-harvest technologies.	Training and annual Project Reports	None
		Indicator 2.5.2: Number of private sector entrepreneurs trained to promote value addition and value chains		8 Private sector enterprises	Training and annual Project reports	None
		Indicator 2.5.3: Number of value chain platforms formed to link value chain actors.	Initial field fact assessment findings report	4 value chain enterprises	Annual project reports	All Value chain segment actors willing to participate in platform.
		Indicator 2.5.4: Number of Youth and women groups supported to enhance income generation	Initial field assessment findings report	15 Youth and women groups supported	Reports	The identified groups are able to prepare business plans and have entrepreneurial skills
OUTCOME 3: Capacity of Local Governments (LG), Civil Society Organizations (CSOs), private sector companies and local communities to effectively deliver & uptake climate change	**Output 3.1:** Grass root NGOs, CBOs operating in the refugee hosting districts provide support to landowners and households to implement climate change and environmental mitigation measures	Indicator 3.1.1: Number of guidelines/measures on climate change adaptation, mitigation, environmental conservation and protection, community based natural resource management for use developed	Baseline survey to be conducted at beginning of action	At least 3 guidelines/measures completed/issued	Reports and records at key stakeholder institutions mainly of Local Governments (LG) and, Civil Society Organizations (CSOs).	Key stakeholder institutions will be willing to apply knowledge and use availed resources. Key personnel in target stakeholder institutions remain are available and committed during the action.
		Indicator 3.1.2: Number of LGs, CSOs and private sector company staff trained on climate change and environmental degradation		12 grass root NGOs, CBOs a benefitting from project support	Needs assessment study, Due diligence and annual Project Reports	None

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
and environmental degradation mitigation measures strengthened	**Output 3.2:** Community members sensitised and trained in conservation and restoration of natural ecosystems.	Indicator 3.2.1: Number of community members trained in conservation and restoration of natural ecosystems	Poor attitude, weak knowledge and environmental management practices among households and landowners towards impacts of climate change and environmental degradation	1000 people trained in conservation and restoration activities	Project report; training reports	
	Output 3.3: District Natural Resources Staff / change agents trained and equipped to provide extension services targeting climate change mitigation and adaptation activities.	3.3.2 Number of LGs facilitated to provide extension services		5 districts	Project reports	None
	Output 3.4: Strengthen capacity of local level private sector and farmers with appropriate value addition and post-harvest handling technologies	Indicator 3.4.1: Number of Private sector and farmers supported with appropriate equipment for value addition and post-harvest handling	Local level private sector has inadequate financial resources to invest in agricultural value chains	8 Private sector enterprises	Project reports	Budget allocated is enough to procure identified equipment/ machinery.
		Indicator 3.4.2: Number of selected Agricultural value chains supported	Initial field fact assessment findings report	4 agricultural enterprise chains	Project reports	
	Output 3.5: A functional network & collaborative mechanism.	Indicator 3.5.1: Number of linkages and networks established by the project with CBOs. NGOs. SMEs and other networks	Initial field fact assessment findings report	At least five (one per district)	Project reports	
		Indicator 3.5.2: Number of joint collaborative activities undertaken	There is an existing network at the national level led by OPM / UNHCR which we	8 Joint collaborative activities undertaken by District and Local level actors	Project reports	None

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
		Indicator 3.5.3: Number of stakeholders meetings held	will learn from and build on. There is no formal engagement between Districts and Local actors to tackle impacts of refugees and climate change on environment/natural resources and livelihoods	12 collaborative meetings of stakeholders	Project reports	None
	Output 3.6: Opportunities for Stakeholder investment in activities responding to impacts of refugees on environment and livelihoods documented	Indicator 3.6.1: Identified investment opportunities profiled	Initial field fact assessment findings report	One report	Project reports	
		Indicator 3.6.2**:** Number of stakeholders investing in SLM, CSA, AF, Woodlot establishments, Post-harvest handling, Value addition, etc	Initial field fact assessment findings report	One report	Project reports	
Outcome 4: The Project is effectively and efficiently managed, and implemented	**M1** Project M&E system is established and functional	AMELF in place and being implemented		1 project AMELP		
		Monitoring and reporting tools in place	Zero	NA	Tools and reports	
		Technical Monitoring Reports produced & shared with key stakeholders	Zero	4 annual monitoring reports	Project reports	
	M2 Prudent Financial management, procurement, and reporting	Financial reports	Zero	12 quarterly financial Statements/reports; 4 Annual financial Reports	Financial reports	
		External Audit Reports	Zero	4 External Audit Reports		
		All procurement done as planned and in compliance to donor procedures	Zero	-equipment as procured	Procurement file document	

Outcome	Output	Indicator	Baseline	Target	Source & MoV	Assumptions
	M3 Annual planning and budgeting	Plans and budgets in place	1 indicative	4 Annual work plan with budget	Work plan and budget documents	
	M4 Project compliance mechanisms in place and functional	Communications, outreach and engagement with beneficiaries, partners and stakeholders	Zero	Communications, Outreach and Engagement Strategy and Plan	Project reports	
		Environmental and Social management framework	Zero	Environmental and Social management Framework	ESMP document and reports	
		Compliance with Environmental and Social Safeguards and Standards	Zero	Compliance with Environmental and Social Safeguards and Standards	ESSS document and reports	
		Strategies for mainstreaming Gender and ensuring inclusiveness	Zero	Gender Mainstreaming and Inclusive Strategy and Plan	Gender Strategy document	
		Strategies addressing Grievances (Grievances Redress Mechanism - GRM)	Zero	Grievances Redress Strategy	GRM document	
	M5 Mid-term and end of project evaluation reports in place	Mid-term review and End of project evaluations	NA	1 Mid-term Review and 1 End of project performance evaluation report	Evaluation reports	
	M6 Field transport, equipment and facilities procured	All procurement done as planned and in compliance to donor procedures	Zero	-equipment as procured	Procurement file document	None
	M7 Steering meetings and Coordination processes	Meetings and held and minutes produced and circulated	Zero	8 meeting minutes	Minutes of meetings	
	M8 Staff recruitment and orientation	Number of staff recruited	Zero	8 staff	HR Files	None

2.4 Activity Matrix and budget for 2022

Table 25 below is the activity matrix and budget projection as was presented in the year one report.

Table 25: Activity matrix for 2022

#	Outcome, Output/activity	Performance Indicator	2022 target	Proposed budget (€)	Responsible
Outcome 1	**Degraded forests, wetlands, savannah woodlands and other fragile ecosystems impacted by refugee settlements in refugee hosting districts restored**				**WCS, NU, ECO, UBF**
Output 1.1	**Socio-economic and ecological baseline survey report**				**WCS**
Activity 1.1.1	Carry out socio-economic surveys				WCS
Activity 1.1.2	Carry out ecological surveys in the selected: a) forests, b) wetlands, and c) savannah woodlands.			3,648.81	NU
Activity 1.1.4	Carry out an assessment to establish the level of adoption and status of existing Sustainable Land Management practices and adoption of SLM, CSA, AF, Woodlots practices			1,428.57	NU
Output 1.2	**Targeted ecosystems planted with site specific species**				**NU, ECO, WCS**
Activity 1.2.1	Carry out planting / enrichment planting with site specific species and or assist forests to naturally regenerate and monitor to ensure survival of planted species	Number of ha planted	353	120,077.83	WCS
Activity 1.2.2	Carry out planting / enrichment planting with site specific species and or assist woodlands to naturally regenerate and monitor to ensure survival of planted species.	No. of Ha planted	870	181,549.78	NU, ECO, WCS
Activity 1.2.3	Carry out planting / enrichment planting with site specific species and or assist wetlands to naturally regenerate and monitor to ensure survival of planted species.	# Ha planted	230.00	62,690.48	NU
Output 1.3	**Law enforcement for the targeted ecosystems strengthened**				**WCS, NU, ECO**
Activity 1.3.1	Support Districts, communities, and NFA to open and mark the boundaries of targeted ecosystems	# of protection plans developed	2.00	4,557.14	NU
Activity 1.3.2	Train and equip Districts and NFA to protect targeted forests, wetlands, and woodlands	# of people trained	38.00	6,587.41	WCS
Activity 1.3.3	Facilitate development of community-based mechanisms (Collaborative Management arrangements) to protect and regulate access to resources from targeted ecosystems.	trainings, beehives, demarcated boundaries, CMAs		23,083.54	NU, ECO
Output 1.4	**Management and restoration plans developed**				**ECO, NU, WCS**
Activity 1.4.1	Support responsible bodies (NFA and DFs) to develop restoration management plans for targeted forests	Number of restoration plans	2.00	59.26	WCS
Activity 1.4.2	Support district LGs and communities to develop Community-Based Management (restoration) Plans for selected ecosystems.		7.00	13,071.90	NU, ECO

Activity 1.4.3	Support communities to implement the Community-Based Wetlands Management /restoration Plans.	# Committees supported	2.00	2,004.76	NU
Output 1.5	**Management Plans and Community Conservation Agreements between District LGs and communities for protecting riverbanks and wetlands developed**				**NU**
Activity 1.5.2	Support development of Community Conservation Agreements (CCAs) with selected communities for implementation of the riverbank / wetland actions.	# of groups identified	2.00	1,966.67	NU
Activity 1.5.3	Develop MoUs with private landowners to implement riverbank / wetland restoration and protection interventions		2.00	-	NU
Outcome 2	**Landowners in refugee host communities supported to adopt agroforestry enterprises and adapt Sustainable Land Management (SLM) and Climate smart Agriculture (CSA) practices**				**All**
Output 2.1	**Grassroots NGOs, CBOs and Small and Medium Enterprises (SMEs) operating in the refugee hosting districts strengthened to support landowners and households to adopt SLM practices, Climate Smart Agriculture and Agroforestry**				**All**
Activity 2.1.1	Strengthen capacity of local actors for services delivery & implementation/uptake SLM, CSA, AF, & Woodlot establishment at landscape level	2 Trainings and 200 ToTs		50,100.00	UBF
Output 2.2	**Farmers/Households are knowledgeable, skilled in, and adopting SLM, CSA and Agroforestry practices**				**All**
Activity 2.2.1	Identify and train Community based extension providers on SLM/AF/CSA	# of people trained	241.00	51,264.16	ECO, NU, WCS
Activity 2.2.2	Establish demonstrations for good practices of SLM, AF, CSAs, and post-harvest handling	# Ha established	204.00	71,823.04	ECO, NU, WCS
Activity 2.2.3	Conduct public awareness campaigns to sensitize farmers about CSA and SLM, and AF practices	# of radio talk shows, public awareness, profiling farmers		14,217.88	WCS, NU, ECO
Output 2.3	**Woodlots to increase tree cover in the landscapes and to provide wood established**				**ECO, UBF**
Activity 2.3.1	Support landowners to plant trees for woodlot formations	# Ha established	332.00	263,308.88	ECO, UBF
Output 2.4	**Agroforestry enterprises, SLM, and CSA practices established at landscape level**				**All**
Activity 2.4.1	Engage beneficiary communities and experts to identify appropriate AF enterprises to promote in each district	# Livelihood (AF/SLM) options identified	5.00	2,500.00	NU
Activity 2.4.2	Support selected tree nursery operators to produce quality agroforestry planting materials throughout the year	# trained and Sets of irrigation infrastructure established		25,112.60	UBF
Activity 2.4.3	Support landowners at landscape level to plant appropriate agroforestry trees for the selected enterprises (Upscaling SML/Agroforestry)	# Ha of SLM/Agroforestry enterprises upscaled	1,279.00	40,527.90	All
Output 2.5	**Farmers/households and private sector actors' capacity to apply appropriate technologies to improve post-harvest handling (storage and value addition) built.**				**UBF**
Activity 2.5.1	Train farmers and private sector actors on good post-harvest handling practices and value addition	Number of farmers trained	150.00	21,295.00	UBF
Activity 2.5.3	Support 15 Youth and women groups activities to enhance income generation	Number of groups supported	8.00	21,785.00	UBF

Outcome 3	**Capacity of Local Governments (LG), Civil Society Organizations (CSOs), private sector companies and local communities to effectively deliver & uptake climate change and environmental degradation mitigation measures strengthened.**				
Output 3.1	**Grass root NGOs, CBOs operating in the refugee hosting districts PROVIDE support to landowners and households to implement climate change and environmental mitigation measures**				**WCS**
Activity 3.1.2	Train/sensitize grass root NGOs, CBOs to support implementation of climate change and environmental degradation mitigation measures	# of people trained	30.00	21,136.42	WCS
Output 3.4	**Strengthen capacity of local level private sector and farmers with appropriate value addition and post-harvest handling technologies**				**UBF**
Activity 3.4.1	Support selected private sector and farmers with appropriate technologies to demonstrate good post-harvest handling and value addition.	Number of private sector actors supported	8.00	146,667.00	UBF
Output 3.5	**A functional network & collaborative mechanisms (platforms, forums, steering committee) for CBOs, NGOs, and SMEs established.**				**UBF, WCS**
Activity 3.5.1	Establish linkages with existing networks, mandated institutions, and between mandated institutions and local actors to strengthen coordination and collaboration,	Annual platform review and meetings attended		21,870.87	UBF
Outcome 4	**The Project is effectively and efficiently managed, and implemented**				UBF
4.1	Conduct Quarterly Data Quality assessments (DQA)	Number of visits	4.00	3,290.00	UBF
4.2	Conduct Quarterly on-spot inspection/validation visits to locations where outputs have been registered for quality assurance			1,400.00	UBF
4.3	Coordinate and compile quarterly and annual financial reports	Number of reports	4.00	5,000.00	UBF
4.4	Support external audit	Number of audit reports	1.00	5,000.00	UBF
4.5	Conduct two 2-day annual project review and planning workshops to review performance, and prepare plans for 2023	Workshop reports	2.00	4,491.00	UBF
4.6	Prepare quarterly and annual reports			225.00	UBF
4.7	Coordinate preparation of Quarterly and interim progress reports	Number of reports	4.00	225.00	UBF
4.8	Project compliance mechanisms in place and functional (Engage a consultant to prepare ESMF for the project)	# reports	1	9,375.00	UBF
4.90	Support mid-term evaluation	# reports	1	5,625.00	UBF
4.1	Promote visibility of the funded projects	Various		8,750.00	UBF
4.11	Conduct steering committee meetings	# meetings	2.00	280.00	UBF
4.12	Organize national Project coordination committee (consortium) meetings to address project issues and or review progress of project implementation	# meetings of PCC	4.00	500.00	UBF

2.5 Action Plan for 2023

A summary of the proposed action plan for the year 2023 is presented in table 26. The detailed workplans is attached as Annex 37

Table 26. summary of outputs and activities planned for 2023

Output/Activities	Timing				Estimated cost (EURO)	Responsible IP
	Q1	Q2	Q3	Q4		
Outcome 1. Degraded forests, wetlands, savannah woodlands and other fragile ecosystems impacted by refugee settlements in refugee hosting districts restored						
Output 1.1 "a. Ecological baseline data on selected forests, wetlands, and savannah woodlands b. Socio-economic baseline data on the targeted communities recorded (livelihood assets, existing on-farm SLM, CSA, AF, and woodlots practices in the project area recorded and KAP indicators)"						NU, ECO
Activity 1.1.2 Carry out ecological surveys in the selected: a) forests, b) wetlands, and c) savannah woodlands.					3,975	NU
Activity 1.1.2.1 Feed Back and Validation Meetings on the Ecological and Social Economic surveys in WN	X				3,975	NU
Activity 1.1.5 Carry out assessment of policy and legal requirements for compliance of refugee settlements with environmental standards (ECO and UBF)	X	X			8,787.50	ECO
Output 1.2 Targeted ecosystems planted with site-specific species						NU, WCS, ECO, UBF
Activity 1.2.1 Carry out planting/enrichment planting with site-specific species and or assist forests to naturally regenerate and monitor to ensure the survival of planted species					8,916.40	WCS
Activity 1.2.1.1 Carry out supervision & monitoring of restoration & maintenance activities with respect to the ToRs, contracts & work schedules for service providers in Mt Kei and Bugoma CFRs	x	x	x	x	8,916.40	WCS
Activity 1.2.2 Carry out planting/enrichment planting with site-specific species and or assist woodlands to naturally regenerate and monitor to ensure the survival of planted species						WCS, NU, ECO
Activity 1.2.2.1 Spatially Identify more degraded woodlands areas to restore in the target clusters	X					WCS
Activity 1.2.2.1 Map woodland sites for restoration through stakeholder engagements	X				3,857	NU
Activity 1.2.2.2 Conduct sensitization meetings for communities/private woodland owners to inform them about the restoration of degraded woodlands	X				1,166.00	WCS
Activity 1.2.2.2 Map, georeference identified sites for woodlands	X				1,869	ECO

Activity 1.2.2.3 Request for expression of interest from woodland owners for restoration planting and shortlist the eligible ones	X				195.00	WCS
Activity 1.2.2.3 Mobilise and raise awareness in refugee camps on the restoration of selected Sites.	X	X	X	X	6,384	NU
Activity 1.2.2.3 Support farmers to prepare and plant trees to enrich the targeted woodlands	X	X	X		37,463	ECO
Activity 1.2.2.4 Map out the sites shortlisted applicants of woodland owners determine the requirements, and planting plans	X				2,182.00	WCS
Activity 1.2.2.4 Conduct tree maintenance, fire protection & pruning in planted woodland sites	X	X	X	X	22,650	ECO
Activity 1.2.2.4 Purchase seedlings suitable for planting in woodlands (Ref 2.4)		X	X	X	16,216	NU
Activity 1.2.2.5 Provide required planting & maintenance materials to the interested woodland community/private owner based on mutual understanding		X	X		29,297.20	WCS
Activity 1.2.2.5 Conduct a Publicity event for the implementation of restoration plans.		X	X		5,238	NU
Activity 1.2.2.6 Identify TOTs and develop work schedules for UBF & WCS to fully engage them during project implementation in the project areas	X	X	X		252.00	WCS
Activity 1.2.2.6 Train communities in woodland Restoration		X	X	X	3,300	NU
Activity 1.2.2.7 Supervise and backstop the planting/natural regeneration.		X	X		4,148.40	WCS
Activity 1.2.2.8 Identify, train and equip selected community monitors in monitoring skills (water quality, observation, binoculars) to monitor regeneration of the restored areas		X	X	X	4,919	NU
Activity 1.2.2.9 Support planting of selected indigenous species in selected woodlands and or promote natural regeneration in demarcated sites (agroforestry) also refer 2.4		X	X	X	5,681	NU
Activity 1.2.2.10 Monitor the regeneration at the sites, supervise and produce reports for recommendations.			x	x	2,005	NU
Activity 1.2.2.11 Provide livelihood interventions for participating community groups (also refer to 1.1.4, 2.2,2.4 and 2.5)		X	X		11,119	NU
Activity 1.2.2.12 Train and equip responsible district technical teams to monitor the regeneration of the restored woodland sites		X	X	X	4,076	NU
Activity 1.2.3 Carry out planting/enrichment planting with site specific species and or assist wetlands to naturally regenerate and monitor to ensure the survival of planted species.						NU

Activity 1.2.3.1 Conduct feedback meetings for WNR to finalize restoration targets and finalize the Ecosystem services assessments	X				3,414	NU
Activity 1.2.3.2 Mobilise and raise awareness of all stakeholders on the plans for the restoration of selected wetlands/ riverine areas	X	X	X	X	4,443	NU
Activity 1.2.3.3 Provide planting material suitable for restoration of wetlands/ riverbanks (Ref 2.4)		X	X	X	15,135	NU
Activity 1.2.3.4 Train communities in wetland and or Riverine Restoration		X	X	X	9,568	NU
Activity 1.2.3.5 Identify, train and equip selected community monitors in monitoring skills (water quality, observation, binoculars) to monitor regeneration of the restored wetlands/ riverine sites)		X	X	X	4,232	NU
Activity 1.2.3.6 Support planting of selected indigenous species in selected wetlands /river catchments and or promote natural regeneration in demarcated sites (agroforestry) also refer 2.4		X	X	X	6,426	NU
Activity 1.2.3.7 Monitor the regeneration at the sites and produce a report for action			X	X	1,373	NU
Activity 1.2.3.8 Provide livelihood interventions for participating community groups (also refer to 1.5. 2.2.and 2.5)		X	X	X	10,168	NU
Activity 1.2.3.9 Train and equip responsible district technical teams to monitor the regeneration of the restored wetlands/riverine sites		X	X	X	3,738	NU
Activity 1.2.5 Coordinate activities of restoration and conservation of degraded ecosystems					26,598	UBF
Activity 1.2.5.1 Carry out field supervision and monitoring visits to assess performance at the field level and stakeholder involvement (To be done with activity M 1.5.1)					10,725	UBF
Activity 1.2.5.4 Organize field tour of Board, Steering, committee and district level stakeholders to tour project activities (Timing based on meeting schedules for steering committee)	X		X	X	15,873	UBF
Output 1.3 Law enforcement for the targeted ecosystems strengthened						WCS, NU, ECO
Activity 1.3.1 Support Districts, communities, and NFA to open and mark the boundaries of targeted ecosystems						NU
Activity 1.3.1.1 Support District local government and communities to implement riverbank protection interventions for selected sites (refer 1.4)		X	X		2,741	NU
Activity 1.3.1.2 Support responsible bodies (districts, communities, and Wetland Management Department) to carry out public	X	X			3,400	NU

awareness on habitat restoration in particular opening and marking boundaries of targeted sites						
Activity 1.3.1.3 Support responsible bodies (districts, communities, and Wetland Management Department) to open and mark boundaries of targeted sites	X	X	X		36,808	NU
Activity 1.3.2 Train and equip Districts and NFA to protect targeted forests, wetlands, and woodlands					5,186.80	WCS
Activity 1.3.2.1 Conduct training of NFA staff, and community-based extension workers on the use of the Global Forest Watcher application to enhance law enforcement	X				2,873.40	WCS
Activity 1.3.2.2 Backstop and monitor the use of the applications (Global Forest Watcher application SMART)		X	X		2,313.40	WCS
Activity 1.3.3 Facilitate development of community-based mechanisms (Collaborative Management arrangements) to protect and regulate access to resources from targeted ecosystem.						NU, ECO
Activity 1.3.3.1 Support NFA & DLG to establish Collaborative management arrangements and associated plans as a long-term mechanism to support management of the selected sites (refer to 2.2)	X	X	X	X	3,362	NU
Activity 1.3.3.3 Support interested farmers to integrate bee keeping in the restored woodland for income generation			X	X	13,500.00	ECO
Activity 1.3.3.4 Conduct training of selected farmers in apiary management			X	X	3,405.00	ECO
Activity 1.3.3.5 Conduct inspection and follow-up on bee keeping sites				X	890.00	ECO
Output 1.4 Management and Restoration Plans developed						NU
Activity 1.4.2 Support district LGs and communities to develop Community-Based Management (restoration) Plans for selected ecosystems.						NU
Activity 1.4.2.1 Develop restoration and management plans (including monitoring plans) for the selected restoration sites through community engagement (Ref to 1.2.3).	X	X			3,884	NU
Activity 1.4.2.2 Conduct taskforce meetings for integrating biodiversity and ecosystem services results into restoration/ management plans	X				3,192	NU
Activity 1.4.2.3 Conduct Stakeholder validation meetings of the Ecosystem services and Restoration Plans	X	X			3,189	NU
Activity 1.4.3 Support communities to implement the Community-Based Wetlands Management /restoration Plans.					2,059	NU
Activity 1.4.3.1 Support formation and /or functioning of the restoration management/ supervisory committees for the selected sites	X	X	X		2,059	NU
Output1.5 Management Plans and Community Conservation Agreements between District LGs and communities for protecting riverbanks and wetlands developed						NU

Activity 1.5.2 Support development of Community Conservation Agreements (CCAs) with selected communities for implementation of the riverbank/wetland actions.					2,259	NU
Activity 1.5.2.1 Develop Community Conservation Agreements (CCAs) with selected DLG and communities for restored wetlands and Woodlands	X	X			2,259	NU
Output 1.6 National Guidelines for selection of new refugee sites, monitoring, and measurement of the effectiveness of mitigation measures developed						WCS
Activity 1.6.1 Support consultant to develop/prepare framework guidelines for selection of new refugee sites, monitoring, and measurement of the effectiveness of mitigation measures						WCS
Activity 1.6.1.1 Conduct a review of background literature and gather pertinent data and information from relevant sources	X				1500	WCS
Activity 1.6.1.2 Undertake preliminary consultations with relevant stakeholders nationally & locally as well as ground truthing of the model in the project area	X				4460.1	WCS
Activity 1.6.1.3 Draft the framework guidelines for the selection of new refugee sites, monitoring, and measurement of the effectiveness of mitigation measures		X				WCS
Activity 1.6.1.4 Organise a validation workshop with relevant stakeholders for the draft guidelines			X		4574.4	WCS
Activity 1.6.1.5 Disseminate the final guidelines for the selection of new refugee sites, monitoring, and measurement of the effectiveness of mitigation measures				X	2110	WCS
Outcome 2. Landowners in refugee host communities supported to adopt agroforestry enterprises and adapt Sustainable Land Management (SLM) and Climate smart Agriculture (CSA) practices						
Output 2.1 Grassroots NGOs, CBOs and Small and Medium Enterprises (SMEs) operating in the refugee hosting districts strengthened to support landowners and households to adopt SLM						UBF
Activity 2.1.1 Strengthen capacity of local actors for services delivery & implementation/uptake SLM, CSA, AF, & Woodlot establishment at landscape level					68,520	UBF
Activity 2.1.1.1 Carry out two regional trainings of local partners (NGOs, CBOs and local government extension agents, and ToTs) involved in promotion of SLM, CSA, and AF practices	X	X			20,770	UBF
Activity 2.1.1.3 Facilitate Trained ToTs to train and senstise households on SLM practices and support scaling up	X	X	X	X	47,750	UBF
Output 2.2 Households are knowledgeable and skilled in SLM, CSA, and Agroforestry practices						WSC, NU,ECO
Activity 2.2.1 Identify and train community-based trainers in AF						NU
Activity 2.2.1.1 Identify and train Community-based trainers in affordable agroforestry and SLM practices and technologies		X	X		3,162	NU

Activity 2.2.1.2 Support community-based trainers to train Communities in selected Agroforestry & SLM practices and technologies			X	X	3,451	NU
Activity 2.2.2 Establish demonstrations for good practices of SLM, AF, CSAs, and post-harvest handling:						WCS, NU, ECO
Activity 2.2.2.1 Identify more suitable farmers with enough land within the community to host demonstration gardens (At least an acre)	X				232	WCS
Activity 2.2.2.1 Establish on farm AF demonstrations (internal/external/ scattered trees and fodder banks)	X	X	X		19,481.25	ECO
Activity 2.2.2.1 Support community-based trainers to establish demonstrations for supporting communities to adopt the appropriate SLM, CSA and Agroforestry technologies for increased HH income and increased land productivity		X	X	X	22,308	NU
Activity 2.2.2.2 Train the identified farmers on good practices of SLM and CSA & assist them to establish demonstration gardens for other farmers in the community to learn using the already developed Extension Manual	X				196	WCS
Activity 2.2.2.2 Establishment of Galleys, /Trenches with Grass/Trees/Hedge rows)		X	X	X	76,230	NU
Activity 2.2.2.2 Establish SLM structures (grass bunds, stone bunds, contours) - upscaling	X	X			5,075.00	ECO
Activity 2.2.2.3 Procure and deliver inputs for the establishment of 30 acres (12 hectares) of demonstration gardens on good practices of SLM and CSA in the project area		X			3562.4	WCS
Activity 2.2.2.3 Agro forestry (Mixed Strip species/Boundary planting)		X	X	X	34,065	NU
Activity 2.2.2.4 Undertake routine support supervision & yield assessment on the performance of demonstration host farmers		X	X		580	WCS
Activity 2.2.2.5 Engage selected local partners to scale up selected SLM/AF practices					1,773	ECO
Activity 2.2.3 Conduct public awareness campaigns to sensitize farmers about CSA and SLM, and AF practices						WCS, NU, ECO
Activity 2.2.3.1 Conduct farmer field days for farmers to learn the CSA technologies being demonstrated at the sub-county level		X	X		885.00	WCS
Activity 2.2.3.1 Conduct public awareness campaigns to promote selected CSA/ SLM and AF practices and technologies		X	X	X	4,276	NU
Activity 2.2.3.1 Conduct public awareness campaigns to sensitize farmers about CSA and SLM, and AF practices.	X	X	X		5,590.00	ECO

Activity 2.2.3.2 Support TOTs and CBEWs to support farmers/early adopters to implement CSA technologies demonstrated.	X	X	X	X	349.00	WCS
Activity 2.2.3.3 Organise and conduct radio talk shows about CSA and SLM, and AF practices for the benefit of the wider public.		X	X		230	WCS
Output 2.3 Woodlots to increase tree cover in the landscapes and to provide wood established						ECO, UBF
Activity 2.3.1 Support landowners to plant trees for woodlots						ECO, UBF
Activity 2.3.1.1 Train identified farmers on woodlot establishment and management	X				2,895.00	ECO
Activity 2.3.1.1 Engage settlement Commandants and Sub-county staff to identify land within and outside the settlements to establish woodlots for woodland restoration	X				4,511	UBF
Activity 2.3.1.2 Conduct tree planting on mapped woodlots		X	X	X	63,431.50	ECO
Activity 2.3.1.2 Support identified partners/ sub-contractors to establish and maintain the targeted woodlots in the refugee settlements and surroundings		X	X		317,250	UBF
Activity 2.3.1.3 Conduct fire protection for planted woodlots				X	5,825	ECO
Activity 2.3.1.3 Support established Woodlots by establishing fire lines around the established woodlots		X	X	X	37,500	UBF
Activity 2.3.1.4 Support interested farmers to integrate bee keeping in the established woodlots for income generation	X	X			27,000	ECO
Activity 2.3.1.4 Support control of termites from damaging trees in 700 established woodlots		X	X	X	10,500	UBF
Activity 2.3.1.5 Conduct project monitoring	X	X	X	X	8,720.38	ECO
Activity 2.3.1.5 Facilitate dialogue meetings between landowners and settlement commandants and LGs to prepare agreements to protect established woodlot assets	X	X	X		5,580	UBF
Output 2.4 Agroforestry enterprises established at landscape level						NU, UBF
Activity 2.4.1 Engage beneficiary communities and experts to identify appropriate AF enterprises to promote in each district						NU, ECO
Activity 2.4.3.1 Train beneficiary communities on appropriate SLM/AF practices to upscale	X	X	X		8093.75	ECO
Activity 2.4.1.1 Identify appropriate AF enterprises to promote in each district through engagement with the beneficiaries (Refer to 1.1.4.1)	X	X	X		3,101	NU
Activity 2.4.2 Support selected tree nursery operators to sustainably produce quality agroforestry planting materials						UBF

Activity 2.4.2.2 Coordinate procurement of contractors to supply and set up irrigation infrastructure for model tree nurseries in the 5 districts	X	X			58,424	UBF
Activity 2.4.3 Support landowners at landscape level to plant appropriate agroforestry trees for the selected enterprise.						NU, UBF
Activity 2.4.3.1 Develop Tree nursery for agroforestry trees (consider working with established nursery operators)	X	X	X		10,707	NU
Activity 2.4.3.1 Work with partners/Contractors and sub-county staff to identify farmers with land to establish high value agroforestry enterprises	X	X				UBF
Activity 2.4.3.2 Support landowners to establish appropriate agroforestry (Landuse) enterprises for improved livelihoods	X	X	X		7,022	NU
Activity 2.4.3.2 Engage partners/contractors to assess agro-input needs of supported farmers for project support.	X		X			UBF
Activity 2.4.3.3 Coordinate and procure agro inputs/ planting materials for partners to distribute to farmers demonstrating SLM/ AF good practices			X	X	37,706	UBF
Output 2.5 Farmers/households and private sector actors' capacity to apply appropriate technologies to improve post-harvest handling built.						UBF
Activity 2.5.1 Train farmers and private sector actors on good post-harvest handling practices					69,150	UBF
Activity 2.5.1.1 Identify farmer groups and champion farmers involved in the selected enterprises to train		X				UBF
Activity 2.5.1.2 Support Consultant/ ECO to assess and train farmers (representatives from groups of selected enterprises) in good post-harvest practices (handling and storage)	X	X	X		63,275	UBF
Activity 2.5.1.3 Facilitate trained champion farmers to mentor and coach other groups on the good post-harvest handling practices for 4 crops/enterprises			X	X	5,875	UBF
Activity 2.5.3 Support 15 Youth and women groups activities to enhance income generation.						UBF
Activity 2.5.3.1 Identify and engage a consultant to prepare simple guidelines on enterprise/business plan development for rural based small-scale enterprises and train selected group members	X				1,000	UBF
Activity 2.5.3.2 Organize district level trainings of identified representatives of groups on enterprise/ business plan development		X			34,075	UBF
Activity 2.5.3.3 Develop and implement the plan to the individual support women and youth groups			X		37,500	UBF

Outcome 3. Capacity of Local Governments (LG), Civil Society Organizations (CSOs), private sector companies and local communities to effectively deliver & uptake climate change and environmental degradation mitigation measures strengthened						
Output 3.4 Strengthen capacity of local level private sector and farmers with appropriate value addition						UBF
Activity 3.4.1 Support selected private sector and farmers with appropriate technologies to demonstrate quality value addition.						UBF
Activity 3.4.1.4 Coordinate procurement and installation of identified materials and equip for enhancing capacities of farmers in post-harvest handling and storage	X	X	X		146,667	UBF
Output 3.5 A functional network & collaborative mechanisms (platforms, forums, steering committee) for CBOs, NGOs, and SMEs established.						UBF
Activity 3.5.1 Establish linkages with existing networks, mandated institutions, and between mandated institutions and local actors to strengthen coordination and collaboration,					9,950	UBF
Activity 3.5.1.1 Organize two regional project review (West Nile and Albertine) meetings for 40 participants from identified CBOs, NGOs, districts, and project partners to review progress on partnership and collaboration arrangements.				X	8,100	UBF
Activity 3.5.1.2 Attend/coordinate IPs to attend scheduled coordination/ networking meetings organized by stakeholders and partners in the project areas	X	X	X		1,850	UBF
Output 3.6 Opportunities for Stakeholder investment on activities responding to impacts of refugees on the environment and livelihoods documented						WCS
Activity 3.6.1 Identify and map groups engaged in response activities that improve the livelihoods of refugee-hosting communities		X			152	WCS
Outcome 4. The Project is effectively and efficiently managed, and implemented						
Activity 3.6.2 Develop a profile of investment opportunities and present it to stakeholders		X			3,596.20	WCS
M 1 Project M&E system is established and functional					3,290	UBF
M 1.2 Develop Monitoring and evaluation tools						UBF
M 1.2.1 Review and Update M&E tools	X	X	X	X		UBF
M 1.3 Mentor and coach partners staff to implement AMELP						**UBF**
M 1.3.1 Conduct Quarterly support visits to partner M&E Offices to ensure implementation of the AMELP.	X	X	X	X		UBF
M 1.4 Collect and analyze monitoring data on project performance						UBF
M1.4.1 Routine collection, management and analysis of monitoring data.	X	X	X	X		UBF
M 1.5 Conduct Quarterly Data Quality assessments (DQA)						UBF

M 1.5.1 Conduct Quarterly on-spot inspection/validation visits to locations where outputs have been registered for quality assurance	X	X	X	X	3,290	UBF
M 1.6 Conduct biannual sessions and share project performance results and lessons learnt to stakeholders	X		X			UBF
M 1.7 Compile Technical monitoring results and integrate them in reports	X	X	X			UBF
M 2 Prudent Financial management, procurement, and reporting						**UBF**
M 2.1 Coordinate and compile quarterly and annual financial reports	X	X	X	X		UBF
M 2.2 Support external audit			X	X	5000	UBF
M 2.3 Develop and implement Procurement Plan	X	X	X			UBF
M 3 Project planning, budgeting and reporting						**UBF**
M 3.1. Conduct 4-day annual project review and planning workshops to review performance, and prepare plans for 2024	X			X	4,894	UBF
M 3.3 Prepare quarterly and annual reports						**UBF**
M 3.3.1 Coordinate preparation of quarterly and interim progress reports	X	X	X	X	1,125	UBF
M 4 Promote communications, outreach, and engagement strategy with beneficiaries, partners, and stakeholders						**UBF**
M 4.2 Develop Information, Education and Communication (IEC) materials to convey messages about the project						**UBF**
M 4.2.1 Newsletters	X	X	X	X	500	UBF
M 4.3 Promote visibility of the funded projects						**UBF**
M 4.3.1 Media visits - TV	X	X	X	X	2,250	UBF
M 4.3.2 Media visits - Radio					1,500	UBF
M 4.3.3 Graphic design, videos, skits					3,000	UBF
M 4.3.4 End of quarter online campaign	X	X	X	X	500	UBF
M 4.3.5 Documentary/Success stories		X	X		9,750	UBF
M 4.3.6 Social media updates/influencers	X	X	X	X	7,500	UBF
M 4.3.7 Publications					15,000	UBF
M 4.3.8 Newspaper articles on EU significant days	X	X	X	X	1,000	UBF
M 4.3.9 T-shirts, bags, umbrellas, caps	X				5,000	UBF
M 4.4 Partner comms field visit to profile project beneficiaries	**X**	**X**	**X**	**X**	**5,000**	**UBF**

M 4.4.1 Train Project Officers on communications	X	X			2,500	UBF
M 4.4.2 Advertise and inform public on the planned and on-going training in the two regions	X	X	X	X	1,400	UBF
M 4.4.3 Media Training and strategy planning	X				1,250	UBF
M 4.4.4 Site signposts on demonstrations and landscapes	X				47,500	UBF
M 5 Steering committee meetings and Coordination processes					780	**UBF**
M 5.1 Conduct steering committee meetings		X		X	280	UBF
M 5.2 Organize monthly national Project coordination committee (consortium) meetings to address project issues and or review progress of project implementation	X	X	X		500	UBF

3. Beneficiaries/Affiliated Entities, Trainees and Other Cooperation

3.1 Relationship between the beneficiaries / affiliated entities of grant action

The European Commission through the European Union Delegation in Uganda prepared the project titled "Restoring and conserving degraded fragile ecosystems for improved community livelihoods among refugees and host communities of West Nile Region and the Mid-Albertine Rift" aimed at addressing the impacts of displaced populations on the environment, natural resources, and the livelihoods of the hosting communities. It is implemented by a consortium led by Uganda Biodiversity Trust Fund (UBF) as the overall coordinator and administrator of the project. The other Implementing Partners (IPs) are Wildlife Conservation Society (WCS), Nature Uganda (NU), and Ecological Christian Organisation (ECO).

At the start of project implementation, IPs agreed to share the project outputs according to their technical expertise and experience. Table 27 shows how the IPs shared roles and responsibilities in the implementation of key project outputs.

Table 27 . IP roles and responsibilities in implementation of targeted project outputs

Key project implementation	Total Project Target	Responsibilities and target for West Nile region			Responsibilities and target for Albertine Region			Totals for each partner			
		WCS	NU	ECO	WCS	NU	ECO	WCS	NU	ECO	UBF
Forest (Ha)	353	282	0	0	71	0	0	353	0	0	0
Wetlands / Riverine (Ha)	400	0	320	0	0	80	0	0	400	0	0
Woodlands (Ha)	1,744	0	0	581	0	0	0	870	293	581	0
Woodlots (Ha)*	182	0	0	182	0	0	0	0	0	182	0
Scaling up SLM, AF, and CSA practices (Ha)	4558	0	0	1520	0	0	0	2,273	765	1,520	0
Demonstrations for SLM, CSA, and AF (Ha)	442	0	0	147	0	0	0	220	75	147	0
Support to tree nurseries including irrigation infrastructure (number of units)	21	0	0	0	0	0	0	0	0	0	21
Value Addition and post harvesting handling (number of units)	8	0	0	0	0	0	0	0	0	0	8
Women and youth groups supported (number)	15	0	0	0	0	0	0	0	0	0	15

* The achievements by UBF and NU under this output area initially were not part of project set targets.

During the FY 2022, UBF continued to provide the overall project coordination, administration and management of the project, while the other three project implementation partners spearheaded the delivery of the project interventions in the project operational areas in MARR and WNR. UBF continued to coordinate monthly and quarterly reviews of project performance through the monthly coordination of technical staff and the quarterly chief executive officers' meetings. Participation in the coordination meeting was mostly physical and a few were virtual. Five coordination meetings for both project coordinators and chief executives were held physically while three were vitual. Additionally, there has been demonstrable active participation and cooperation in all project meetings and responses to all communications among consortium members. This was evidenced by the level of commitment of the chief executive officers in attending their quarterly project performance reviews and the coordinators attendance at the monthly project review meetings. There has been teamwork during annual planning, joint field-level monitoring to learn from each other and ensure ownership of project sites, and participation in training/field activities and meetings organised by any one member.

In general, project implementation amongst the consortium members remained cordial, and matters regarding any issue raised by any member were harmoniously resolved. For example, the sharing of the roles and responsibilities shown in the table above demonstrates how the implementing partners mutually and amicably agree on project-related issues to ensure the successful implementation of the project.

In 2022, all IPs started to deliver physical outputs. Where deliverables have not been registered, processes to deliver these in 2023 are in advanced stages. This is explained under the tasks undertaken on each activity described in section 2.2.2 of the report. Summary Table 1 presents how each IP performed on the allocated outputs. The project is on track towards completing planting and or assisting in the regeneration of selected woodlands. During the reporting period, the WCS successfully completed the planting activities for the restoration of the targeted 353 Ha of forests but the performance on the woodland restored was assessed to be below 50% of the target. ECO completed the establishment of the targeted woodlot acreages and over 83% of the targeted woodland is to be restored in 2022. More to this, UBF established 62% of the targeted woodlots for woodland restoration within and in the surroundings of refugee settlements.

On wetland restoration, NU carried out pre-processes required before wetland restoration activities start in the selected wetlands. A total of 5 Ha was restored by planting indigenous tree species in the riverine along Imvetre water stream in Terego district. In the Mid-Albertine rift region, a total of 390 Ha of wetland boundaries were demarcated and are under passive restoration. Through NU, the project invested in making 310 concrete pillars that were installed on boundaries of some sections of selected wetlands in Kamwenge (220) and Kyegegwa (90) districts. Some changes to reflect realities on the ground saw NU earmark resources towards establishment of a 40 Ha woodlot in Otumbari local forest reserve and enrichment planting with indigenous trees in 5 Ha buffering the Imvetre stream.

By the end of the year, UBF was in the final processes of procuring equipment for value addition of selected enterprises (Shea nut, Honey, Mango juice processing, and cassava processing). The procurement process to supply the equipment by interested bidders was at evaluation level. Following the training of 62 nursery operators, UBF obtained bills of quantities to support at least 15 nurseries with solar powered irrigation infrastructure. The bills of quantities will guide decision making on which nurseries to support.

Performance under sustainable land management and climate smart agriculture remained very low. With the coordination of UBF, the responsible IPs have agreed to engage the civil society organizations operating in the landscapes to expedite implementation of the set project targets. There is hope that use of this strategy will lead to significant achievement of the set targets in 2023. The partners have boosted the human resources by recruiting field level officers to improve on implementation capacity in both regions. UBF is keenly monitoring the performance of implementing partners to ensure that the allocated outputs are implemented according to the logframe. On her part, UBF's recruitment of a program officer and a Monitoring and Evaluation Specialist will improve the capacity of the

coordination to support other partners better, conduct meaningful monitoring and supervise field-level implementation.

Towards the end of 2022, the project received allegations on misuse of funds in procurement of seedlings. However, field level investigations carried out by UBF team including a field visit involving the UBF Executive Director did not establish any evidence on the allegations pertaining to the allegations. The joint field monitoring visits established that ECO had distributed seedlings to several farmers in the sub-counties of Drajini and Kuru in Yumbe district, and four sub counties (Bilieafe, Omugo, Odupi, and Uriama) in Terego district. The financial reports received by UBF showed that ECO procured a large number of seedlings and used the price range agreed upon by the IPs. An expert review of the financial report submitted by ECO did not raise any issues of concern. Accordingly, the allegations have since been ignored.

Challenges faced during the implementation of the project by all IPs are highlighted on page 7. These include:

1. Delayed planting which led the seedlings to meet a long drought period, especially in the West Nile region leading to losses. Going forward, the project will address this by linking with meteorology department to ascertain the right timing for planting.
2. Limited local capacity to supply quality planting materials leading to shortage of supply of some of the targeted indigenous tree species and supply of young seedlings for some species. The project will address this challenge by engaging seedling suppliers in good time.
3. Serious fire outbreaks that are said to be a cultural practice and sometimes an act of malice destroying about 50% of the planted area in West Nile region (Annex 36 report). However, there was hope of recovery of the fire-resistant species like Gmelina arborea and Teak. Joint engagement of stakeholders by UBF and OPM at field level has happened and remains ongoing with the purpose of guarding against recurrence.
4. Pest infestations such as termites feeding on the planted seedlings. The project has engaged the communities to identify cultural methods used in the control of damage but also to continue to applying methods recommended by NFA and NEMA.
5. Limited staffing capacity at the filed level. The project IP have started recruiting additional staff approved as part of budget adjustment approved in November 2022. The project has also devised a strategy to increase participation of local partners in the implementation especially where the project is slow in delivering the targeted outputs. With these strategies, the challenge will be resolved.
6. Continued encroachment on the Mt Kei central forest reserve part under restoration. The project will continue to engage the local authorities to ensure total removal of illegal activities and people that stealthily continue entering the forest for agricultural activities.

3.2 Relationship between Project partners and State Authorities

All the project implementers (UBF, WCS, NU, and ECO) have had good working relationships with government agencies at national and local levels. For example;

- District Local authorities are appreciative of the project interventions on wetland and woodland restoration. This is because the project is helping them not only to address the challenges, they face regarding habitat degradation but also in achieving some of the district targets. For example, Kamwenge and Kyegegwa districts identified the wetlands under support by the project for inclusion in the district development plans for sustainability. In these two districts, the District Environment Officers and their Natural Resource Officers have been fully engaged in project implementation and helped to initiate wetland restoration. The two districts have taken lead on installation of the reinforced concrete pillars purchased by the project.
- All districts selected the District Natural Resource Officers as focal points for the project. They also went ahead and allocated staff that coordinate the project implementation at field level as a practical demonstration of support to the project.

- The project has cordially interacted with all the state authorities without any major incidence recorded. This is exemplified by the immense support extended to WCS by district and state authorities during the implementation of the project activities, including restoration activities in Bugoma and Mt. Kei Central Forest Reserves. National Forestry Authority (NFA) has been active in the restoration of the two central forest reserves by delineation of boundaries for the project to restore, allocation of staff to train, and allocation of staff to work with project contractors during the restoration processes.
- The project through UBF a signed memorandum of understanding (MoU) with Office of the Prime Minister (OPM) to enhance collaboration during implementation of the project within the refugee settlements. This opened the way for the project to refugee settlements of Kyangwali, Bidibidi, Imvepi, and Rhino Camp. The field level implementation of the woodlot for woodland restoration was commissioned by the Acting Commissioner for refugees who launched planting of trees in Kyangwali refugee settlementin September 2022. Subsequently, the OPM staff including the Regional Desk Officers (RDOs) and Settlement Commandants (SC) have been active participants in monitoring and supervision of the work within refugee settlements and in host communities.
- To enhance collaboration with relevant government agencies and ensure the project is aligned to the government priorities, a project Steering Committee was formed to oversee the project implementation. It is composed of mainly the state agencies that have a direct role in project implementation. At their first meeting in July 2022, the committee chose the Ministry of Water and Environment (MWE) to chair the Project Steering Committee and be co-chaired by the OPM. The other members include National Forestry Authority (NFA), National Environment Management Authority (NEMA), Uganda Wildlife Authority (UWA), United Nations High Commission for Refugees (UNHCR), select District Local Government to represent the region where the project is implemented, and the European Union Delegation in Uganda.
- In the period under review, all the project implementing partners have had cordial interactions with all the lower local authorities at lower levels, i.e., the Sub- County chiefs, the Local Councill III chairmen, and village leaders where the project is implemented. As such, no major disruptions have occurred to the project at the field level.

3.3 Relationship with other organizations involved in implementing the Action

In 2022, the project through UBF devised a strategy of enabling local partners particularly CSOs and private sector local companies to get interested in the project by involving them in planting trees for long term supply of fuelwood and building materials to refugees and refugee host communities with the overall goal of reducing pressure to the natural forests and woodlands. For example, through a competitive procurement, Uganda Biodiversity Fund selected fifteen (15) CSOs and SMEs to provide services of planting trees in 195 Ha within and around three refugee settlements (Bidibidi, Imvepi, and Rhino camp) of the West Nile region and eight (8) competed to plant 47.5 Ha within and around the Kyangwali refugee settlement. Eventually, eight CSOs and SMEs were awarded contracts for woodlots establishment.

Furthermore, the project procured and used local community-based organizations and groups to support restoration of Mt Kei and Bugoma CFRs as well as Otumbari LFR. Involving CSOs and SMEs did not only interest or enhance interest of other actors but also has helped to enhance information sharing and visibility of the project and the donor at local level. The engagement of these organizations enabled some of the groups active as well as for communities to earn additional income. The approach has aroused significant interest by many local partners and hence active and effective participation in regional platform meetings. It is this experience that has informed IPs to consider a similar approach accelerate the scaling up the SLM/CSA/AF practices to achieve the project set target.

3.4 Links and synergies developed with other Actions

To enable effective collaboration with other EUD financed Actions, in November 2022, the EU consortium involved the Save the Children (SC) in a five-day joint field event spear-headed by UBF to share experiences but most importantly identify areas to enable the two lots of RED Action to strengthen collaboration. A report on this is presented in annex 23. This field involvement led to identification of the Save the Children field office in Yumbe as an opportunity to host some of the project staff when need arises. It was also noted that some of the issues identified such as how to deal with fires and straying domestic animals could best be handled by the SC. SC also identified some of the farmers that could also benefit from the interventions of energy saving stoves. In 2023, a mechanism to actualise more meaningful collaboration by the two consortia and other ideas will be explored and implemented.

As a first step toward the development of the methodology or guidance for sighting of refugee settlements to mitigate habitat loss and degradation, and damage to the environment, on September 09, 2022, the project conducted a consultative meeting with ICRAF/CIFOR who had developed the guidelines for integrated landscape approaches in displacement settings. The purpose of the meeting was to learn from ICRAF/CIFOR about the approach they used, source of data, data variables and components considered, and the methodology applied. The project also wanted to know how the product would be applied and who the users are to enable the project to engage more constructively with those relevant stakeholders and institutions. During this meeting, we learned from ICRAF/CIFOR staff that their approach focused more on the socio-ecological systems, politico-economics, gender-equity inclusion, and land tenure aspects. Cultural values and livelihood strategies were identified by the institution as an important consideration, though they didn't include them in their analysis. We also learned that the UNCHR Environmental guidelines and camp planning minimum standards for refugee program are key resources for the project to explore to help improve our approach. It was agreed that the project would continue engaging ICRAF/CIFOR as we progress with this activity.

3.5 Previous EU grants and how this action builds upon/complements them

*i*There are no prior EU grants that the consortium members have implemented together targeting the same audiences and beneficiaries.

3.6 Training report on each trainee under the action

During the reporting period, there were no trainees associated with the project. Consequently, the traineeship report is not applicable to any of the consortium members.

4. Visibility

Most of the communications in 2022 about the project were through use of traditional and new media dissemination channels targeting different audiences. This constituted the use of publications as a media channel to reach the targeted audiences including the donor and other development agencies, the government and the public. Furthermore, progress of some key field-based and national level activities were posted partners web pages, on social media with millions of impressions on twitter and LinkedIn, and Facebook engagement, to supplement and compliment the other media channels used. For instance, the donation of SMART devices to NFA to enhance law enforcement and forest protection for Central Forest Reserves in Yumbe and Terego within a radius of 10 kilometers from the refugee settlements of Bidi-bidi, Ivempi, and Rhino Camp were posted as follows: https://twitter.com/wcs_uganda/status/1542847331028156416, and https://uganda.wcs.org/About-Us/News/ID/17819/NFA-Receives-Mobile-Phones-to-Enhance-Forest-Protection-and-Law-Enforcement-Operations-Using-SMART-Technology.aspx Furthermore webpages about the project on implementing partners websites were developed. Some of them of them include: https://ugandabiodiversityfund.org/portfolio/the-european-union-restoration-and-conservation-project-in-the-refugee-and-refugee-host-communities/ and https://uganda.wcs.org/restoring-and-conserving-degraded-fragile-ecosystems.aspx.

Use of mass media is justified since it reaches the targeted audience in real time most especially for meeting the purpose the disseminating information and raising of awareness to the public without distortion. The project communication and visibility are guided by the Communication and Visibility plan that informs the project during implementation. The activities therein comply with the planned communication tactics to reach different stakeholders. These comprise the donor, the public, government, and other organisations in the conservation sector.

The essence of the project at national level was recognized by Daily Monitor Newspaper article of May, 9th 2022. The article was published by the newspaper on the Europe Day as a tribute for the contribution and support of the European Union to the government of Uganda in responding to the degradation and losses of natural ecosystems within and the surroundings of refugee settlements.

To augment information about the project and the donor, the project organized the launch of implementation in the regional areas of Albertine Rift and the West Nile on June 10th and 16th 2022 respectively. This became an opportunity to showcase what the European Action had accomplished since inception a year earlier up to that point and to mobilize regional level stakeholders to actively participate in the implementation.

Figure 43: The Chairman LCV Kamwenge district, attending the project launch and handover of equipment at Kikuube district on 10th June 2022 urged the stakeholders implementing of the European Funded restoration and conservation project to fully involve local governments at all levels to succeed.

Figure 44: The Chairman LCV Yumbe district, attending the project launch and handover of equipment at Yumbe district on 16th June 2022 urged the regional leaders to support the implementation of the European Funded project by stopping illegal timber cutting and charcoal burning in West Nile

The events were covered and publicised by the Nation Media Group's NTV and the Vision Group's Arua One Radio and New Vision.

Another method that has been embraced by the project to enhance visibility at all events and meetings is the use of Information, Education and Communication (IEC) materials which are consistently displayed and viewed in every visual media channel including newspapers through photographs, television during press interviews and on social media. The project was also prominently mentioned in the UBF quarterly newsletter which were widely disseminated to all relevant organisations and uploaded on the website as well. In addition, a webpage specific to the European Union Action was created on the newly redesigned website of UBF. Information on the project will all be uploaded in this webpage.

In the year ending 2022, the project produced and distributed 200 t-shirts, 20 press jackets, 200 caps, 12 sets of display materials which included rollup and teardrop banners, as well as memorabilia in form of laptop stickers. The t-shirts, press jackets, and caps were distributed to over 400 participants attending the project launch in the two regions to gain top of mind awareness with the beneficiaries.

The project Implementing Partners engaged the beneficiaries in the different areas using mainstream and community radios to mobilize and reach the communities (landowners, farmers, resources users and government) to participate in project implementation. Two radio talk shows were held in the two project regional areas to inform the listeners about the project and to update them on the progress of its

implementation. The first was held during the handover of the equipment to the beneficiary districts in June. The second was when holding the stakeholders meeting to share information on the progress of implementation of livelihoods and environment projects under implementation in the two regions. These additional talk shows were held in July and December 2022. Listeners were informed about the key stakeholders including the European Union (the donor), the implementing partners and the roles of districts, civil society organizations and the communities.

Signposts, such as shown below bearing the donor's and the implementing partner's logos were erected and continue to be set up to enhance visibility of the project in the project landscapes. So far over 65 such signposts were produced by UBF and WCS and installed.

Figure 45: Shows a site board installed at suitable place closer to the restoration site in Mt. Kei Central Forest Reserve

Figure 46: Shows an installed signpost showing the farmer who benefited from the woodlot establishment, the land acreage the location and distance to the site

The project also made sure that all advertisements in the local media for services to support the implementation of project activities and the contribution of the EU was visible through the use of the EU logo. Additionally, during trainings and sensitization meetings in the target communities, project pull-up banners branded with project partners and EU logos were displayed within and outside the meeting places/venues.

5. Publicising Results of the Action

The European Commission may wish to publicize the results of Actions. Do you have any objection to this report being published on EuropeAid Co-operation Office website? If so, please state your objections here.

Name of the Contact Person for the Action: Ivan Amanigaruhanga

Signature: …….

Location: UBTF Headquarters Kisugu, Kampala

Date Report Due: NA

Date Revised Report Sent: 4th May 2023

Annexes

The annexes below were sent as separate files. They are:

1. Performance of the project on logframe indicators
2. Samples of Beneficiaries both in PDF data form and Excel database
3. Assets and equipment registers
4. Detailed financial report for the period of January to December 2022
5. Socio-economic baseline survey report
6. Ecological baseline survey report
7. Report on restoration of Imvepi Stream, Terego district
8. Restoration plan for the project site in Mt Kei CFR
9. Restoration plan for the project site in Bugoma CFR
10. Wetland management plan for Rushango Wetland Kamwenge District
11. Wetland management plan for Kajororo Wetland Kamwenge District
12. Wetland management plan for Kyakatwanga Wetland Kyegegwa District
13. Wetland management plan for Komucwezi Wetland Kyegegwa District
14. Sample of Community Conservation Agreements (CCA)
15. Sample of a report on the training of farmers on SLM and Agroforestry
16. Training report for the community-based extension workers
17. Training report for nursery operators in Mid Albertine Rift Region
18. Training manual about climate change adaptation and mitigation as well as environmental conservation and protection
19. Value Addition needs assessment report
20. Report on Civil society meeting held in April 2022 in Fort-Portal
21. Report on Civil society meeting held in December 2022 in Arua
22. Report on Civil society meeting held in January 2023 in Fort-Portal
23. Joint field collaboration visit report with Save the Children Fund
24. Joint field visit report by the Executive Directors of IPs
25. Diagnostic assessment report on restoration sites in Mt Kei and Bugoma CFRs
26. Report on Birds in project Wetlands of Kyegegwa and Kamwenge
27. Report on Herpetofauna in project Wetlands of Kyegegwa and Kamwenge
28. Report on mammals in project Wetlands of Kyegegwa and Kamwenge
29. Report on plant diversity in project Wetlands of Kyegegwa and Kamwenge
30. Report on The Ecosystem Services Assessment in project Wetlands of Kyegegwa and Kamwenge
31. Seedlings distribution to UBF beneficiary farmers. Sample is in both PDF and Excel sheet.
32. Guidelines on land planting and planting operations
33. Report on Identification land for woodlot establishment in refugee settlements
34. Report on commencement of implementation of contracts to establish woodlots
35. Report on field inspection of progress in implementation of the service contracts
36. Fire incident report in the woodlots of Terego and Yumbe districts
37. Assessment needs report on the value addition enterprises for project support.
38. Detailed consolidated workplan for the year 2023.
39. An excel sheet on summary of achievements against project set targets.