PV NATURE

PROJECT IDEA NOTE

Bugoma-Budongo Corridor Restoration Program

Northern Albertine-Rift Region, Western Uganda

Version 1.3
June 2025

Western Citril, Kidoma, Bugoma-Budongo Landscape

Developed by:

ECOTRUST	ECOTRUST: The Environmental Conservation Trust for Uganda www.ecotrust.or.ug

Contents

Overview

Project Title:	Bugoma-Budongo Corridor Restoration Program
Location:	Uganda, in the Districts of Hoima, Kikuube & Masindi in the Northern Albertine Rift in the Western region
Project description:	This is a community – designed / owned / led corridor restoration programme, seeking to secure and restore the connectivity of the wildlife corridor between the Bugoma-Budongo Forest Reserves in Western Uganda to ensure conservation of the rich biodiversity, climate resilience and sustainable livelihoods in the Northern Albertine Rift. The tropical forests of the Albertine Rift harbour an astounding biodiversity; 52% of Africa's bird species; 39% of its mammal species; 19% of its amphibians; 14% of its reptiles; and 14% of its plants (Plumptre *et al*., 2007). The once densely forested project area has been subjected to widespread and rapid degradation, resulting in fragmentation, reducing the corridor connectivity. The fragmentation crisis for biodiversity is severe, especially for the flagship endangered species, the Eastern Chimpanzee (*Pan troglodytes schweinfurthii*). Uganda's remaining 5,000 chimpanzees are confined to the forests of the Northern Albertine Rift (Plumptre *et al.*, 2003). Astonishingly, a few groups of chimpanzees continue to move through farmlands between forest patches, with some having their entire home ranges in community land (McCarthy *et al*., 2015; McLennan & Plumptre, 2012; McLennan, 2008).
Project Area:	The wider program is targeting approximately 12,500 ha of multiple landholdings in the connectivity linkages of the Bugoma-Budongo wildlife corridor. However, the general project region is about a 50,000 ha stretching from Bugoma Central Forest Reserve in the south to Budongo Central Forest Reserve north of the corridor. The project will focus on restoring connectivity between the six Central Forest Reserves of Budongo, Kasongoire, Mikhihani, Bujawe, Wambabya and Bugoma. The project is targeting to re-establish connectivity by restoring forests around currently highly degraded, mainly riverine, tropical high and medium altitude, moist semi-deciduous community forests that serve as stepping stones for wildlife moving between the protected areas. The project will start with a pilot area of approximately 2,000 ha focusing on linkage 2 (1,228 ha) linking Bugoma to Wambabya and ten patches of degraded land (954 ha), which have been set aside for the creation of community reserves in the area that links Budongo to Kasongoire and Mukhihani.
Project Coordinator:	Pauline Nantongo-Kalunda ECOTRUST- The Environmental Conservation Trust in Uganda Plot 1034, #85, Lubowa Housing Estate, Entebbe Road, Kampala P. O. Box 8986, Kampala, Uganda www.ecotrust.or.ug

Project Participants:	Participants in this program are community members organised in different community groups each targeting a specific area within the connectivity linkages. These include Communal Land Associations; Private Forest Owners Associations; Collaborative Forest Management groups and Wetland Management Associations. 1) **Communal Land Associations (CLAs)** have been formed and incorporated as the Bodies responsible for the management of community forests in accordance with the provisions of section 17 of the Forest and Tree Planting Act, 2003. There are 60 Potential CLAs expected to manage forest patches ranging between 4 ha to 3,400 ha. ECOTRUST has so far supported the incorporation of ten and these will participate in the pilot phase. 2) **Private Forest Owners Associations (PFOAs)** are mainly small holder farmers, who have been working with ECOTRUST to set aside land through different types of conservation agreements in the corridor linkages. The project will start with the PFOA on Linkage 2, which connects Wambabya and Bugoma Central Forest Reserves. 3) **Collaborative Forest Management Associations (CFMAs)** are groups under a mutually beneficial arrangement in which a local community or a forest user group shares roles, responsibilities, and benefits with a responsible body arising from the management of a forest reserve or part of it. The Uganda Forestry Policy (2001) and the National Forestry and Tree Planting Act, 2003 (NFTPA). 4) **Community Wetland Associations (CWAs)** are groups that ECOTRUST has been working with targeting the improved management of hotspots within the Kiiha catchment, which is the main river system in the corridor.
Project Intervention(s):	The proposed interventions for this project will include Restoration, Improved Management and Other Supportive Activities interventions. **The Restoration interventions include:** • Farmer managed natural regeneration through the removal of invasive species and protection of naturally regenerating native trees. **The Improved Management interventions include:** • Forest fire control: through the establishment of, and maintenance of fire lines, as well as an active response to fires when they break-out • Capacity building, equipment & logistical support to a selected well-trained community patrol team who will be responsible for forest monitoring and patrols • Forest boundary maintenance: through maintenance of boundary lines and planting of live boundary markers • Removal of encroachers, refraining from unsustainable practices, containment of agriculture expansion, develop guidelines for sustainable offtakes to support sustainable use to enable regulated access to basic needs of firewood, and building poles **Other Supportive Activities will include:** • Effective recognition and protection of community rights and customary uses aligned to conservation objectives through the Formation of CLAs, Land

	Trusteeships & conservancies, and strengthening of tenure rights through acquiring Titles of Communal Ownership to the corridor forest land. • Improving governance and management effectiveness of community forests including equitable benefit-sharing arrangements, capacity building • Business Plans for community – owned / managed green enterprises developed and linked to PES payments; cooperatives formed; and non-timber forest-based enterprises linked to off-takers. • Establishment of a resilience fund to support emergency response to human-wildlife-conflict and promotion of buffer crops, • Community engagement processes, community mobilisation, & capacity building, new agroforestry, community forestry and Climate SMART agriculture practices developed, adopted or improved; Traditional practices revitalized; women-specific knowledge, experiences and skills about biodiversity and its contribution to well-being documented.
Expected Benefits:	The project is seeking to secure and restore the connectivity of the wildlife corridor between the Bugoma-Budongo Forest Reserves in Western Uganda to ensure conservation of the rich biodiversity, climate resilience and sustainable livelihoods in the Northern Albertine Rift. These are described below: **Biodiversity benefits:** The sites are classified as Key Biodiversity Areas and are important for the conservation of threatened species and for hosting unique biome-restricted species, including the Sudan & Guinea Savanna biome species and Guinea-Congo Forest biome species. Particularly important species are the Eastern Chimpanzee (EN) and African Elephant *Loxodonta africana* (EN). Threatened bird species include the Nahan's Francolin *Ptilopachus nahani* (EN), Grey Parrot *Psittacus erithacus* (VU), and range-restricted species including the Yellow-footed Flycatcher *Muscicapa sethsmithi*, and Puvel's Illadopsis *Illadopsis puveli*. The sites are unique with tree diversity special to the Albertine Rift. The project is expected to result in the restoration of the integrity of forest ecological conditions, enhancing ecosystem recovery and regeneration. Reduced human pressure on resources will assist in ensuring forest recovery. Strengthening of connectivity will result in enhancement in ecological interactions, which are essential in preventing local extinction. Reducing threats in the forest will allow movement of animals across forests, which supports the exchange of gene pools in support of viable populations of endangered wildlife. In addition, the project will contribute to the enhancement of landscape and species diversity. **Community livelihoods benefits**: The project will enhance biodiversity- based livelihoods and wellbeing. The Payment for Ecosystem Services (PES) payments will be used to support community – owned / managed green enterprises. This will enable private and public financial flows to support the livelihoods & community – wellbeing, providing long term support to biodiversity-based community livelihoods and wellbeing. The creation of a line of least resistance for wildlife will control and minimize impacts of wildlife on human wellbeing in the whole landscape. **Community Governance and social equity** *(Rights in relation to land / water and other natural resource management, community-based landscape governance and social capital):* The project will also enhance local knowledge & innovation, revitalising

	traditional practices and documenting, women specific knowledge, experiences, and skills about biodiversity & its contribution to human wellbeing. **Climate mitigation and adaptation**: Increasing tree cover in the landscape will increase carbon stocks – carbon sequestration and build the resilience of the landscape and the people to climate change. Reforestation is expected to produce long-term, verifiable voluntary emission reductions. **Reduction of human-wildlife conflict (HWC)**: The project will establish a resilience fund, which will serve as a local community-driven and financed compensation scheme that aims at enhancing community resilience to losses from wildlife incursions. The fund can contribute to providing alternative livelihoods or incentives for wildlife-friendly practices which can encourage local communities to protect wildlife rather than see them as a threat. This is expected to incentivise community involvement in reducing deforestation and forest degradation. Landholders owning the 12,500 ha of land that will be reforested in the three corridor districts of Kikuube, Hoima and Masindi in Western Uganda; and a more climate resilient landscape and livelihoods for the 1,034,600 million residents of the three districts.
Methodology Design:	This is a restoration project, seeking to secure and restore the connectivity of the wildlife corridor between the Bugoma-Budongo Forest Reserves in Western Uganda in the Northern Albertine Rift.
PIN Version:	Version 2.0
Date Approved:	18 June 2025

1 General Information

1.1 Project Rationale

The proposed project is a community-owned and community-led restoration program, seeking to secure and restore the connectivity of the wildlife corridor between the Bugoma-Budongo Forest Reserves in Western Uganda to ensure conservation of the rich biodiversity, climate resilience and sustainable livelihoods in the Northern Albertine Rift. The Albertine Rift is one of the most important biodiversity hotspots in the African continent, with more vertebrate species than any other region on the continent and contains more endemic species of vertebrate than any other region on mainland Africa (Plumptre *et al.* 2007).

The Northern Albertine Rift, a once densely forested project area has been subjected to widespread and rapid degradation, resulting in fragmentation, reducing the corridor connectivity. The area has lost more than 50% of its initial native forest in the last ten years between 2010 – 2020 (See Figure 1; Lumprey, 2020).

This once continuous forest is now reduced and disaggregated into large and small forest patches along the length of the Albertine rift, some established as protected areas, others as fragments on community land. The fragments of community land continue to disappear at an alarming rate. Plumptre (2002) estimates that between 1986 and 2002, over 110 km^2 of forest was cleared within 15 km of Bugoma, and about 90 km^2 was cleared within 15 km of Budongo. The loss of vegetation cover has greatly contributed to the reduction of the corridor connectivity functions of the different forested areas in this landscape. The fragmentation crisis for biodiversity is severe, especially for the flagship endangered species, the Eastern Chimpanzee. Uganda's remaining 5,000 chimpanzees are confined to the forests of the Northern Albertine Rift (Plumptre *et al.*, 2003). Astonishingly, a few groups of chimpanzees continue to move through farmlands between forest patches, with some having their entire home ranges in community land (McCarthy *et al.*, 2015; McLennan & Plumptre, 2012; McLennan, 2008).

The most significant drivers of these land use changes are agricultural activities and increasing human population (Plumptre, 2007; Lamprey, 2020; Kusiima *et al.* 2022), with detrimental implications on ecosystem services and human livelihoods and well-being (Lamprey 2020). Between 1990 and 2020, there was a declining trend for grassland, bushland, and tropical high forest by 19.5%, 4.7%, and 2.7% respectively while subsistence farmland, commercial farmland and built-up areas experienced an overall rate of increase of 19.0%, 5.0%, and 3.5% respectively (WCS and MUIENR 2008; Kusiima *et al.* 2022). Agriculture expansion is both small-scale subsistence and large-scale commercial agriculture, where smallholder farmers are part of large-scale out-grower schemes. With the licencing of three new sugarcane factories bringing the total number of sugarcane factories to four in the area (one for each district), the land area covered by sugarcane production will only increase at the expense of forest on community land.

Land tenure is a major driving factor, with land ownership in this region of Uganda mostly under customary tenure where community lands are owned by traditional institutions. Under this type of ownership, land is generally not officially registered or even properly surveyed. Boundaries often demarcate only active fields and the settlement on the land, which are mutually agreed upon among neighbours, which exposes it to conversion. The project is supporting communities to agree to register corridor land as Community Forests by complying with the provisions of Section 17 of the Forest and Tree Planting Act, 2003.

Experience with Trees for Global Benefit Programme indicates that communities are desirous of having trees on their land. However, commercial agriculture, in particular sugarcane is a strong competing land use. The commercial agro-business schemes provide all the inputs required for the production, in addition to providing a secure market for the produce. The income from Plan Vivo Biodiversity Certificates (PVBCs) provides the financing required to restore the forest, removing the investment barrier. Moreover, the project will support Business Plans for community – owned/managed green enterprises linked to PES payments. This will help create a business ecosystem around sustainable forestry.

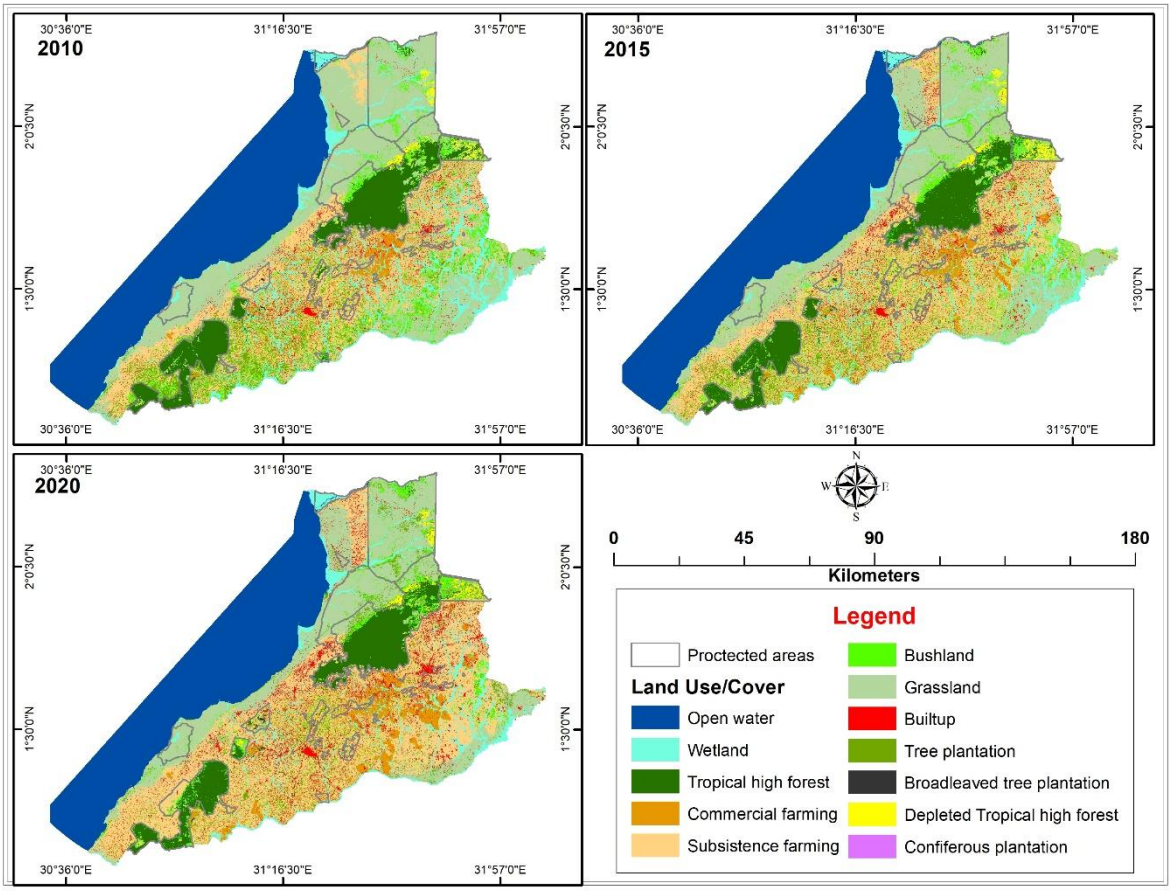

Figure 1. Land use map for the Albertine Rift region acquired from the U.S Geological Survey (USGS) data portal where Landsat 8 and Landsat 5 were downloaded for the years 2020, 2015 and 2010.

Note: The landuse classes used in the classification included: Open water, wetland, tropical high forest, bushland, grassland, woodland, commercial farming, subsistence farming and built-up. Built up comprised of built areas like schools, trading centers, home steadies, roads among others, commercial farming comprised of mainly sugarcane and tea plantations. Tropical high forest was considered to be intact forest with the protected areas but outside protected areas classified as woodlands. Bushlands and thickets were classified as bushland.

Community Benefits

This community-owned and community-led restoration project will strengthen Community Governance and Social Equity Rights in relation to land and other natural resource management. Community-based landscape governance and social capital will be strengthened through the formation of CLAs, Land Trusteeships & conservancies. This will also strengthen tenure rights through acquiring Titles of Communal Ownership to the corridor forest land.

Furthermore, the project will revitalise local knowledge and innovate traditional practices including the promotion of women-specific knowledge, experiences and skills about biodiversity, and its contribution to human well-being.

The project will enhance biodiversity-based livelihoods and well-being through PES, including wood and non-wood forestry products for food, medicine, firewood and the diversified community livelihoods projects. The PES payments will be used to support community – owned/managed green enterprises. This will enable private and public financial flows to support long-term biodiversity-based community livelihoods and well-being.

The creation of a line of least resistance for wildlife will control and minimize impacts of wildlife on human well-being, especially by reducing crop raiding. Moreover, the project will support the establishment of a resilience fund to support emergency response to human-wildlife-conflict (HWC) and promotion of buffer crops growing. This is expected to reduce the burden of wildlife incursions and create a positive attitude towards reducing deforestation and forest degradation. Whereas there are no panaceas to HWC, a lack of compensation for crops damaged or injuries by animals foraging out of protected areas remains the greatest cause of discontent amongst communities in their relations with protected area authorities.

The project will benefit the landholders owning the 12,500 ha of land that will be reforested; participating in the PV Nature project in the three corridor districts of Kikuube, Hoima and Masindi in Western Uganda; and a more climate resilient landscape and livelihoods for the 1,034,600 residents of the three districts.

The project aims to re-establish connectivity in the conservation linkages between Bugoma Central Forest Reserve (CFR) and Budongo CFR by restoring the forest fragments within the currently highly degraded and deforested landscape. This once-a-complete forest mosaic has been highly fragmented in recent years, resulting in a disconnection of the unique landscape to two separate ecosystems disjointed by highly agricultural landscapes (Plumptre, 2007; Lamprey, 2020). The project will target the areas mainly around the riverine parches and tropical high and medium altitude community forests that serve as stepping stones for wildlife moving between these two protected areas. Within the conservation linkage, there remain several smaller forest reserves including Wambabya, Bugambe, Kasokwa, Kasongoire, Mukihani, and Bujawe among others, interspersed within the communally owned forests and private forests. Our focus for this project is to restore the communally owned forests and the private forests that have faced the highest degree of deforestation to restore the connectivity between the scattered forest reserve remnants in the landscape.

The once-all forested 50,000 ha stretch from Bugoma CFR to Budongo CFR remains important for biodiversity conservation. Both these forests are Key Biodiversity Areas (KBAs) important for the conservation of threatened species and for hosting unique biome-restricted species including the Sudan & Guinea Savanna biome species and Guinea-Congo Forest biome species. The key special species are the Eastern Chimpanzee and the African Elephant (both EN). Threatened bird species include the Nahan's Francolin, Grey Parrot, and range-restricted species including the Yellow-footed Flycatcher, and Puvel's Illadopsis. The sites are also unique with tree diversity special to the Albertine Rift Ecoregion.

Due to its importance for biodiversity conservation, the project region is home to several protected regions including national parks (Murchison Falls National Park), and wildlife reserves (e.g. Kabwoya, Kaiso–Tonya, Karuma & Bugungu). The corridor landscape itself is interspersed with major central forest reserves (Budongo & Bugoma) and several small forest reserves including Wambabya, Bugambe, Kasokwa, Kasongoire, Mukihani, Bujawe and several others.

Despite its fragmented nature, this landscape continues to support the threatened Eastern Chimpanzee and other primates, and bird and butterfly species endemic to the highly diverse Albertine Rift (Lamprey, 2020) making the whole corridor a site of conservation interest.

The heavily degraded forest and woodland patches in the landscape outside the protected areas under private, communal (ranging in size from 4 ha to 3,400 ha) and government ownership (JGI, 2010), remain important stepping stones for wildlife migrating within the corridor.

Ecology, biodiversity and conservation value of the region.

The Albertine Rift is one of the most important regions for conservation in Africa, with more endemic species of vertebrate than any other region on mainland Africa (Burgess *et al*., 2004) and more than half of continental Africa's bird species and nearly 40% of its mammal species (Plumptre *et al.* 2007). It has an astronomically high conservation value and has been recognised as an Endemic Bird Area according to BirdLife International, (Stattersfield *et al*. 1998), a 'Global-200' priority ecoregion as described by WWF (Olson and Dinerstein, 1998; Burgess *et al*. 2004), and Conservation International (Brooks *et al*. 2004) described it as part of the Eastern Afromontane Hotspot, a very highly diverse hotspot (Plumptre, 2007). The 40 km corridor is in the tropical high forests and woodlands in the Northern Albertine Rift. The tropical forests of the Albertine Rift harbour an astounding biodiversity; 52% of Africa's bird species; 39% of its mammal species; 19% of its amphibians; 14% of its reptiles; and 14% of its plants (Plumptre *et al*. 2007).

Uganda's remaining 5,000 chimpanzees are confined to the forests of the northern Albertine Rift, particularly in Hoima, Kikuube and Masindi Districts (Plumptre, Cox, & Mugume, 2003). Astonishingly, a few groups of chimpanzees continue to move through farmlands between forest patches, with some having their entire home ranges in community land (McCarthy *et al*. 2015; McLennan & Plumptre, 2012; McLennan, 2008). Maintaining corridors between forests is essential for maintaining genetic diversity and managing HWC.

The vegetation in the target area comprises a mosaic of forest, woodland, and grassland, intermixed with the cultivated fields of subsistence farmers and bush fallow with valleys often having papyrus (*Cyperus papyrus*) swamps bounded by dense clumps of the wild date palm (*Phoenix reclinata*), (Plumptre *et al.* 2007) a mosaic highly suitable for a range of biodiversity. The pilot corridor Linkage 2, for instance, has two key forest sub-linkages centred on the two main streams in the area; the Kanywabarogo River (Linkage-2A) and the Kasoma River (Linkage 2B), which have been shown to be critical for the movement of primates between Bugoma and Wambabya FRs (Lamprey, 2017a), two of the CFRs in the corridor landscape (Figures 2 and 3).

State why the project is appropriate for PV Nature.

The project is appropriate for PV Nature since it is expected to result in positive restoration outcomes in the form of supporting the integrity of forest ecological conditions and enhancing ecosystem recovery and regeneration. The project interventions is targeted to restore connectivity between forest patches between Bugoma CFR and Budongo CFR. Despite its fragmented nature, this landscape continues to support the threatened Eastern Chimpanzee and other primates, plus bird species (mainly forest visitors) and butterfly species endemic to the highly diverse Albertine Rift, making the whole corridor a site of conservation interest.

The high levels of deforestation in this area are driving forest fragmentation with the result being that the forest reserves are now almost entirely isolated from each other. As part of the process to prepare an investment plan for the corridor, an analysis of forest cover change was conducted using high-

resolution satellite images of 2010, 2015 and 2020. Forest cover loss in the pilot site of Kidoma for example has accelerated from -2.8% per annum over 2013-2017 to -22% per annum over 2017-2020. Due to a growing population, forests are being cleared to pave the way for expansion of both small-scale subsistence and large-scale commercial agriculture, where smallholder farmers are part of large scale outgrower schemes. Agriculture is viewed by the smallholders as a more financially viable alternative to forest as a land use.

Moreover, most tree planting initiatives in this area are further driving the transition to plantation forestry as many households are now replacing their patches of indigenous trees with fast-growing exotics, mainly eucalyptus to meet their fuelwood needs. Without immediate action, all-natural forests in the linkages have been predicted to be lost within two years.

There is a need therefore to establish incentive arrangements that specifically target the restoration of native forests, as an economically viable land use option. The plan is to use PVBCs to increase income generating opportunities from indigenous forestry. The project will work with communities to develop plans that will restore core areas of forest along the rivers that will act as paths of least resistance for the passage of wildlife. The communities will also establish a buffer between the core areas and their farms and will be supported to develop business cases based on Non-Timber Forest Products (NTFPs), e.g. honey production. This is expected to reduce human pressure on resources, which will assist in ensuring forest recovery.

1.2 Justification for Conservation Projects *(Not applicable for Restoration Projects)*

Not Applicable.

1.3 Project Interventions

Table 1 – Project Interventions

Intervention Type	**Project Intervention**	**Expected Benefits**
Restoration	Farmer managed natural regeneration through removal of invasive species and, protection of naturally regenerating native trees.	Restoring the integrity of forest ecological conditions will enhance ecosystem recovery and regeneration, for increased biodiversity and resilience to climate change. Improved connectivity will foster the exchange of gene pools in support of viable populations of endangered wildlife. Enhancing ecological interactions is essential in preventing local extinction. The above will contribute to the enhancement of the landscape and species diversity.

Improved Management	Forest fire control: through the establishment of and maintenance of fire lines, as well as an active response to fires when they break-out.	Reduction in the risk of forest loss and degradation linked to forest fires. Reduction in the risk of human encroachment and trespassing, thus improving recovery. Enable regulated access to the basic needs of firewood and building poles. Reducing threats in the forest will allow the movement of animals across forests.
	Capacity building and providing equipment & logistical support to a select well-trained community patrol team who will be responsible for forest monitoring and patrols, through regular visits.	
	Forest boundary maintenance: through slashing and clearing the boundary lines of all bush to make them visible, as well as planting live boundary markers and ensuring that the boundary pillars are always visible.	
	Removal of encroachers: This will be achieved through a community-wide negotiated boundary marking process as part of the Community Forest designation. All villages that own the forest agree on the boundaries through consensus and whichever household has any crops within the boundary is given a time period within which to harvest.	
	Create guidelines / bylaws and support their enforcement. Refraining from unsustainable practices, containment of agriculture expansion, and developing guidelines for sustainable offtakes to support sustainable use.	

1.4 Project Logic[1]

Table 2 Initial Project Logic

	Description	Assumptions/Risks
Outcomes – Intended overall project aim: Conserve over 50,000 ha of natural forest by securing and restoring the corridor connectivity between Bugoma and Budongo CFRs in the Albertine Rift for enhanced landscape diversity, ecosystem integrity and sustainable community livelihoods. The project aims to restore 12,500 ha of the corridor landscape.		
Biodiversity Benefit	Enhanced species diversity in terms of species richness and density, indicative of corridor restoration.	Assumption - It is assumed that communities will set aside land for reforestation to connect specific forests to allow movement of a range of migratory species which need suitable cover for their movement in search of food and roosting or nesting sites. This is important, particularly for the survival of flagship endangered species, like the Eastern Chimpanzee. Risk - There is a possibility that some landowners may refuse or delay to set aside their land for conservation. This process will be voluntary, based on FPIC. The project will allow for different landowners to join the project as and when they feel ready. The project will target the creation of incentives that make forestry a viable land use option. However, the area that has already been committed to the project is sufficient to guarantee corridor functionality in most of the priority linkages.
	Ecosystem recovery, enhanced regeneration and recaptured ecosystem integrity.	
	Ecological interactions are enhanced to support the flow or movement of individuals, exchange of gene pools and ecological processes, which are interactions and connections that support biodiversity	
Socioeconomic Benefit	Biodiversity - based livelihoods and wellbeing improved through support to community – owned businesses linked to PES, the prevention of human-wildlife-conflict as well as availability of wood and non-wood forest products.	Assumption - Landowners are willing to set their land aside for restoration Restoration will be effective, resulting in biodiversity uplift and more social economic benefits including both timber and non-timber products. Risks - The main risk here is that a few communities may be deprived of access to resources for their basic needs. However, the community-wide
	Local knowledge and innovation enhanced through a community – led/owned	

[1] N.B. Project logic is Section 3.5 in the PV Nature Project Requirements however has been placed here for ease writing and reviewing this document.

	approach to restoration and a monitoring approach that empowers them to lead, drive, and own this initiative.	negotiations will ensure that the communities will continue to have access to basic needs of fibre, water, vegetables, etc. Moreover, some of the income from the sale of PVBCs will be used to support community-owned businesses linked to PES for improved livelihoods and well-being. Another risk is that the restoration activities may result in an escalation of HWC. However, reforesting the area identified as line of least resistance along the riverine will indeed reduce the possibility of wildlife wandering into farms in search of food, roosting or nesting sites. Additionally, the project will train and equip wildlife champions to help in the monitoring and prevention of conflict. Some of the income from the sale of PVBCs will be used to establish a human-wildlife resilience fund as a structure to enable the communities anticipate, prevent and respond to any wildlife incursions. Risk – The introduction of money into households has potential to escalate gender-based violence in certain communities. Nonetheless, the Gender Action Learning System (GALs) methodology tool, known as the Gender Balance Tree, will be utilized to promote awareness about the importance of gender participation in both household and community initiatives. The GALS processes allow for men and women to interact on an equal platform and challenge gender descrimination across development and humanitarian interventions thus breaking through the traditional gender contraints and liberate men and women to grow together.
	Community governance and social equity through the creation and strengthening of community – owned institutions to support restoration.	
Environmental Benefit	Watershed services through the conservation of the riverine forests in Kiiha, one of the main water	Assumption - The targeted forests offer protection to many local streams & rivers, and they reduce siltation providing soil and water conservation

	catchments in the Albert Water Management Zone.	benefits. The pilot corridor Linkage 2, for instance, has two key forest sub-linkages centred on the two main streams in the area; the Kanywabarogo River (Linkage-2A) and the Kasoma River (Linkage 2B) Risk – Poor agricultural activities in the upstream may be detrimental to the catchment especially if they result into pollution, erosion, and siltation, affecting the integrity of the watershed. The planned forest restoration activities are intended to buffer the watershed from upstream agricultural activities. The project is also leveraging from the sustainable agriculture initiatives by other actors e.g. Trees for Global Benefits.
	The enhancement of ecological processes also enhances ecosystem services, such as primary production, respiration, energy and nutrient flow.	The assumption here is that increasing tree cover also benefits the productive systems.
	Increased carbon stocks as well as resilience of landscapes and the adaptive capacities of rural smallholders to climate change built. This would protect the communities and landscape from the effects of climate change.	Assumption - Reforestation is expected to produce long-term, verifiable voluntary emission reductions. Risk of undocumented tenure. Mitigation - Strengthening of tenure rights through acquiring Titles of Communal Ownership to the corridor forest land, effective recognition and protection of community rights and customary uses aligned to conservation objectives through the formation of CLAs, Land Trusteeships & conservancies. Risk of drought from adverse weather conditions. Mitigation - All the sites that have been selected are along the river and so won't be affected by drought. In addition, the approach to restoration will promote those species that are well adapted to the environment and thus are able to survive the weather changes.

Output 1	Community – led ecosystem restoration of at least 10,000 ha of tropical high corridor forests between six Central Forest Reserves; Budongo, Bugoma, Bujawe, Wambabya, Kasongoire & Mukihani	Risks: 1. Some Landowners may not be willing to commit their land to restoration. 2. The restoration may not be effective due to a lack of technical know-how. 3. Environmental factors such as drought, pests, and diseases may hinder restoration efforts. 4. Escalation of Human-Wildlife Conflicts. 5. The income from PVBCs may not be sufficient to meet the cost of restoration, yet the wildlife in the corridor renders the land unsuitable for other land use. 6. Market failure for biodiversity credits. Mitigation measures: 1. Early engagement with potential buyers and funders will lay the basis for the market. 2. Creating different offerings including biodiversity enhanced carbon credits will reduce the chances of market failure. 3. The incentive package is intended to make forestry a viable land option and we have provided different incentives for these options. 4. Critical linkages have been located in riverine areas to safeguard against drought. The choice of the restoration method will favour trees that are well adapted to that environment. 5. The income from the sale of PVBCs will be used to create opportunities for multiple income streams from
Output 2	10,000 ha of land set aside for community – based forestry	
Output 3	Co-financing arrangements in support of locally driven biodiversity conservation initiatives established	
Output 4	Reduced demand for wood / forestry products	
Output 5	Agriculture expansion contained	
Output 6	Biodiversity – based community – owned business cases implemented through various business streams	
Output 7	At least 15 community groups that live adjacent to the forest have developed their ability to conserve biodiversity'	
Output 8	Land Trusteeships and Conservancies established as community – managed institutions to support conservation	
Output 9	Built up community governance & social equity of forest adjacent communities	

		NTFPs to reduce dependency on this one stream.

1.5 Project Boundaries

The project has an initial target of 2,182 ha, 1,228 ha in linkage 2, and 954 ha in the 10 CLA patches. The rate of onboarding of sites into the programme varies depending on how ready the landowner is to join the programme. Onboarding happens as and when the landowner is ready but the plan is to implement the project in a phased manner as in the table below. It will start with the CLAs and Linkage 2, then move on to the other linkages.

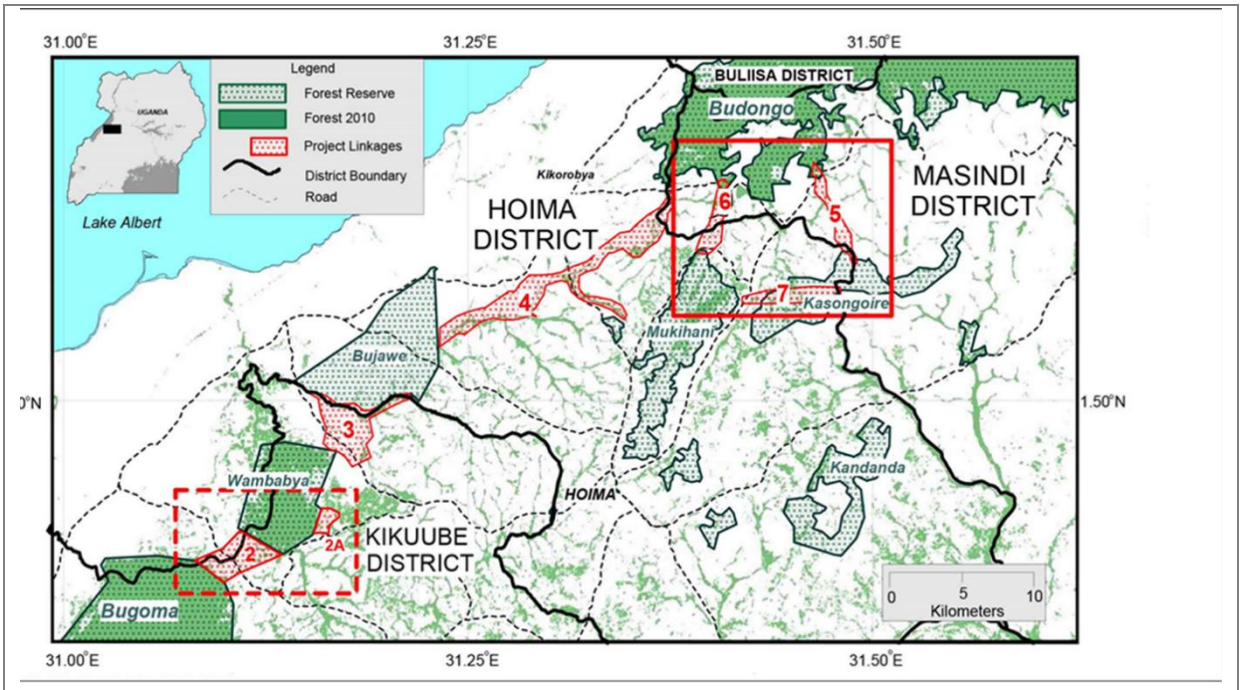

Figure 2. Map of the Linkages in the Bugoma-Budongo Forest Corridor Landscape.

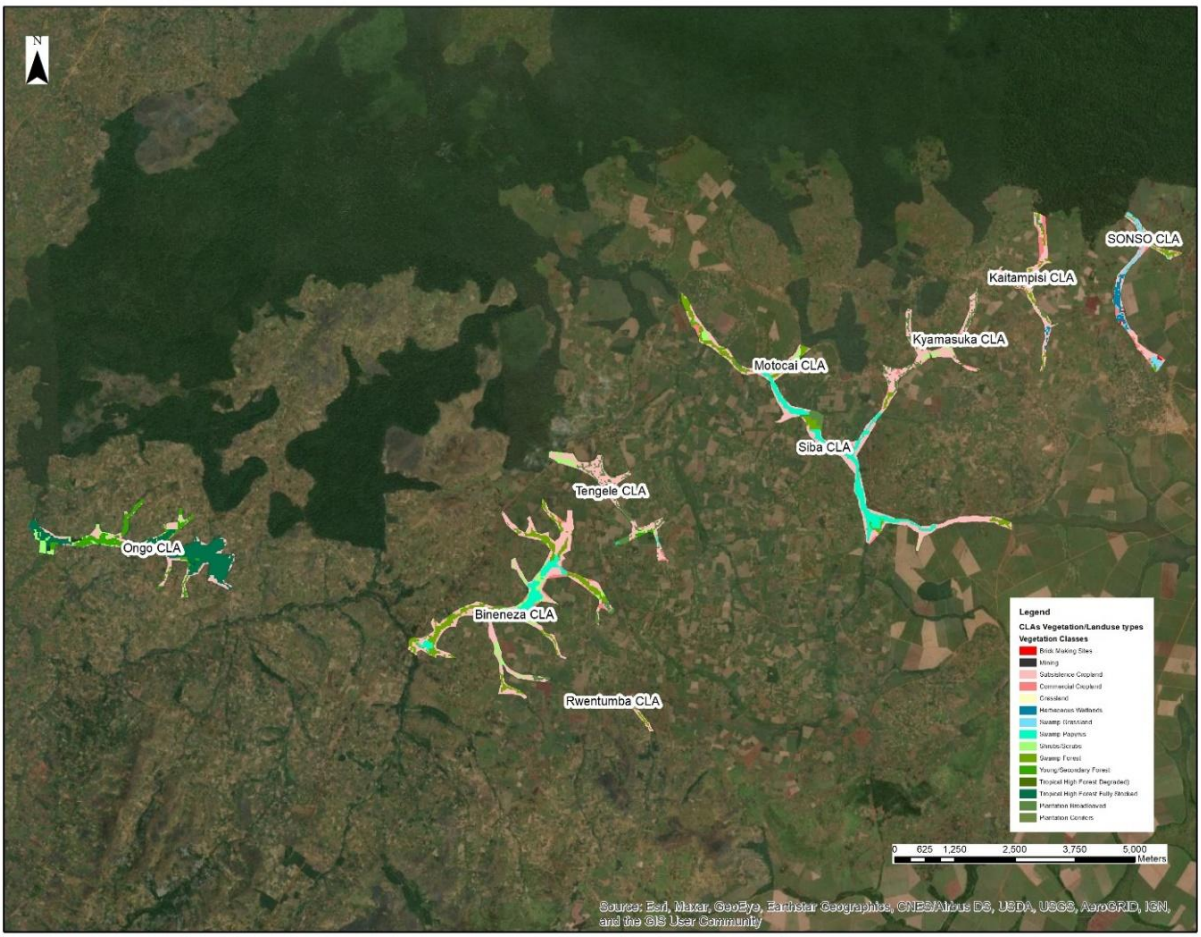

Figure 3. Map of the CLAs in the Bugoma-Budongo Forest Corridor Landscape

Table 3 Project implementation, including the details of the process by which different landholdings will be included in the project

Phase	2022	2023	2024	2025	2026
Negotiations	Linkage 2	CLAs		CFMs, Linkage 3,6,5,8,7	Linkage 4
Management Planning	Linkage 2	CLAs		CFMs, Linkage 3,6,5,8,7	Linkage 4
Design		CLAs & Linkage 2		CFMs, Linkage 3,6,5,8,7	Linkage 4
Pilot			CLAs & Linkage 2		
Implementation			CLAs	CFMs, Linkage 3,6,5,8,7	Linkage 4
Upscaling, Lesson Sharing				CLAs & Linkage 2	CFMs, Linkage 3,5,6,8,7 Linkage 4

Table 4 Project Boundaries

Location:	Country: Uganda District: Masindi, Kikuube, Hoima
Geographic Coordinates:	Budongo CFR 1° 49' 19" North (1.82°) 31° 35' 20" East (31.59°) Bugoma CFR 1° 15' 17" North (1.26°) 30° 57' 53" East (30.97°)
Project Region(s):	One region is the Albertine Region, and the targeted area, which is the Northern Albertine Rift, spans over 50,000 ha.
Project Area(s):	The proposed project will be implemented in the Bugoma-Budongo corridor landscape. It is one (1) region and the targeted connections to be established total 12,500 ha. The project will start with a pilot area of approximately 2,182 ha focusing on linkage 2 (1,228 ha) linking Bugoma to Wambabya and ten patches of degraded land, (954 ha total; ranging from 15ha – 242ha each) which have been set aside for the creation of community reserves in the area that links Budongo to Kasongoire and Mukhihani.
Protected Areas:	The project is not a protected area, but it is targeting the connections between two of Uganda's Largest Central Forest Reserves, which are also Key Biodiversity Areas: Budongo CFR and Bugoma CFR. Interspersed between these two Tropical High Rainforest Reserves, are several smaller forest reserves, including Wambabya, Bugambe, Kasokwa, Kasongoire, Mukihani, Bujawe, among others. Due to its importance for biodiversity conservation, the wider project region is home to several protected regions, including national parks (Murchison Falls National Park), and wildlife reserves (e.g. Kabwoya, Kaiso–Tonya, Karuma & Bugungu).

1.6 Land and Management Rights

Land ownership in this region of Uganda is mostly under customary tenure where land is owned either communally or individually, or by families or by clans. Peoples' rights to this land are recognized by law, although they have no documents to prove ownership, and there is no register where their land ownership is recorded. Under this type of ownership, land is generally not officially registered or even properly surveyed. Conflicts on such land may arise but are locally managed through the local leadership structures. Where land is communally – owned, the project is supporting communities to set aside this land as Community Forests by complying with the provisions of Section 17 of the Forest and Tree Planting Act, 2003. ECOTRUST have been facilitating different communities to form CLA that become the responsible body for managing the forest on behalf of the adjacent community. Each of

the CLAs is responsible for the management of the forest guided by a constitution and forest management plan that clearly specifies the user as well as access rights, also which rights are open to all households in the neighbouring villages and which ones are closed to only members of the association.

Where the land is owned by an individual family, the project will enter into an agreement with the landholder to set aside a part of the land and all land parcels will be consolidated into a conservancy. Some households have opted to find land elsewhere for their farming activities and these have been compensated and their corridor land held in trust for conservation. This option will be available in all linkages. Under this arrangement, ECOTRUST purchases the land from willing sellers and holds it in trust for conservation. This land then becomes land held in trust by ECOTRUST for restoration and conservation purposes under the Land Trust financing mechanism.

2 Stakeholder Engagement

2.1 Stakeholder Identification

The main / primary and local stakeholder group is the landholders owning the 12,500 ha of land that will be reforested, and participating in the PV Nature scheme in the three corridor districts of Kikuube, Hoima and Masindi in Western Uganda. These have been organised into the CLAs; OFOAs, CFMs, & CWAs. These groups have developed the Forest Management Plans and have participated in program design through the Visioning exercise, which has informed the Project's theory of change. The interventions described in the PIN have been drawn from the combined Vision Road Journeys.

The secondary stakeholders are mainly the local government and the civil society organisations that support these local communities. These have been consulted through the Northern Albertine Rift Conservation Group (NARCG), a coalition of non-government organizations (NGOs) and CSOs group including ECOTRUST, Fauna and Flora International (FFI), Jane Goodall Institute (JGI), Wildlife Conservation Society (WCS), World Wildlife Fund (WWF), Chimpanzee Trust, and Bulindi. Through the consultations with these stakeholder groups, the overall restoration plan for the Murchison Falls Corridor landscape was agreed upon. This has been documented as the investment plan for the Northern Albertine Rift.

The investment plan was derived from a wider Ministry of Water and Environment (MWE) – led concept to create a mega corridor that stretches from Semliki in the south to Murchison Falls National Park, for the maintenance of ecological connectivity in the Albertine Rift as a whole (Plumptre *et al*. 2011). In addition to the NARCG CSOs, the mega corridor concept involved other stakeholders including: MWE, National Forestry Authority (NFA), Uganda Wildlife Authority (UWA), Ministry of Agriculture Animal Fisheries and Industry (MAAIF), National Environment Management Authority (NEMA), District Local Government (DLG), Community-based Organisations (CBOs) and cultural & religious institutions.

Table 5 Stakeholder Assessment in terms of their relationships with the Project

Stakeholder Group	Relationship with the Project
Local Stakeholders	**Local Residents** These include residents and landowners within the Bugoma – Budongo Corridor in the three districts of Kikuube, Hoima and Masindi in Western Uganda. The residents will directly be affected by the interventions of

	the project, positively by the increased resources and livelihood options and negatively by impacts from the project mainly the human / wildlife conflicts that may arise from the increased biodiversity especially by wildlife responding to the improved habitat connectivity. The residents will lead the project design, including Visioning and development of the theory of change through the GALs methodology, formulating management plans for their sites, agreeing on project interventions, possible conservation incentives and benefit sharing mechanisms, organizing community awareness & sensitization campaigns, lead in undertaking project activities and provide security to project programmes.
Primary Stakeholders	**Landowners:** These are the main / primary stakeholder group owning the 12,500 ha of land that will be reforested; and participating in the PV Nature project in the three corridor districts of Kikuube, Hoima and Masindi in Western Uganda. These have been organized into the CLAs, PFOAs, CFMs, & CWAs. These groups have developed the Forest Management Plans and have participated in program design through the Visioning exercise, which has informed the Project's theory of change. The interventions described in the PIN have been drawn from the combined Vision Road Journeys of these groups. **Community-based Organisations (CBOs):** In this landscape, most of the CBOs are SACCOs which are microfinance institutions or micro banks that manage community finances including savings and loan schemes for the community members. Other CBOs are mainly in line with livelihood projects, dealing with improving the welfare of the members. These CBOs provide avenues for effective benefit sharing as benefits can be channelled through them and distributed to the registered members or utilized for community projects, as may be agreed in the project design. **Cultural & Religious Institutions:** These are key influencers with the main role of raising awareness and educating the local community on various matters pertaining to their livelihoods. They will be used as channels to relay messages and mobilize community action.
Secondary Stakeholders	**National Government Bodies:** At the national level, we will work with the Northern Albertine Rift Conservation Group (NARCG), Ministry of Water and Environment (MWE), National Forestry Authority (NFA), Uganda Wildlife Authority (UWA), Ministry of Agriculture Animal Fisheries and Industry (MAAIF), and the National Environment Management Authority (NEMA). They provide an oversight role on the implementation of nationally agreed decisions on the environment in the country. **District Local Government**: We are working in the Districts of Masindi, Hoima & Kikuube, and we will work together with the District Forest Services, Environment Officer and Community Development Officers. These will support the local communities in the alignment of their visions with the government's policies and laws. They provide legal structures

	and ensure adherence by the communities. They also provide a supportive function to the local communities, including providing funding to some interventions through government financing schemes like the Parish Development Model, Bona Bagagawale Fund, Youth Livelihood Programme, Uganda Women Entrepreneurship Programme, etc. **Civil Society Organizations:** These have been consulted through the NARCG a coalition of NGOs / CSOs group including ECOTRUST, FFI, JGI, WCS, WWF, Chimpanzee Trust, and Bulindi. Through consultations with these stakeholders, the overall restoration plan for the Murchison Falls Corridor landscape was agreed upon. This has been documented as the investment plan for the Northern Albertine Rift. The investment plan was derived from a wider MWE–led concept to create a mega corridor that stretches from Semliki in the south to Murchison Falls National Park, for the maintenance of ecological connectivity in the Albertine Rift as a whole (Plumptre *et al.* 2011).

2.2 Project Coordination and Management

This community-owned project is coordinated by ECOTRUST, a Not-for-Profit Environmental Trust whose mission is to conserve biological diversity and enhance social welfare by promoting innovative and sustainable environmental management. ECOTRUST has since its inception in 1999, relentlessly partnered with government agencies, civil societies, and the private sector to develop and support the implementation of strategies that improve natural resource management while investing in programs that increase income opportunities for the rural poor.

ECOTRUST's experience in smallholder-led, commercially viable payment for environmental services scheme includes Trees for Global Benefit (TGB). Under TGB, ECOTRUST has supported 50,000 smallholder farmers to grow more than 16 million trees on about 40,000 ha in different parts of Uganda, linked to the voluntary carbon market (VCM). Through TGB, ECOTRUST provides a platform, where different community - led actions are aggregated to achieve scale in a cost–effective manner that enables funds committed for conservation action to reach the intended beneficiary in the form of direct cash transfers. TGB won the 2013 SEED Award for its innovation and entrepreneurship, its promising efforts to promote economic growth, social development and environmental protection in Uganda, and the potential of its partnership to inspire others.

ECOTRUST has an already existing social infrastructure for community mobilisation, sensitization regarding legal framework/requirements, establishing community-led institutions, resource mapping, management planning & supporting implementation, supporting land registration & declaration of community-owned/managed reserves.

The actual restoration work, improved management, forest patrols, etc., will be implemented by the communities with support and capacity building from ECOTRUST. The communities will also participate in the monitoring through the community-based biodiversity monitoring approach, guided by a clear monitoring protocol, with simplified but robust methods complete with indicator taxa, sampling tools and data collection applications. Each community has monitoring teams, and they hold monthly feedback meetings with the rest of the community to make sense of the trends.

Table 6 Responsibility for Project Coordination and Management Functions

Project Coordination and Management Function	**Responsible Party/Parties**
Stakeholder engagement during project development and implementation	ECOTRUST
Ensuring conformance with the Plan Vivo Biodiversity Standard (PV Nature) and compliance with applicable policies, laws and regulations	ECOTRUST
Developing technical specifications, land management plans and project agreements with project participants	ECOTRUST
Ensuring that the PDD is updated with any changes to the project	ECOTRUST
Registration and recording of land management plans, project agreements, and sales agreements	ECOTRUST
Managing project finances and dispersal of income to project participants as described by the benefit sharing mechanism	ECOTRUST
Managing Plan Vivo Biodiversity Certificates in the Plan Vivo Registry	ECOTRUST
Preparing annual reports and coordinating validation and verification events	ECOTRUST
Securing certificate sales and other means of funding the project	ECOTRUST
Assisting Project Participants to secure any legal or regulatory permissions required to carry out the project	ECOTRUST
Providing technical assistance and capacity building required for project participants to implement project interventions	ECOTRUST
Monitoring progress indicators, socioeconomic indicators and climate indicators and providing ongoing support to project participants	CLAs and ECOTRUST
Measurement, reporting and verification of biodiversity benefits	ECOTRUST

2.3 Project Participants

This is a community – owned project, targeting Type I Project Participants who are community members organised in different community groups each targeting a specific area within the connectivity linkages. These include Communal Land Associations, Private Forest Owners Associations; Collaborative Forest Management Groups and Wetland Management Associations: The description of these categories is provided below:

Collaborative Forest Management Associations
The Collaborative Forestry Management community groups are those under a mutually beneficial arrangement in which a local community or a forest user group shares roles, responsibilities, and benefits with a responsible body arising from the management of a forest reserve or part of it. These groups are governed by the Uganda Forestry Policy (2001) and the National Forestry and Tree Planting Act (NFTPA), 2003. These groups will be responsible for restoration activities in the forest patches under their jurisdiction as set in their agreements.

Communal Land Associations
These are community groups mandated to manage the smaller forests within the corridor landscapes. The CLAs are community groups formed and incorporated as the Bodies responsible for the management of community forests in accordance with the provisions of Section 17 of the NFTPA, 2003. Out of the over 60 community forests in the landscape, this project has already onboarded 10 of them under this CLAs arrangement, covering about 954 ha, and the rest will be onboarded as they become ready. They will be responsible for managing the restoration activities in their respective CLAs.

Private Forest Owners Associations
The PFOAs are groups of landowners who own the land within the corridor landscape and have agreed to set it aside for restoration work. These may be smallholder farmers, small forest owners as well as secured tenure under lease, purchase / management agreement or conservation agreement. These are all located in the corridor linkage between Wambabya and Bugoma, including Bugambe 25 ha & Kidoma 99 ha into a PFOA.

Community Wetland Associations
These are community groups mandated to manage wetlands in their locations on behalf of the Wetland Management Department in the MWE under the Wetland Management Act, 2020. ECOTRUST has been working with two CWAs targeting the improved management of hotspots within the Kiiha catchment, which is the main river system in the corridor. These will be responsible for the restoration activities within the Kiiha catchment.

Summary of Project Participants

At the community level, we will work with about 10 CBOs that have signed Collaborative Forest Management Agreements with NFA.

We will also work with two CWAs, and we expect to support the formation of at least 10 PFOAs from the list in Table 7.

Additionally, we will work with the 10 CLAs in Table 8 and support the creation of more.

Table 7 Area under Linkages 2-7 that will be included within the Project

Linkage	Area (ha)	50 m buffer
Linkage 2	1078	42
Linkage 2A	150	4
Linkage 3	2001	0
Linkage 4A	TBD*	TBD*
Linkage 4B	TBD*	TBD*
Linkage 4C	TBD*	TBD*
Linkage 5A	534	124
Linkage 5A-5B	365	116
Linkage 5C	66	30
Linkage 6	209	53
Linkage 7	68	24
	4471	**393**

**The size of Linkage 4 is yet to be determined and included in the table in due course.*

Table 8 Area under CLAs that will be included within the Project

NAME OF COMMUNAL LAND ASSOCIATION	AREA UNDER MANAGEMENT (HA)
1. Kaitampisi Communal Land Association	62
2. Motokai Communal Land Association	15
3. Tengele Communal Land Association	75
4. Kyamasuka Communal Land Association	74
5. Bineneza Communal Land Association	242
6. Ongo Communal Land Association	188
7. Alimugonza Communal Land Association	24
8. Siiba Communal Land Association	198
9. Sonso Communal Land Association	62
10. Rwentumba Communal Land Association	14
	954

2.4 Participatory Design

The project has been designed in collaboration with the local community and will continue to involve them as the landholders in its design and implementation. The design process employs Participatory Rural Appraisal techniques and the GALS tools, which ensure an effective community engagement process. Using the Vision Road Journey, each community describes their restoration vision, which is later translated into a Multi Lane Highway through which the investments to achieve the Vision Road Journey are described. The Multi Lane Highway focuses on identifying the interventions required for achieving the biodiversity conservation and the biodiversity – based livelihood objectives of the group, which informs the Project's theory of change.

Using the Resource Map, the community identifies the resources that are needed to support biodiversity – based livelihoods and to achieve their Vision Road Journey. This is one of the GALS aimed at helping resource users to understand their resources, and the location and status of those resources. The resources identified here assist in the identification of monitoring indicators.

The Challenge Action Tree is used to provide ideas of where the threats in the landscape are and the efforts required to ensure the recovery of the needed resources for attaining the community biodiversity-related vision. The community then identifies the indicators of the resources as well as the indicators of the threats to the resources. The community members then select the methodologies, monitoring elements, and tools as well as designing the monitoring data collection forms with clear explanatory notes for the communities to understand. The timing and frequency of transect monitoring are also agreed upon. Alongside this is the digital monitoring that is based on automated equipment such as camera traps and acoustic sensors and is supported by the technical staff of ECOTRUST / who are in-country experts and have been trained by a data analytics company specialising in biodiversity monitoring through a digital approach. This digital monitoring is designed by the technical staff to ensure that it is robust and aligned with the expected best practices in accordance with the PV Nature requirements. The monitoring programme is developed by the group members in these communities, and a few of them are selected to be trained as monitors. In the long term, these trained members are then able to train other members for the sustainability of the program.

The Gender Action Tree may be needed to show how the men, women, youth and children (girls & boys) can all be involved in the biodiversity conservation programme depending on how each group interacts with the various resources.

The secondary stakeholders have been involved in the process that defined the Corridor Investment Plan and will continue to be engaged during the quarterly meetings of the Northern Albertine Rift Conservation Group.

2.5 FPIC Process

The process of attaining FPIC employs Participatory Rural Appraisal techniques and the GALS tools which ensure an effective community engagement process. GALS is a mainstream methodology for women and men to address gender issues important to the effectiveness of any development intervention. It uses visual diagramming, principles of inclusion and provides a practical set of tools that enable individuals, households, communities and organizations to plan their futures, and identify and negotiate their needs for gender-equitable livelihoods. GALS is a community-led household methodology that uses participatory processes and visual diagrams to empower women and men to take action against societal norms that drive gender inequality and plan for their futures together. It aims at creating self-led economic, social and political transformation at an individual, household,

community and organizational level. GALS has been integrated across different interventions worldwide including in agricultural value chains, gender-based violence interventions, village savings and associations, functional adult literacy, climate change and advocacy interventions.

This system employs several tools that can be used depending on the issue being handled. The tools commonly employed in restoration projects are the Vision Road Journey and the resulting Multilane Highway, Resource Map, the Gender Balance Tree, Achievement Road Journey, and the Challenge Action Tree among others.

The project is inspired by the community's aspiration to pursue a biodiversity-based livelihood as described in the Vision Road Journey. This planning tool will enable individuals and groups to set clear visions for their restoration programs, with SMART objectives, achievable targets as well as to identify opportunities to support their site restoration. The Vision Road Journey in particular is used to establish if the community has any intentions to participate in biodiversity conservation based on their planned actions. The Integration of GALS in this process enables men and women to work together to develop a joint vision (visioning) which will increase the opportunities for them by restoring forests.

The CLAs and CFMs that we work with have land in forest reserves and their mandate is to restore this forest for sustainable livelihoods. In addition, every CLA and CFM group develops a management plan for the forest and a constitution describing how the group will be managed around the sharing of resources derived from the forest. The Constitution is useful in informing the benefit-sharing arrangements, linking the income from the sale of PVBCs to the actions and rights of the various community members including the community livelihood benefits.

The project responds to the community barriers and challenges that are described through the Challenge Action Tree. The Challenge Action Tree is used to guide the communities in analyzing the challenges they are likely to face during the restoration program, identify their root causes and together, devise possible solutions to those challenges. This information is used to categorise threats, and interventions into restoration, control, support, rewards and compensation and allocate the resources from the sale of PVBCs towards supporting these broad categories.

The Gender Balance Tree is used to undertake a gender analysis framework that critically examines the differences in workload, roles, activities, needs of the different genders in certain contexts and situations. Restoration activities may be seen as a man's activities, but this tree will clearly map out the contribution of all genders in restoration, and who and how they benefit while increasing participant awareness of the inherent gender inequalities in terms of the activity profile, access & control of resources. Decisions are made on what they would like to change after identification of the differences, for better planning and balanced gender involvement.

The project is designed by the community through the Multilane Highway which is what has been converted into the project's theory of change. This is a tool in which the community agree on what their vision and objectives are and how they will achieve this and by who. They also come up with milestones and activities to achieve these as well as the challenges that they may face and how they will overcome them. Together, they agree to work as a team to achieve this.

Since participation is based on FPIC, we don't expect 100% buy-in. However, the project has been designed through a consultative process that has been ongoing for more than 5 years. In this period, we have come up with different land use options under which 12,500 ha have already been committed and the project will support the legal recognition of these designations.

Various land use options have been provided, fronting forestry as a profitable land use option. These options include the Communal Forests under the CLAs and land held in trust by ECOTRUST on behalf of the community, and land owned by private individuals under conservation agreements. We are drawing from a large landscape and we are prioritizing the line of least resistance. The risk of withdrawal would mostly affect the land under conservation agreements. However, all those landholders who have expressed interest in entering into conservation agreements have done so based on their desire to consider forestry as a land use option and we expect that PVBCs will make this a viable land use option. In the event that these landholders do not find forest a viable land use option, one of the options is to sell their land to the trust. And not every beneficiary is expected to participate in the management of their land. There are different levels of participation and how deeply they would like to engage.

3 Project Design

3.1 Biodiversity Baseline

The Albertine Rift is one of the most important regions for conservation in Africa, containing more vertebrate species than any other region on the continent and more endemic species of vertebrates than any other region on mainland Africa (Plumptre *et al.* 2007). This region contains more than half of continental Africa's bird species and nearly 40% of its mammal species (Plumptre *et al.* 2007).

In 2003, chimpanzees were estimated to have a national population of close to 5,000 individuals with Bugoma and Budongo being among the four forests that still had viable populations of the species (~500 individuals as a minimum population size) for long-term viability (Plumptre *et al.* 2003). However, maintaining the connectivity between many of the smaller forests was predicted to be vital if chimpanzees are to survive in the long-term (Plumptre *et al.* 2003).

The Albertine Rift, where the project is located, has experienced a dramatic change in land use driven by deforestation and habitat destruction. Between 1990 and 2020, there was a declining trend for grassland, bushland, and tropical high forest by 19.5%, 4.7%, and 2.7% respectively while subsistence farmland, commercial farmland and built-up areas experienced an overall rate of increase of 19.0%, 5.0%, and 3.5% respectively (WCS and MUIENR 2008; Kusiima *et al.* 2022).

The intervention aims to restore connectivity between the forest patches of Bugoma CFR and Budongo CFR. Despite its fragmented nature, this landscape continues to support the threatened Eastern Chimpanzee and other primates and bird species (mainly forest visitors) and butterfly species endemic to the highly diverse Albertine Rift, making the whole corridor a site of conservation interest. Uganda's remaining 5,000 chimpanzees, for example, are confined to the forests of the northern Albertine Rift, particularly in Hoima, Kikuube and Masindi Districts (Plumptre *et al.*, 2003).

The maintenance and genetic health of these species depend on their ability to move and disperse between forest blocks. In the past, this has been possible, since in many areas the woodland and forest existed as a continuous swathe between larger forest protected areas. On community land, connectivity was maintained in the narrow bands of forest along wetlands and rivers. The current baseline situation is that of natural forest patches that are completely disconnected resulting in forest reserves that are now almost entirely isolated from each other.

Despite significant disturbance, there remains areas that have retained functionality for the movement of primates, including groups of chimpanzees which continue to move through farmlands between forest patches, with some having their entire home ranges in community land (*McCarthy et al*., 2015; McLennan & Plumptre, 2012; McLennan, 2008). These are the areas, particularly on

community land along the rivers, that have been identified as the critical linkages that the project is seeking to set aside and restore for the purposes of re-establishing the connectivity. Strengthening of connectivity will result in an enhancement in ecological interactions, which are essential in preventing local extinction.

3.2 Socioeconomic Baseline

This is a rural, poor farming community with an average household size of 6.4 people ± 2.55 (SD), where 48% of the population is under the age of 16 years, suggesting a high population growth rate. On average, crops, forests, and plantations occupy a total of 68% of the farm, leaving 32% as fallow. In this area, the traditional cash crop is tobacco, and the 2007 imagery indicates that this crop dominated agricultural production at that time. Today, tobacco is less common and is giving way to other important cash crops, notably sugarcane, coffee, rice, and maize.

There are four sugarcane factories in the area (one for each district), where smallholder farmers are part of largescale out-grower schemes. The land area covered by sugarcane production will only increase at the expense of forest on community land if no viable alternative is presented to the farmers. This project will promote forest restoration as a viable option to all other land uses and all landowners are free to voluntarily join the project.

The forest fragmentation and the high rate of agricultural expansion have left the communities in high competition with the wildlife for resources, leading to high rates of human-wildlife conflicts. This has led to negative attitudes of communities to wildlife and thus do not entertain them on their land.

Some 99% of households (HHs) use firewood as their primary cooking fuel. Across the corridor, woodlot plantations have increased from 2.3 ha in 2017 to 9.8 ha in 2020. In the 2020 survey, 49% of HHs indicated that they obtained their fuelwood from a plantation on their own land, whilst 21% indicated that they obtained fuelwood on their own natural forests. Some 41% of HHs indicated they obtained fuelwood from the Wambabya FR, so clearly the lack of natural forest within the corridor is prompting HHs to choose other sources. Households with forests walk an average of 581 m ± 673 (SE) to collect firewood, similar to the distances in Kidoma.

3.3 Environmental Baseline

Despite the conservation importance of the region, there has been widespread and rapid degradation even inside protected areas, which has led to a loss of forest cover mainly due to extensive encroachment for agricultural land. The tropical high forest and woodlands in Hoima and Masindi have been degraded over many years, resulting in the fragmentation of the once densely forested areas. This applies to both private / communal forests and CFRs. Plumptre (2002) estimates that between 1986 and 2002, over 110 km^2 of forest was cleared within 15 km of Bugoma, and about 90km^2 was cleared within 15 km of Budongo.

In 2010, most areas within the wildlife corridors were covered by forests, but these have been converted to agricultural land, either subsistence farms (growing maize, beans, potatoes, etc), or commercial farms (e.g. tobacco, tea and sugarcane). As part of the process to prepare an investment plan for the corridor, an analysis of forest cover change was conducted using high-resolution satellite images of 2007, 2013, 2017 and 2020. Forest cover loss in the pilot site of Kidoma, for example, has accelerated from -2.8% per annum over 2013-2017 to -22% per annum over 2017-2020.

The forests located along rivers, micro-catchments, or wetlands have similarly been affected, with cultivation being carried out to the riverbanks, or even riverbeds for the smaller streams.

3.4 Proposed Biodiversity Monitoring

Table 9 Prospective Biodiversity Monitoring

Selected Biodiversity Monitoring Tool	Target Groups(s) the Biodiversity Monitoring Tool will target	Reason why this tool has been selected	Monitoring activities. Detail project specific considerations for monitoring this target group.
Required Target Groups			
Tool 1: Acoustic recorders	Birds	Required for capturing the bird's activity. The nocturnal and canopy, and understorey birds will be well captured by these recorders.	Different birds are active differently in dry and wet seasons, so monitoring will need to occur in both seasons.
Tool 2: High Resolution Imagery	Plants (under 2 m)	These are difficult to accurately sample using transect point counts. So, we will use the camera and gimbal to acquire high-resolution images for identifying these plants.	The plant diversity is at its maximum in rainy seasons, so monitoring will need to be done in the rainy seasons.
Additional Recommended Groups			
Tool 3 – Camera Trapping	Primates	Primates occur in the project sites but are rarely encountered, so they will be monitored by the camera traps.	Target understorey and nocturnal species are not easily seen on transect counts. Timing should cater for both rainy and dry seasons.
Tool 4 – Acoustic Monitoring	Bats	Required for capturing the nocturnal activity of these Bats as they are mainly active at night and are shy and thus rarely seen.	Monitoring will be done once a year at regular times every year.
Tool 5 - Transect	Birds	This is intended to provide an opportunity for	Monitoring should target both rainy and dry

Counts	Plants Primates Bats	community participation in the monitoring programme and targets the community's preferred indicators of restoration outcomes tagged to community benefits: biodiversity – based livelihoods and well-being.	seasons.

3.5 Additionality[2]

Table 10 Initial Barrier Analysis

Project Intervention	Main Barriers	Activities to Overcome Barriers
Restoration: *Natural regeneration*	**Technical Know How** for natural regeneration is lacking with communities more familiar with the clearance of natural forests to pave way for plantations	Capacity building and establishment of field trials for communities to learn removal of invasives and protection of naturally regenerating trees
	Tenure Security: the targeted areas are on unprotected public land with no clear ownership and no responsible body	The communities will be supported to convert this land into Community Forests by complying with the provisions of Section 17 of the Forest and Tree Planting Act, 2003. The CLA will become the responsible body to manage the forest on behalf of the adjacent community
	Competing Land Use: Especially with cash crops and in particular sugarcane	The income from the sale of PVBCs will be used to invest forest – based enterprises, making forestry an economically viable land use option
Improved Forest Management: *Forest fire control, forest boundary maintenance, removal of encroachers,*	**HWC:** The crop raiding and continuous wildlife incursions have forced communities to develop a negative attitude towards wildlife	The establishment of well – managed corridors is intended as a control measure to reduce the likelihood of animals wandering into community gardens. The project will also have an awareness program on co-existence with wildlife. Furthermore, the

[2] See Baseline Scenario and Additionality Assessment Tool

refraining from unsustainable practices, and containment of agriculture expansion		project will set up a resilience fund that empowers communities to predict, monitor and respond to wildlife incursions. Moreover, the project will train and equip wildlife champions to help in the monitoring and prevention of conflict
	Technical Know How: There is no well-trained body that has been designated to take charge of the forest	The communities will identify men and women among their youth, who will be trained to become forest monitors and patrol
	Lack of Financing: In support of forest management operations especially forest patrols	Part of the income from the sale of PVBCs will be used to support the operations of monitors and patrol teams
Supportive Activities: *Land Trusteeships, benefit sharing arrangements, & community engagement*	**Technical Know How:** Communities lack an understanding of the legal requirements and customising them to their local circumstances	The project will support capacity building workshops and handhold communities in complying with the provisions of Section 17 of the Forest and Tree Planting Act, 2003
	Lack of Financing: To facilitate the negotiations to broker and harmonise relations within and among communities as well as with the local authorities	The project will provide the necessary financing for community engagement meetings
	Lack of Market Access: For the products that are sustainably generated from the forest	Part of the project's strategy is to broker relationships with off takers of sustainably generated products

Table 11 Threat Analysis

Major threat to biodiversity	Main Barriers	Activities to mitigate threat
Agricultural expansion: High land demand for settlement and expansion of commercial & subsistence agriculture for an increasing population	**Land tenure** is a major barrier since, being an open access resource, communities do not have the mandate to prevent encroachers Limited knowledge to increase or maintain the productivity of the existing fields propels the conversion of forests to farmland	Designation of these areas as community forests and giving the community a mandate through the creation of CLAs Capacity building in sustainable land use to improve the productivity of existing farms
Indiscriminate cutting of trees for fuelwood, building poles and timber by encroachers	**Low-income levels** & joblessness coupled with a low supply of the needed products outside forests, have caused forests on community land to be over-exploited for firewood, charcoal, and timber	Develop business cases based on landscape restoration as a business. Communities will be able to develop businesses such as tree nursery operations, apiaries, etc.
HWC: where incidents of wildlife incursions & crop raiding result in retaliatory animal kills in reprisal and annihilation of private forests as a deterrent	Not much has been invested in establishing HWC controls in this region, and this issue has increasingly become a community concern. In some cases, it has bred hostility	Establishment of a resilience fund to support emergency response to HWC and promotion of buffer crops
Limited economic incentives to conserve natural forests	The long-term investment horizon against the competing short-term cash flows from commercial or subsistence farming	The income from the sale of PVBCs will be used to create opportunities not just short term but for a predictable and sustainable flow of income to the communities

3.6 Exclusion List

This project does not include any activities listed on the Exclusion List.

3.7 Environmental and Social Screening

Table 12 Environmental and Social Risks

Risk Area	**Potential Risks**
Vulnerable Groups	The project may not be accessible to marginalised groups, e.g. women, youth, elderly & disabled. The project will apply GALS as a gender mainstreaming methodology for women and men to address gender issues important to the effectiveness of any development intervention.
Gender Equality	Same as above
Human Rights	Same as above
Community, Health, Safety & Security	Loss of livelihoods as a result of the escalation of HWC, e.g. crop raiding.
Labour and Working Conditions	Much of the work is distributed among various community members who take up the responsibilities on a voluntary basis. It is, however, expected that the groups will be supported with equipment, e.g. protective wear.
Resource Efficiency, Pollution, Wastes, Chemicals and GHG emissions	There is no potential threat here.
Access Restrictions and Livelihoods	Local communities may be deprived of access to forestry resources. The mitigation action is to empower communities to legally own the forests and establish sustainable offtake levels that will enable recovery.
Cultural Heritage	There is no threat here as there are no cultural resources identified in the project sites. Moreover, the sites are being restored, so the project interventions will allow the preservation of any cultural resource in the site.

Indigenous Peoples	This is a community – led project, designed and implemented by the local community.
Biodiversity and Sustainable Use of Natural Resources	The monitoring protocols will account for both outcomes and threats to biodiversity.
Land Tenure Conflicts	Through the formation of CLAs, the security of tenure is clarified and strengthened.
Risk of Not Accounting for Climate Change	The project will technically specify the interventions to account for both biodiversity and climate change.
Other – e.g. Cumulative Impacts	No other impacts.

3.8 Stacking and Double Counting

The proposed project also plans to generate carbon credits from the same project area. ECOTRUST has been operating a carbon scheme – Trees for Global Benefit, and has never registered these types of land under the scheme. This is mainly because, on their own, the anticipated income from carbon credit sales vis-à-vis the level of effort required to manage the forest was not going to be sufficient to enable the project to break even. It is also likely that the income from the sale of PVBCs alone is insufficient to meet the climate and biodiversity conservation needs of the project. So, to create a balance between costs and benefits and ensure the success and sustainability of the project, we plan to utilize both financial streams from PVBCs and PVCs in this project.

Moreover, the key interventions required for carbon accumulation and climate resilience are different from those required to enhance biodiversity conservation. Activities such as establishing a resilience fund, conducting forest patrols, monitoring threats, and removing invasive species are central to biodiversity conservation in the project area, though they may not directly contribute to carbon accumulation. And even if they did, the level of investment required would likely be less than that needed for biodiversity conservation.

The project through stacking will technically specify the details around carbon accumulation activities, the targeted carbon pools, the baseline scenario and the expected benefits. Other interventions will include ecosystem profiling, liberation tending, (which is a release treatment to free a young cohort, or young shoots, from competition with much larger sized trees), establishment of nurseries and support enrichment planting and reforestation through establishment of stands of mixed native species in the patches that are completely deforested (Table 12).

Table 13 Interventions under a carbon project as an expansion of Trees for Global Benefit

Intervention Type	Project Intervention	Expected Benefits
Restoration	**Ecosystem Profiling** and development of technical specifications to guide reforestation, especially on tree species suitable for the sites **Tree Nursery Establishment** to provide suitable seedlings for enrichment planting and reforestation **Enrichment Planting** to support the natural regeneration of forest stands, with some trees still surviving **Reforestation** through the establishment of stands of mixed native species in the patches that are completely deforested **Liberation Tending** through the removal of mature trees to free a young cohort from competition with much larger-sized trees	Restoration of the integrity of forest ecological conditions will enhance ecosystem recovery and regeneration, for increased biodiversity and resilience to climate change. Improved connectivity will foster the exchange of gene pools in support of viable populations of endangered wildlife. The enhanced ecological interactions are essential in preventing local extinction. The above will all contribute to the enhancement of the landscape and species diversity.
Improved Forest Management	**Carbon Monitoring** following the PV Climate methodologies	This will help determine the PVCs accrued by the different landowners and thus determine the corresponding funds due. These funds will be used by the different landowners for livelihood improvement.
	Gap Filling through planting more seedlings in existing gaps to cover up the dead seedlings and create a more complete forest stand	Restoration of the integrity of forest ecological conditions will enhance ecosystem recovery and regeneration, for increased biodiversity and resilience to climate change.
Supportive Activities	**Benefit-sharing Arrangements:** Landowners will be capacitated on the benefit-sharing arrangements available which they can utilize when obtaining their revenue from the sale of the PVCs.	The project will support capacity-building workshops to promote the understanding and appreciation of the equitable benefit-sharing arrangements in the project.

	Community Engagement through workshops and meetings to share more about the project and how landowners can participate. The main message here will be the promotion of forestry as a viable land use option amidst all competing land uses. This will promote voluntary decisions for landowners to join the project.	

3.9 Relevant Legislation and Policies

Table 14 National Level Legislation, Policies and Instruments

	Yes/No/Unsure	**Details**
Does the country receive or plan to receive results-based biodiversity or climate finance through bilateral or multilateral programs?	Yes	Under the Nationally Determined Contributions (NDCs), Uganda is expecting to receive results-based climate finance through bilateral or multilateral programs. Our programme, however is not listed among the beneficiaries of this financing.
Are there any other relevant regulations, policies or instruments?	Yes	Following the Kunming-Montreal Agreement, for the Post-2020 Global Biodiversity Framework (GBF), Uganda (like many countries) is updating its National Biodiversity Strategy and Action Plan (NBSAP), including the Biodiversity Finance Initiative (BIOFIN) as a financing mechanism. However, this is unlikely to impact the project, as its implementation aligns closely with the initiative. This project, categorized as one of the PES options, effectively fulfils one of BIOFIN's (*Building Transformative Policy and Financing Frameworks to Increase Investment in Biodiversity Management')* financing alternatives. BIOFIN is part of a global programme that seeks to assist countries in effectively mobilising and aligning domestic and international biodiversity funds, and to accomplish long-term development goals.

4 Governance and Administration

4.1 Governance Structure

This is a community – designed/owned/led corridor restoration programme, coordinated by ECOTRUST. The programme will run as a conservancy where different communities, either as individual families or as a community group, will contribute parts of their land to form a contiguous forest corridor that will support the migration of wildlife between specific forest reserves. The communities around the different patches are organised in the form of CLAs, PFOAs, CWAs and CFMAs. Each association has a constitution that clearly guides decision – making and a leadership structure. In addition to the overall group leadership, the associations have different committees responsible for different aspects of forest management and benefit-sharing. Most of the beneficiaries would belong to either one of the committees or to a specific resource – user group. Through these committees and resource user groups, the communities will participate in programme design and implementation.

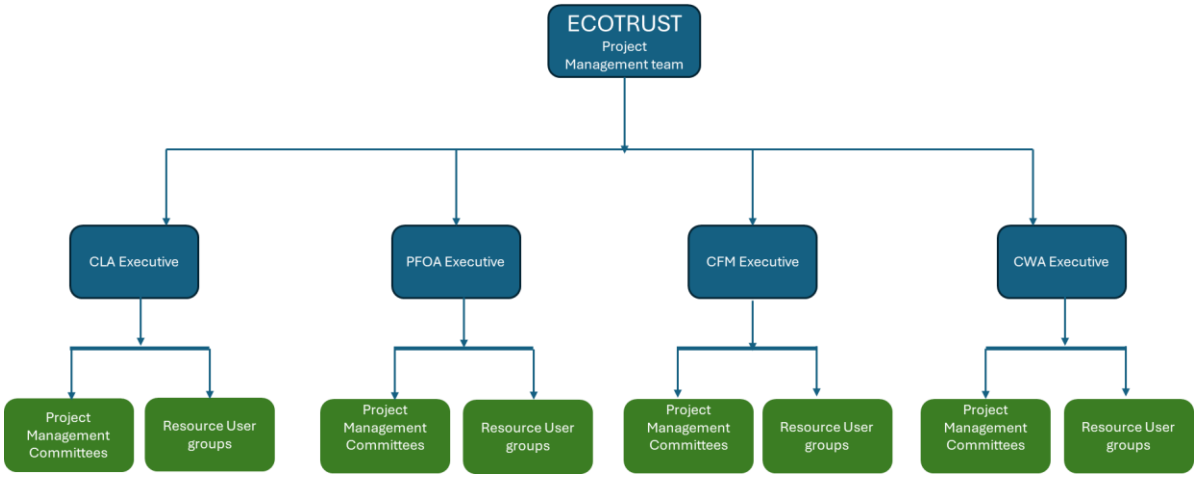

Figure 4. A governance organogram for the Budongo-Bugoma Corridor Restoration Project

4.2 Legal and Regulatory Compliance

Land ownership in this region of Uganda is mostly under customary tenure, where community lands are owned by traditional institutions. Under this type of ownership, land is generally not officially registered or even properly surveyed. Boundaries often demarcate only active fields and the settlement on the land, which are mutually agreed upon among neighbours, exposing it to conversion. The project is supporting communities to register corridor land as Community Forests by complying with the provisions of Section 17 of the Forest and Tree Planting Act, 2003.

The project will operate in full compliance with all national and international policies, laws and regulations for Uganda.

4.3 Financial Plan

The initial set-up of the project has been supported by a project funded by the Darwin Initiative. This has supported the setup of project structures and procurement of the equipment needed for monitoring biodiversity as required by the project. This funding is intended to meet the project

development costs. It is anticipated that project implementation will be made possible by financing from the sale of the PVBCs.

The PVBCs accrued will support community projects as agreed by the community groups and will follow the Plan Vivo's 60-40 benefit-sharing mechanism as followed by the ongoing PV Climate TGB programme. The communities determine how to distribute the 60% among themselves, and this will be described in the benefit-sharing plan.

5 References and Further Reading

Burgess D. Neil., H. Jennifer, Hales E. Underwood, K., and Newman. 2004. Terrestrial eco-regions of Africa and Madagascar: A conservation assessment.

Hill, C.M., Osborn, F.V. and Plumptre, A.J. 2002. Human-wildlife conflict: identifying the problem and possible solutions. Albertine Rift Technical Report No. 1, 137 pp

Kusiima et al. (2022). Interconnectedness of Ecosystem Services Potential with Land Use/Land Cover Change Dynamics in Western Uganda. DOI: 10.3390/land12020475

McLennan, AJ Plumptre. (2012). Protected apes, unprotected forest: composition, structure and diversity of riverine forest fragments and their conservation value in Uganda. Tropical Conservation Science.

McLennan, (2008) The Global 200: a representation approach to conserving the Earth's most biologically valuable ecoregions

DM Olson, E Dinerstein - Conservation biology, (1998) – JSTOR Plumptre A.J., Cox, D. & Mugume, S. (2003) The Status of Chimpanzees in Uganda. Albertine Rift Technical Report Series No. 2. Wildlife Conservation Society.

Plumptre, A. & Reynolds, V. (1996). Censusing chimpanzees in the Budongo forest. International Journal of Primatology 17, 85-99 Plumptre, A.J. & Reynolds, V. 1997. Nesting behaviour of chimpanzees: implications for censuses. International Journal of Primatology 18, 475- 485.

Plumptre, A. J., Mugume, S., Cox, D., Bergl, R. & Rothen, L. (1999). Chimpanzee and other Large Mammals survey of Bugoma Forest Reserve and the Kagombe-Matiri Forest Reserve Complex. Report to WCS, on surveys in western Uganda.

Plumptre, A.J. & Grieser-Johns, A.D. 2001. Changes in Primate Communities following Logging Disturbance. pp. 71-92 In: The cutting edge: conserving Wildlife in logged Tropical Forests. Eds: R.A. Fimbel, A. Grajal, and J.G. Robinson. Columbia University Press, New York.

Plumptre, A.J. & Reynolds, V. 1994. The impact of selective logging on the primate populations in the Budongo Forest Reserve, Uganda. Journal of Applied Ecology 31, 631-641

Plumptre, A.J. 2000. Monitoring mammal populations with line transect techniques in African forests. Journal of Applied Ecology 37, 356-368.

Plumptre, A.J. 2002. The Extent and Status of Forests in the Ugandan Albertine Rift. Report to UNDP/GEF PDFb process, Uganda.

Plumptre, A.J., Mugume, S., Cox, D., & Montgomery, C. 2001. Chimpanzee and large mammal survey of Budongo Forest Reserve and Kibale National Park. Report to WCS on surveys in Western Uganda.

Plumptre, A.J., Mutungire, N., Tumusiime, R., Cox, D. and Montgomery C. 2002. Chimpanzee and large mammal survey of Kalinzu, Kasyoha-Kitomi and Maramagambo Forests. Report to WCS on surveys in Western Uganda

Plumptre, A.J., Reynolds, V. and Bakuneeta, C. 1994. The contribution of fruit eating primates to seed dispersal and natural regeneration after selective logging. Report to ODA. Status of Chimpanzees in Uganda 65 Wildlife Conservation Society

Plumptre, A.J., Reynolds, V. and Bakuneeta, C. (1997). The effects of selective logging in monodominant tropical forests on biodiversity. Report to ODA on project R6057

Plumptre, Cox, & Mugume, 2003 Plumptre A.J., Cox, D. & Mugume, S. (2003) The Status of Chimpanzees in Uganda. Albertine Rift Technical Report Series No. 2. Wildlife Conservation Society

Plumptre, J. Andrew, Tim R.B. Davenport, Mathias Behangana, Robert Kityo, Gerald Eilu, Paul Ssegawa, Corneille Ewango, Danny Meirte, Charles Kahindo, Marc Herremans, Julian Kerbis Peterhans, John D. Pilgrim, Malcolm Wilson, Marc Languy, David Moyer. (2007). The biodiversity of the Albertine Rift. Biological Conservation, Volume 134, Issue 2, Pages 178-194.

6 Annexes

Annex 1 – Project Boundaries and Habitat Types

Project boundary maps are presented in Section 1.5.

Annex 2 –Registration Certificate

ECO TRUST CERTIFICATE OF INCC

ECO TRUST PERMIT TO OPERATE.pdf

Annex 3 – Exclusion List

Activities	**Included in Project ('Yes' or 'No')**
Any project activities leading to or requiring the destruction [1] of critical habitat [2] or any forestry project which does not implement a plan for improvement and/or sustainable management.	No
Any activity which could be associated with the significant impairment of areas particularly worthy of protection of cultural heritage (without adequate compensation in accordance with international standards).	No
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention [3].	No
Illegal, harvesting or trading in any wildlife resources.	No
Destructive fishing methods or drift net fishing with a net more than 2.5 km in length, explosives and/or poison.	No
Large-scale commercial logging operations for use in primary tropical moist forest.	No
Production or trade in wood or other forestry products other than from sustainably managed forests [4].	No
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process, and exploitation of other conflict minerals [5]	No
Activities involving harmful or exploitative forms of forced labour, [6] harmful child labour [7], modern slavery and human trafficking [8].	No
Projects that include involuntary physical displacement and/or forced eviction.	No
Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented Free, Prior and Informed Consent (FPIC) of such peoples [9].	No
Production, use, sale or trade of pharmaceuticals, pesticides/herbicides, ozone layer depleting substances [10], and other toxic [11] or dangerous materials such as asbestos or products containing PCB's [12], wildlife or products regulated under CITES, including all products that are banned or are being progressively phased out internationally	No
Production or trade of arms, ammunition, weaponry, controversial weapons, or components thereof (e.g., nuclear weapons and radioactive ammunition, biological and chemical weapons of mass destruction, cluster bombs, anti - personnel mines, enriched uranium).	No
Procurement and use of firearms.	No
Provision of finances to military institutions involved in conservation or security activities.	No
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).	No
Production or trade of tobacco and other drugs	No
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking [13].	No
Any trade related to pornography, prostitution or sexual exploitation of any form.	No
Production or trade in radioactive material. This does not apply to the procurement of medical equipment, quality control equipment or other	No

application for which the radioactive source is insignificant and/or adequately shielded	
Production or trade in unbound asbestos. This does not apply to the purchase or use of cement linings with bound asbestos and an asbestos content of less than 20%.	No
Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.	No
Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations [14].	No
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage [15].	No
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.	No
Projects involving the planting or introduction of invasive species	No
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.	No

Notes:

[1] Destruction means (1) the elimination or severe reduction in the integrity of a habitat/area caused by a major and long-term/prolonged change in land-use or water resources or (2) the modification of a habitat such that this habitat's ability to fulfil its function/ role is lost.

[2] The term critical habitat encompasses natural and modified habitats that deserve particular attention. This term includes (1) spaces with high biodiversity value as defined in the IUCN's classification criteria, including, in particular, habitats required for the survival of endangered species as defined by the IUCN's red list of threatened species or by any national legislation; (2) spaces with a particular importance for endemic species or whose geographical range is limited; (3) critical sites for the survival of migratory species; (4) spaces welcoming a significant number of individuals from congregatory species; (5) spaces presenting unique assemblages of species or containing species which are associated according to key evolution processes or which fulfil key ecosystem services; (6) and territories with socially, economically or culturally significant biodiversity for local communities. Primary forests or high conservation value forests must also be considered as critical habitats.

[3] https://cites.org/eng/disc/text.php

[4] Sustainably managed forests are forests managed in a way that balances ecological, economic and socio-cultural needs.

[5] Conflict minerals, including tin, tungsten, tantalum and gold, can be used to finance armed groups, fuel forced labour and other human rights abuses, and support corruption and money laundering. See the EU Regulation on conflict minerals: https://policy.trade.ec.europa.eu/development-and-sustainability/conflict-minerals-regulation/regulation-explained_en

[6] Forced labour means all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

[7] Harmful child labour means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the

child's health, or physical, mental, spiritual, moral, or social development. Employees must be at least 14 years of age, as defined in the ILO's Declaration on the Fundamental Principles and Rights at Work (C138 – Minimum Age Convention, Article 2), unless local laws require compulsory school attendance or a minimum working age. In such circumstances, the highest age requirement must be used.

[8] Modern slavery is comprised two key components: forced labour and forced marriage. These refer to situations of exploitation that a person cannot leave or refuse due to threats, violence, deception or coercion. (https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---ipec/documents/publication/wcms_854733.pdf)

[9] https://www.fao.org/indigenous-peoples/our-pillars/fpic/en/

[10] Any chemical component which reacts with, and destroys, the stratospheric ozone layer leading to the formation of holes in this layer. The Montreal Protocol lists Ozone Depleting Substances (ODS), their reduction targets and deadlines for phasing them out.

[11] Including substances included under the Rotterdam Convention, Stockholm Convention and WHO "Pharmaceuticals: Restrictions in Use and Availability".

[12] PCBs (polychlorinated biphenyls) are a group of highly toxic chemical products that may be found in oil-filled electrical transformers, capacitors and switchgear dating from 1950 to 1985.

[13] Any direct financing of these projects or activities involving them (for example, a hotel including a casino). Urban improvement plans which could subsequently incorporate such projects are not affected.

[14] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal (1989).

[15] "Critical cultural heritage" is considered as any heritage element recognised internationally or nationally as being of historical, social and/or cultural interest.

Annex 4 - Environmental and Social Screening

Guidance on use

Background

The questionnaire includes questions aligned with the Plan Vivo Biodiversity Standard (PV Nature) Environmental and Social Safeguards (Section 3.9, v1.0) and other Safeguard Provisions that are embedded in PV Nature (namely Stakeholder Engagement, Stakeholder Consultation, Free Prior and Informed Consent, Grievance Mechanism).
The questionnaire also draws from the Plan Vivo Environmental and Social Policy Framework (ESPF).
The questionnaire is structured around the IUCN ESMS Questionnaire, which itself is designed to be aligned with the IUCN ESMS (2016), and the World Bank Environmental and Social Framework (2017), including World Bank Standards 1-10.
The number of questions has been limited in this version of the questionnaire to ensure that it is practical and user-friendly.
The purpose of the questionnaire is to establish: 1) the project risk rating; 2) the significance of risks and impacts; 3) alignment with safeguard provisions; 4) the need for further E&S assessment during project design; 5) the likely safeguard plans that should be developed.
Due to the early stage in project design, the questionnaire is not designed to assess alignment with PV Nature requirements, but rather prompt projects as to what will be expected regarding those requirements that relate to E&S safeguards.
Any social and environmental risks must inform the design of the *Project*.

Requirement

As per PV Nature v1.0 every project must conduct a screening of environmental and social risks and impacts at the PIN stage of project design. The questionnaire and screening report are to be submitted alongside the PIN to the Plan Vivo Foundation.

Process for use of the E&S questionnaire

The Project Coordinator is to fill in the "Project coordinator response" section of the questionnaire. This is the column shaded light grey.
Once completed by the Project Coordinator, the Plan Vivo Foundation Project Officer and E&S reviewer is to fill in the "E&S reviewer comments" section of the questionnaire. This includes filling in the "E&S reviewer conclusions".
The screening report is then completed at the end by the Plan Vivo Foundation E&S reviewer, and the results are shared and discussed with the Project Coordinator.

Establishing significance of risks and impacts

Table 1 illustrates how risk significance can be established based on an estimate of likelihood of something happening, and the impact should it occur. This likelihood-magnitude matrix can be used by the Project Officer and the E&S reviewer to estimate the risk and impact significance of the E&S risk areas

indicated in the E&S questionnaire **Section B**, below. Note that while the questionnaire focuses on key topics and issues that are common to natural resource management projects, the project coordinator should include other known E&S risks and impacts associated with the planned project.

Likelihood represents the possibility that a given risk event is expected to occur. The likelihood should be established using the following five ratings:

Very unlikely to occur (1)
Not expected to occur (2)
Likely – could occur (3)
Known to occur - almost certain (4)
Common occurrence (5)

Impact (or consequence) refers to the extent to which a risk event might negatively affect environmental or social receptors – see below criteria distinguishing five levels of impacts:

Severe (5)	Adverse impacts on people and/or environment of **very high magnitude**, including **very large scale** and/or spatial extent (large geographic area, large number of people, transboundary impacts), cumulative, **long-term (permanent and irreversible**); **receptors** are considered **highly sensitive**; examples are severe adverse impacts on areas with high biodiversity value; severe adverse impacts to lands, resources and territories of indigenous peoples; significant levels of displacement or resettlement with long-term consequences on peoples' livelihood; impacts give rise to severe and cumulative social conflicts with long-term consequences.
Major (4)	Adverse impacts on people and/or environment of **high magnitude**, including **large scale** and/or spatial extent (large geographic area, large number of people, transboundary impacts), of certain duration **but still reversible** if sufficient effort is provided for mitigation; receptors are considered sensitive; examples are adverse impacts on areas with high biodiversity value; adverse impacts to lands, resources and territories of indigenous peoples; significant levels of displacement or resettlement with temporary consequences on peoples' livelihood; impacts give rise to social conflicts which are expected to be of limited duration.
Medium (3)	Adverse impacts of **medium magnitude**, **limited in scale** (small area and low number of people affected), **limited in duration** (temporary), impacts are relatively predictable and can be avoided, managed and/or mitigated with known solutions and straight forward measures.
Minor (2)	Adverse impacts of **minor magnitude, very small scale** (e.g. very small affected area, very low number of people affected) and only short duration, may be easily avoided, managed, mitigated.
Negligible (1)	Negligible or no adverse impacts on communities, individuals, and/or on the environment.

Table 1: Rating significance of a risk area (Source: IUCN ESMS questionnaire, 2020)

		Likelihood of occurrence				
		Very unlikely to occur (1)	*Not expected to occur (2)*	*Likely – could occur (3)*	*Known to occur - almost certain (4)*	*Common occurrence (5)*
Magnitude	*Severe (5)*	Moderate	Substantial	High	High	High
	Major (4)	Low	Moderate	Substantial	Substantial	High
	Medium (3)	Low	Moderate	Moderate	Moderate	Substantial
	Minor (2)	Low	Low	Moderate	Moderate	Moderate
	Negligible (1)	Low	Low	Low	Low	Low

Establishing project risk category

The project risk category will be determined based on an understanding of the types of potential E&S risks and impacts associated with the project, and the availability of appropriate and known mitigation measures. Most Plan Vivo projects are thought to be of either low or moderate risk. If high risk projects are identified, the E&S impact assessment would look to understand the alternative project designs available to reduce the potential risks and impacts.

Table 2: Rating significance of a risk area (Source: IUCN ESMS questionnaire, 2020)

Risk Category	**Definition**
Low	Insignificant or low potential environmental and social risks and impacts have been identified. No additional management measures are required; no Environmental and Social Management Plan (ESMP) section of the PDD required.
Moderate	Moderate and/or substantial potential adverse risks and impacts have been identified, in one or more risk areas. These risks and impacts can be mitigated through known mitigation measures, such as a Stakeholder

	Engagement Plan, livelihood restoration plan, or through the project's ESMP.
High	High risks and impacts that are potentially diverse and irreversible, and for which standard solutions are not sufficient to manage, and for which specialist safeguard plans and expertise is required.

Alignment with safeguard provisions

Section C of the questionnaire refers to PV Nature safeguard provisions which are integrated into the Standard. These include:

- *Stakeholder engagement and consultation*
- *Free, Prior and Informed Consent*
- *Grievance Redress Mechanism*

The project coordinator will answer the questions related to these provisions, and clarify the project's intentions to meet these Standard requirements during the project design phase.

Environmental and Social Assessment

The E&S questionnaire should determine what E&S assessment is required during the project design phase (PDD development). For low and moderate risk projects, a tailored E&S assessment is required. For high-risk projects, an Environmental and Social Impact Assessment (ESIA) is required. The project coordinator should consider in responses what further assessment of risks and impacts is required, and the E&S reviewer will comment on this and include a summary in the Screening Report section.

Safeguard Plans

The E&S questionnaire should determine which Safeguard Plans are required by the project. For low risk projects, it is unlikely that an ESMP will be required. For moderate risk projects, and ESMP will be required. Projects will, according to the Standard, also require a mandatory Stakeholder Engagement Plan and a Grievance Redress Mechanism.

Some projects might require specialist plans, such as an Indigenous Peoples Plan (IPP) or a Livelihood Restoration Plan.

SECTION A: PROJECT INFORMATION	
Project title:	**Bugoma-Budongo Corridor Restoration Program**
Project coordinator:	**ECOTRUST**
Country:	**Uganda**

Geography/ landscape:	**Bugoma-Budongo Forest Corridor, Northern Albertine Rift**
Project summary:	*The Budongo-Bugoma Forest Corridor, is part of the Albertine Rift, one of the most important biodiversity hotspots in the East African region. Despite its fragmentation crisis, this landscape continues to support the threatened Eastern Chimpanzee (Pan troglodytes schweinfurthii IUCN Red List <EN>) and other Primates, plus bird and butterfly species endemic to the highly diverse Albertine rift, making the whole corridor a site of conservation interest. Uganda's remaining 5,000 chimpanzees for example are confined to the forests of the Northern Albertine Rift, particularly in Hoima, Kikuube and Masindi Districts. The project is a community – designed/owned/led corridor restoration programme, seeking to "Secure and restore the connectivity of the wildlife corridor between the Bugoma and Budongo Central Forest Reserves in Western Uganda to ensure conservation of the rich biodiversity, climate resilience and sustainable livelihoods. The project targets to restore 12,500ha of Tropical rain forest in the Bugoma-Budongo Forest corridor. The once densely forested project area has been subjected to widespread and rapid degradation, resulting in fragmentation, reducing the corridor connectivity. The project is expected to result into positive restoration outcomes including; Effective recognition and protection of community rights and customary uses; strengthening of land-tenure rights; Improved governance and management effectiveness of community forests; Equitable Benefit sharing mechanisms; Business Plans for community – owned/managed green enterprises; improved integrity of forest ecological conditions, enhanced ecosystem recovery and regeneration; reduced climate-related shocks and human-wildlife conflict as well as sustainable resource management for improved community livelihoods.*
Name and role of project coordinator staff member filling this questionnaire:	**Pauline Nantongo-Kalunda and Dianah Nalwanga - ECOTRUST**
Confirm that the Plan Vivo Exclusion List is appended to this E&S questionnaire:	*Completed in version 3 of PIN.*

SECTION B: POTENTIAL E&S RISKS AND IMPACTS			
Topic	**Question**	**Project coordinator response**	**E&S reviewer comments**
E&S Risks and Impacts			
Vulnerable Groups	Are there vulnerable or disadvantaged groups or individuals, including people with disabilities (consider also landless groups, lower income groups less able to cope with livelihood shocks/ stresses) in the project area, and are their livelihood conditions well understood by the project?	The entire community being targeted is vulnerable and at the forefront of the effects of climate change. The project is seeking to build the resilience of this community. However, among them are more marginalised groups, e.g. women, youth, elderly & disabled. The project will apply the GALS, a gender mainstreaming methodology for women and men to address gender issues important to the effectiveness of any development intervention.	*Good. At PDD stage, a thorough explanation of the GALS methodology and any other plans to address risks to these vulnerable groups will need to be provided.*

	Is there a risk that project activities disproportionately affect vulnerable groups, due to their vulnerability status?	It is unlikely that the project will affect vulnerable groups due to their vulnerability status. The only risk is, as explained above, that the vulnerable groups, if not well targeted, could be excluded.	*As above. Please ensure the potential risk is addressed and mitigated in the PDD.*
	Is there a risk that the project discriminates against vulnerable groups, for example regarding access to project services or benefits and decision-making?	The project will not necessarily discriminate against them, but simply due to their vulnerability, if not well targeted, could be excluded.	*Further details and explanations on vulnerable groups that are not well targeted and will be excluded from access to project services and/or benefits will be required at the PDD stage.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 2 – The project has identified vulnerable groups and plans to manage and mitigate through the GALS methodology which will help with building governance amongst the different groups. The presence of vulnerable groups and plans to manage will need to be done at the PDD stage which means the risk should still be considered likely.* *Estimated magnitude of risks (1-5) & justification: 3 – If this risk were to occur, it would have a relatively significant impact on a moderate number of people.* *Risk significance:* ***Moderate***			
Gender equality	Is there a risk of adverse gender impacts due to the project/ project activities, including for example discrimination or creation/exacerbation or perpetuation of gender-related inequalities?	Through the GALS methodology, women and men, young and old, including the disabled are able to address gender issues important to the effectiveness of any development intervention.	*Good. As mentioned above, more detail on the GALS methodology will be required at the PDD Stage.*
	Is there a risk that project activities will result in adverse impacts on the situation of women or girls, including their rights and livelihoods? Consider for example where access restrictions disproportionately affect	Different gender groups have different relationships with forestry resources. Through the GALS methodology, women and men, young and old, including the disabled are able to address gender issues important to the effectiveness of any development intervention.	*Good.*

	women and girls due to their roles and positions in accessing environmental goods and services?		
	Is there a risk that project activities could cause or contribute to gender- based violence, including risks of sexual exploitation, sexual abuse or sexual harassment (SEAH)? Consider partner and collaborating partner organizations and policies they have in place. Please describe.	The introduction of money at household level has potential to create tensions that may result into gender – based violence. Through the GALS methodology, women and men, young and old, including the disabled are able to address gender issues important to the effectiveness of any development intervention.	*Good. Please ensure the GALS methodology further outlined in the PDD thoroughly assesses and makes plans to mitigate the mentioned tensions amongst the different genders.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 3 - The project has identified some gender inequality and plans to manage and mitigate through the GALS methodology. More details on the planned mitigation and management measures will need to be clearly outlined at PDD stage.* *Estimated magnitude of risks (1-5) & justification: 4 – If this risk were to occur, it would have a major impact on a significant number of people. This risk can be lowered to 3 (medium) if proper measures are implemented.* *Risk significance:* ***Substantial***			
Human Rights	Is there a risk that the project prevents peoples from fulfilling their economic or social rights, such as the right to life, the right to self-determination, cultural survival, health, work, water and adequate standard of living?	The entire participatory process is designed to empower communities to self – manage and self – determine. The visioning exercise and the business case development process ensure that communities have an opportunity to derive biodiversity – based livelihoods.	*Good. Please ensure the visioning exercise and business case development process are outlined in detail in the PDD.*
	Is there a risk that the project prevents peoples from enjoying their procedural rights, for example through exclusion of	This is very unlikely since communities have already developed constitutions as part of the Communal Land Association formation process.	*Good. Please outline the Communal Land and Association formation process further at PDD stage.*

	individuals or groups from participating in decisions affecting them?		
	Are you aware of any severe human rights violations linked to project partners in the last 5 years?	None. We are unaware of any violations linked to project partners and therefore we do not envisage any risk of severe human rights violations related to this project going forward.	*Thanks, please ensure you have appropriate ways to check this with project partners at PDD stage.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 2 – Management of the risk has been assessed and will be implemented after visioning and business case development outlined in the PDD, this risk is not expected to occur.* *Estimated magnitude of risks (1-5) & justification: 2 – This risk is adequately addressed and appears negligible for the project.* *Risk significance:* ***Low***			
Community, Health, Safety & Security	Is there a risk of exacerbating existing social and stakeholder conflicts through the implementation of project activities? Consider for example existing conflicts over land or natural resources, between communities and the state.	There are no current conflicts over the targeted land for the project. Moreover, the Legal arrangements by this project will ensure that no conflicts over project land happen in the future. The project seeks to strengthen land tenure rights through the formation of the Communal Land Associations, a process through which any claims over land as well as the preferred access procedures are agreed upon before the issuance of the certificate of communal ownership. Each association will have a constitution that explains how grievances are resolved.	*Please provide further detail at the PDD stage on whether there is a risk for future conflicts to occur amongst communities and the state and how this will be addressed and mitigated for.*
	Does the project provide support (technical, material, financial) to law enforcement activities? Consider support to government agencies and to Community Rangers or members conducting monitoring and patrolling. If so, is there a risk that these activities will harm communities or personnel	Each participating community has a system through which individuals self – select to join a team of well-trained community patrol teams who will be responsible for forest monitoring and patrols. These are well-respected individuals among society and their role is well-received. There is no history of negative repercussions from these roles.	*Good. Please outline in detail at the PDD stage how the risk for community members who choose to be rangers will be safeguarded whilst involved in monitoring and patrolling.*

	involved in monitoring and patrolling?		
	Are there any other activities that could adversely affect community health and safety? Consider for example exacerbating human-wildlife conflict, affecting provisioning ecosystem services, and transmission of diseases.	Humanwildlife conflict is a real issue of concern, and it is hoped that the establishment of wildlife corridors will reduce incidences of wildlife incursions & crop raiding. The project will support the establishment of a resilience fund to support emergency response to Human-wildlife conflict and promotion of buffer crops.	*Good. The risk of human-wildlife conflict is explained well here, please ensure how it will be assessed and mitigated for in detail at the PDD stage.* *Please address the risk of disease transmission between humans and apes (i.e. chimpanzees) and how this may be prevented (e.g. establishment of the wildlife corridors). This can be addressed at the PDD stage.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 3 – This risk is scored higher because of the election of forest monitoring patrols which may have consequential impacts on the local participants. Additionally, whilst the project is mitigating for human-wildlife conflict there is a risk it will continue to exist whilst interventions are being implemented.* *Estimated magnitude of risks (1-5) & justification: 4 – If this risk were to occur, it could have transboundary impacts on a larger number of people.* *Risk significance: **Substantial***			
Labour and working conditions	Is there a risk that the project, including project partners, would lead to working conditions for project workers that are not aligned with national labour laws or the International Labor Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work (discriminatory	This is unlikely as the project does not plan to employ any workers. The main intervention is natural regeneration, which doesn't require labour input. Moreover, most of the activities will be done by the community groups themselves.	*Ok, thanks, please ensure this is confirmed during PDD phase.*

	working conditions, lack of equal opportunity, lack of clear employment terms, failure to prevent harassment or exploitation, failure to ensure freedom of association etc.)?		
	Is there an occupational health and safety risk to project workers while completing project activities?	All individuals participating in the project activities in the different community groups will be supported with the appropriate protective gear, such as raincoats, gumboots etc., where needed.	*Good. Please outline the protective gear that will be provided at the PDD stage.*
	Is there a risk that the project support or be linked to forced labour, harmful child labour, or any other damaging forms of labour?	This is unlikely since all labour requirements will be provided by the community members, who self select.	*Please explain in the PDD what is meant by self selecting and how this avoids the risk of forced labour or other.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 3 – The project does not fully address the potential risk of worsening labour conditions, therefore this risk is considered likely if not addressed properly. This risk can be lowered with a thorough outline of mitigation and management measures at PDD stage.* *Estimated magnitude of risks (1-5) & justification: 2 – If this risk would occur, it would have a fairly substantial impact on a relatively small number of participants.* *Risk significance:* ***Moderate***			
Resource efficiency, pollution, wastes, chemicals and GHG emissions	Is there a risk that project activities might lead to releasing pollutants to the environment, cause significant amounts of waste or hazardous waste or materials?	This is not expected. The approach we have chosen for restoration does not require fertilizers, pesticides, herbicides or anything like this. We are targeting a tropical high rainforest area, assisting the natural regeneration of the tree species that are well adapted to the area. Ordinarily, these would not require artificial inputs.	*Thanks, please ensure these details are incorporated into the PDD.*
	Is there a risk that the project will lead to significant consumption of energy, water	This is not expected. The approach we have chosen to apply is restoration (assisted Natural Regeneration) which does not require high water or energy uptake or anything like this. We	*Thanks, please ensure these details are incorporated into the PDD.*

	or other resources, or lead to significant increases of greenhouse gases?	are targeting a tropical rainforest area, where restoration does not normally require these inputs.	
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 1 – The nature of the project activities are not expected to have a pollution risk or overconsumption of resources. The details of how this will be mitigated for will be required at PDD stage.* *Estimated magnitude of risks (1-5) & justification: 2 - If this risk were to occur, it could have a significant impact on a small number of people.* *Risk significance: **Low***			
Access restrictions and livelihoods	Will the project include activities that could restrict peoples' access to land or natural resources where they have recognised rights (customary, and legal)? Consider projects that introduce new access restrictions (e.g. creation of a community forest), reinforce existing access restrictions (e.g. improve management effectiveness and patrolling of a community forest), or alter the way that land and natural resource access restrictions are decided (e.g. through introducing formal management such as co-management).	The project seeks to protect Local Community rights to the forestry resources, promote restoration and support regulated access based on off take levels that have been established by the communities themselves. The decision – making will be made as guided by the Communal Land Association's already existing constitution.	*Good, concisely explained. Please ensure the existing constitution through the Communal Land Association is explained and focusing on access regulation for the community at PDD stage.*
	Is there a risk that the access restrictions introduced /reinforced/altered	Not expected since the project seeks to protect local community rights and customary uses aligned to conservation through the support of regulated access.	*Thanks for this detail, please ensure this is articulated in the PDD.*

	by the project will negatively affect peoples' livelihoods?		
	Have strategies to avoid, minimise and compensate for these negative impacts been identified and planned?	There is a plan to set up a resilience fund to support recovery as part of human-wildlife-conflict. The resilience fund concept will be described in the PDD.	*Helpful, please outline the resilience fund at PDD stage.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 2 – The risk to access restrictions and impacting livelihoods is not expected as the community has established regulated access themselves. Resilience fund is proposed, however due to the nature of project activities (i.e. establishing wildlife corridors) the risk is likely if not mitigated properly.* *Estimated magnitude of risks (1-5) & justification: 2 – If the risk were to occur, it would have less of an impact on a small number of people.* *Risk significance:* ***Low***			
Cultural heritage	Is the Project Area officially designated or proposed as a cultural site, including international and national designations?	No. The Project Area is not designated for any purposes.	*Thanks for this clarification.*
	Does the project site potentially include important physical cultural resources, including burial sites and monuments, or natural features or resources of cultural significance (e.g. sacred sites and species, ceremonial areas) and is there risk that the project will negatively impact this cultural heritage?	No. The project site, does not include important physical cultural resources, including burial sites and monuments, or natural features or resources of cultural significance	*Thanks for this clarification.*
	Is there a risk that the project will negatively impact intangible cultural heritage? Consider for example cultural	No. The project area has no cultural resources and there is no known cultural practice that is supported by the locations selected for restoration.	*Thanks for this clarification.*

	practices, social and cultural norms in relation to land and natural resources.		
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 1 – negligible risk.* *Estimated magnitude of risks (1-5) & justification: 1 – negligible risk.* *Risk significance:* ***Low***			
Indigenous Peoples	Are there Indigenous Peoples living within the Project Area, using the land or natural resources within the project area, or with claims to land or territory within the Project Area?	No.	*Ok.*
	Is there a risk that the project negatively affects Indigenous Peoples through economic displacement, negatively affects their rights (including right to FPIC), their self-determination, or any other social or cultural impacts?	No.	*Ok.*
	Is there a risk that there is inadequate consultation of Indigenous Peoples, and/or that the project does not seek the FPIC of Indigenous Peoples, for example leading to lack of benefits or inappropriate activities?	No.	*Ok.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 1 – No Indigenous groups present in the area; therefore the risk is negligible.*			

Estimated magnitude of risks (1-5) & justification: 1 – As above, negligible risk. *Risk significance:* ***Low***			
Biodiversity and sustainable use of natural resources	Is there a risk that project activities will cause adverse impacts on biodiversity (both in areas of high biodiversity value, and outside of these areas) or the functioning of ecosystems? Consider issues such as use of pesticides, construction, fencing, disturbance etc.	Not expected. The aim of the project is restoration for biodiversity enhancement and ecosystem functioning there is no risk of adverse impacts from the project to Biodiversity. The project will prioritise interventions that allow for the ecosystem to recover naturally.	*Not expected is good, however there is a possibility for adverse effects so please address the risk further at PDD stage.*
	Is there a risk that the project will introduce non-native species or invasive species?	Not expected – the project will not introduce invasive species, and the communities will be trained to remove any invasive species that may find their way into the regenerating areas as part of assisted natural regeneration. The detailed training plan will be described at PDD stage.	*Thank you for providing clarification. Good to know the training plan will be provided at PDD stage.*
	Is there a risk that the project will lead to the unsustainable use of natural resources? Consider for example projects promoting value chains and natural resource-based livelihoods.	The focus is mainly on NTFPs such as honey. The technical specifications will support the description of risk.	*Ok. Please focus on addressing and mitigating this risk at the PDD stage.*
	Is there a risk that the project will lead to the exploitation of any wildlife? Consider the animal or plant groups being monitored under the PV Nature Methodology and how this will impact other groups.	The community groups certainly have biodiversity – based livelihoods as one of their objectives. This is more from access to basic needs of fuelwood & building poles. This will probably not be among the target groups to be monitored under PV Nature Methodology. However, the communities will have their parallel monitoring programme intended among other things to inform sustainable offtake levels.	*Good. Please explain further how this risk will be addressed and mitigated for within the PDD.*
E&S reviewer conclusions			

Estimated likelihood of risks (1-5) & justification: 2 – The mitigation measures proposed to be implemented would prevent any risk to biodiversity and sustainable use of natural resources and therefore the risk is not expected to occur. *Estimated magnitude of risks (1-5) & justification: 4 – If this risk were to occur to the natural resources then it could have a significant impact on the environment in the wider area.* *Risk significance:* ***Moderate***			
Land tenure conflicts	Has the land tenure and use rights in the project area been assessed and understood?	Yes, land tenure in this region of Uganda is customary and often undocumented. The project aims to support the documentation of those pieces of land on public land and support communities to agree to register them as Community Forests by complying with the provisions of Section 17 of the Forest and Tree Planting Act, 2003, outlined below: 17 Declaration of community forest (1) The Minister may— (a)after consultation with the District Land Board and the local community; and (b)upon approval by resolution of the District Council, by statutory order, declare an area within its jurisdiction to be a community forest. (2) The Minister shall, in every order declaring a community forest under this section, specify a responsible body for the community forest, and with effect from the commencement of the order or from a date specified in the order, the management, maintenance and control of the community forest shall be the responsibility of that body. (3) An order made under subsection (1) shall be published by posting outside the office or other meeting place of the local government, a notice specifying the situation, duly surveyed extent and limits of the community forest. (4) An area declared for use as a community forest under this section shall not be used for any other purposes without the approval by resolution of the District Council and written consent of the Minister.	*Thank you for this comprehensive information, this is clear. Please ensure to carry over this detail when developing the PDD.*

	Is there a risk that project activities will exacerbate any existing land tenure conflicts, or lead to land tenure or use right conflicts?	Not expected. The project is based on effective recognition and protection of community rights and customary uses aligned with conservation objectives.	*Thank you for the additional information, since this is still a risk although not expected it will still be vital to have a risk mitigation plan explained in the PDD.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 2 – The risk likely could occur if measures are not properly mitigating for potential conflicts around land tenure and outlined thoroughly in the PDD.* *Estimated magnitude of risks (1-5) & justification: 2 – If this risk were to occur it would impact a low number of people. If predicted accurately with measures to avoid at PDD stage, this risk score can be lowered.* *Risk significance:* ***Low***			
Risk of not accounting for climate change	Have trends in climate variability in the project areas been assessed and understood?	Yes- the building of climate resilience is one of the goals of the project. The type of intervention has been informed by historical climate data, including temperature, precipitation, which have been analysed alongside remote sensing data on land use and vegetation changes for a broader perspective on the relationship between the two. This is also included in the ecosystem profiling to inform the technical specifications. The details will be included in the PDD.	*Thank you for this additional detail this is very valuable and informative to the way the project is designed and will be prudent to include in the PDD.*
	Has the climate vulnerability of communities and particular social groups been assessed and understood?	Yes, as mentioned above, the building of climate resilience is one of the goals of the project. The detailed description of the link between degradation and climate variability will be part of the ecosystem profiling, which will inform the interventions, described in the form of technical specifications. An approach that has been employed to identify vulnerabilities involves the following steps: - Collecting data on economic activities, social structures, and demographics. - Evaluating exposure to extreme events, including their frequency and intensity.	*Thank you for this additional detail this is very valuable and informative to the way the project is designed and will be prudent to include in the PDD.*

		- Assessing the sensitivity of various social groups, such as low-income households, women, and the elderly, to climate impacts. - Engaged with communities to gain insights into their understanding of vulnerability. - Supported communities with ongoing monitoring of climate impacts and their resilience, enabling them to adapt their strategies over time.	
	Is there a risk that climate variability and changes might influence the effectiveness of project activities (e.g. undermine project-supported livelihood activities) or increase community exposure to climate variation and hazards? Consider floods, droughts, wildfires, landslides, cyclones, etc.	No. In the PDD, we will describe why we feel that this risk is well mitigated for. There is no history of floods in this area. There is a risk of droughts and heavy rains, however, considering that all our restoration sites are located along the river, the exposure to the risk of climate variability is very limited. Moreover, in order to have specific interventions targeting climate mitigation, we are working on submitting a separate tech spec for PV Climate under which all the climate risks and benefits will be monitored.	*Thank you for the additional information, it is unlikely there is no risk at all that climate change will not impact project activities. As the project is located along the river, there is a chance it may be impact by drought which in turn may impact the restoration efforts, however it is noted that the mitigation plan against these climate variations and natural hazards will be implemented through the PV Climate project interventions. Please ensure that comprehensive details about the activities planned under PV Climate are explained in the PDD for this PV Nature project too.*

E&S reviewer conclusions
Estimated likelihood of risks (1-5) & justification: 2 – No outlined plans to address the risk of accounting for climate change, therefore there is a risk it will impact the project in future scenarios. At PDD stage, this will need to be addressed through a disaster risk reduction plan, for example.
Estimated magnitude of risks (1-5) & justification: 3 – The risk of not accounting for climate change influencing project activities may have major impacts on its success.
Risk significance: ***Low***

Other – eg. cumulative impacts	Is there a risk that the project will contribute cumulatively to existing environmental or social risks or impacts, for example through introducing new access restrictions in a landscape with existing restrictions and limited land availability?	Not expected. Although land is not documented, households in this landscape are generally land secure, since this form of land ownership is recognised and protected by the constitution of the Republic of Uganda. The project is not reducing land rights but safeguarding the forested land in the area from encroachment, mostly by migrant farmers and land speculators. The project promotes forestry as a viable land use option for the various landowners.	*Thank you for the additional information, this is useful for understanding how cumulative impacts are reduced through the project interventions. It will still be prudent to detail this mitigation plan in the PDD.*
	Are there any other environmental and social risks worthy of note that are not covered by the topics and questions above?	None	*Ok.*
E&S reviewer conclusions *Estimated likelihood of risks (1-5) & justification: 1 – This risk is not expected, however management plans in the PDD should be aimed at addressing the potential cumulative risk.* *Estimated magnitude of risks (1-5) & justification: 3 – If this risk were to occur, it would have a medium impact on a low number of people.* *Risk significance:* ***Low***			
SECTION C: SAFEGUARD PROVISIONS			
Stakeholder engagement: requirements 2.1.1-2.1.3	Has a stakeholder analysis been conducted that has identified all stakeholders that could influence or be affected by the project, or is this still to be completed? Please describe.	Yes, a stakeholder analysis identified the primary, secondary and tertiary stakeholders and these are listed in the PIN. Most of the stakeholders belong to landscape – based platforms, the main ones being: The Northern Albertine Rift Conservation Group -NARC-G and the Kiiha Catchment Conservation Partnership.	*Thank you, please ensure the details of the stakeholder analysis are covered at length in the PDD.*
	Are the local community and indigenous peoples statutory or customary rights to land or resources within the project area already clear and documented, or	It is clear and the documentation is part of the project process and will follow the guidelines under Section 17 of the Forestry and Tree Planting Act (2023). The entire documentation will not be available at PDD stage since the project plans to use the income from the sale of biocredits to partly support the	*Great, thanks for the additional clarification, this is helpful. Please make sure some of the documentation is included in the PDD.*

	is further assessment required? Please describe.	completion of the documentation process as part of securing community rights.	
	Are local governance structures and decision-making processes described and understood (including details of the involvement of women and marginalized or vulnerable groups), or is further assessment required? Please describe.	Yes. This follows the constitution of the group with clear governance structures that guide decision making in the groups. This will be described clearly at PDD stage.	*Thanks for the added clarification, this makes sense.*
	Are past or ongoing disputes over land or resources in the project area known and documented, or is there need for further assessment? Please describe.	There is no need for assessment. Land tenure although not documented is clear and well protected in the Country's constitution and Land Act of 2003.	*Good. Please outline Uganda's constitution and Land Act 2003 and how the project will comply at PDD stage.*
Stakeholder consultation: requirements 2.5.1 and 2.5.2	Does the project have a Stakeholder Engagement Plan with clear measures to engage Vulnerable Groups, or is this plan still to be developed? Please describe.	The project has a community engagement strategy – this will be described at PDD. We have developed a project manual, which we are using to support the community in designing the project.	*Thanks for providing clarity around the Stakeholder Engagement Plan, we look forward to seeing it in the PDD, ensure it includes the community engagement strategy in detail and addresses measures to engage with Vulnerable Groups.*
	Has the Project Coordinator informed all stakeholders of the project, through providing relevant project information in an accessible format, or does this still need to be completed? Please describe.	Yes, through the visioning exercise and the investment planning process. This will be described in the PDD.	*Good. Please ensure the visioning exercise and the investment planning process are outlined thoroughly in the PDD.*

Free, Prior and Informed Consent: requirements 2.6.1-2.6.4	Has the project analysed and understood national and international requirements for Free Prior and Informed Consent (FPIC)? Please describe.	Yes. The project has analysed and understood the national and international requirements of FPIC and will integrate these into its operations. Stakeholder engagement will ensure consent is obtained from community members, including the local communities where required, and this will be well documented.	*Thank you for clarifying this, we look to see these details in the PDD.*
	Has the project identified potential FPIC rightsholders and potential representatives in local communities and among indigenous peoples, or is this still to be completed? Please describe.	Yes, through the visioning exercise and the investment planning process. ECOTRUST has adopted the Gender Action Learning System (GALS) as a community engagement strategy throughout all stages of the biodiversity credit project's design and implementation. The GALS methodology was created by Oxfam as a community-led household methodology that uses participatory processes to empower women and men at different literacy levels to jointly take action against gender inequality and plan for their futures together.	*Great, this is a clear and detailed response. The GALS methodology is really great, and we look forward to learning more about it in the PDD and beyond.*
	Has the project worked with rightsholders and representatives of local communities and indigenous peoples to understand the local decision-making process and timeline (ensuring involvement of women and vulnerable groups), or is this still to be completed? Please describe.	Yes, through the visioning exercise and the investment planning process. The Project's Theory of Change has been derived from information generated in the different groups' Vision Road Journeys.	*Great, thanks, please ensure the visioning exercise and the investment planning process are outlined thoroughly in the PDD.*
	Has the project sought consent from communities to 'consider the proposed Project', and if so, where is this in principle consent documented? Please describe.	The consent documentation is in the form of the various Vision Road Journeys of every participating community, the biodiversity conservation programme, and site management plans. Samples of these Vision Road Journeys will be attached as addendums to the PDD.	*Thanks for the clarification, ensure the consent documentation and include the vision road journey and site management plans in the PDD.*
Grievance Redress Mechanism:	Does the project already have a Grievance Redress Mechanism (GRM), or is this still to be established? Please describe.	This is partly developed – in form of every group's constitutions.	*Good to hear the GRM is being developed and we look forward to reading about it at the PDD stage.*

requirements 3.16.1	For projects with a GRM, is this accessible to project affected people? Please describe.	Each community group has a copy of their constitution. The project will develop additional guidelines that will be published and will be included in the meeting agenda as key messages.	*Thanks for this information. It will be prudent to include the GRM in the PDD.*

E&S reviewer conclusions for safeguard provisions

Are the project Safeguard Provisions adequately addressed, or to be adequately addressed during the project design phase? ***Yes, some more information is required for some sections and is stated in our comments above.***

What additional actions need to be conducted during the project design phase? ***More detail will need to be provided on GRM requirements, climate change risks, biodiversity and use of natural resources, pollution risk, community health and safety and potential gender inequality.***

Any other comments: ***Thank you for completing the screening, it is coming along. Additional information that is missing from sections that were not filled in completely will be required in the next submission of the PIN. As the risk for the overall project currently is moderate, there is potential for it to be lowered when additional detail can be provided to decrease the overall risk.***

SECTION D: SCREENING REPORT (NOT TO BE COMPLETED BY PROJECT: FOR USE OF PV E&S REVIEWER)	
Name of E&S reviewer	***Terita Deare (1st Rev); Toral Shah (2nd Rev).***
Date of E&S screening:	***02/08/2024 (1st Rev), 22/04/2025 (2nd Rev)***
Project risk rating:	*Low – Low risk is now identified in most topics/risk areas, due to the additional information and clarification provided in the screening. The project is working well to provide the GALS methodology and visioning exercises to project participants, which will manage and mitigate risks categorised as moderate or substantial. This E&S screening is approved, with additional information to be included at PDD stage.*
Principle risks and impacts	*Key risks identified (those categorised as 'Moderate' and 'Substantial') are:* - *The presence of multiple groups of vulnerable people and not all being identified in the project area;* - *The presence of potential gender disparity amongst participants due to increased household finances because of the project* - *The presence of wildlife in the area and the risk of human-wildlife conflict may have a negative impact on participants' livelihoods, therefore the risk should be carefully managed and monitored*

- *Risk of unfair labour and working conditions has not completely been identified with no plans to manage for*
- *People in the area are at the forefront of climate change, yet the risk has not been fully identified and should carefully be mitigated and monitored*

E&S topic/ risk area	**Likelihood (1-5)**	**Magnitude (1-5)**	**Significance (low, moderate, severe, high)**
Vulnerable Groups	2	3	Moderate
Gender equality	3	4	Substantial
Human Rights	2	2	Low
Community, Health, Safety & Security	3	4	Substantial
Labour and working conditions	3	2	Moderate
Resource efficiency, pollution, wastes, chemicals and GHG emissions	1	2	Low
Access restrictions and livelihoods	2	2	Low
Cultural heritage	1	1	Low
Indigenous Peoples	1	1	Low
Biodiversity and sustainable use of natural resources	2	4	Moderate
Land tenure conflicts	2	2	Low
Risk of not accounting for climate change	2	3	Moderate
Other – eg. cumulative impacts	1	3	Low

E&S assessment required

The PDD should include a thorough E&S assessment (and ESA scoping report) where each risk is evaluated by the (relevant) project participants, and management/mitigation measures are collectively decided upon and implemented. Focus should be on the four 'moderately' and two 'substantial' rated

	risks identified above. This should then be translated into a thorough E&S Management Plan in the PDD, where individual risks are identified, and management/mitigation measures are detailed and subsequently monitored throughout the project period.
Likely safeguard plans required	*As above.*

Annex 5 – Notification of Relevant Authorities

This will be provided at PDD.

Annex 6 – Criteria for Key Biodiversity Areas

A. Threatened biodiversity		
A1 Threatened species		Assessment parameters
A1a	≥0.5% of global population size and ≥5 reproductive units (RU) of a CR/EN species	(i) no. of mature individuals (ii) area of occupancy (iii) extent of suitable habitat (iv) range (v) no. of localities (vi) distinct genetic diversity
A1b	≥1.0% of global population size and ≥10 RU of a VU species	
A1c	≥0.1% of global population size and ≥5 RU of a species listed as CR/EN due only to past/current decline [= Red List A1, A2, A4 only]	
A1d	≥0.2% of global population size and ≥10 RU of a species listed as VU due only to past/current decline [= Red List A1, A2, A4 only]	
A1e	Effectively the entire population size of a CR/EN species	
A2 Threatened ecosystem types		
A2a	≥5% of global extent of a CR or EN ecosystem type	
A2b	≥10% of global extent of a VU ecosystem type	
B. Geographically restricted biodiversity		
B1. Individual geographically restricted species	≥10% of global population size and ≥10 RU of any species	(i) no. of mature individuals (ii) area of occupancy (iii) extent of suitable habitat (iv) range (v) no. of localities (vi) distinct genetic diversity
B2. Co-occurring geographically restricted species	≥1% of global population size of each of a number of restricted range species in a taxonomic group: ≥2 species or 0.02% of the total number of species in the taxonomic group, whichever is larger	
B3. Geographically restricted assemblages		
B3a	≥0.5% of global population size of each of a number of ecoregion-restricted species in a taxonomic group: ≥5 species or 10% of the species restricted to ecoregion, whichever is larger	(i) no. of mature individuals (ii) area of occupancy (iii) extent of suitable habitat (iv) range (v) no. of localities
B3b	≥5 RU of ≥5 bioregion-restricted species or ≥5 RU of 30% of the bioregion-restricted species known from the country, whichever is larger	
B3c	Site is part of the globally most important 5% of occupied habitat for ≥5 species in the taxonomic group	(i) relative density of mature individuals (ii) relative abundance of mature individuals
B4. Geographically restricted ecosystem types		
	≥20% of the global extent of an ecosystem type	
C. Ecological integrity		
	Site is one of ≤2 per ecoregion with wholly intact ecological communities	composition and abundance of species and interactions
D. Biological processes		
D1. Demographic aggregations		
D1a	≥1% of global population size of a species, over a season, and during ≥1 key stage in life cycle	no. of mature individuals
D1b	Site is among largest 10 aggregations of the species	no. of mature individuals
D2. Ecological refugia	≥10% of global population during periods of environmental stress	no. of mature individuals
D3. Recruitment sources	Produces propagules, larvae or juveniles maintaining ≥10% of global population size	no. of mature individuals
E. Irreplaceability through quantitative analysis		

Annex 7 – Criteria for Important Plant Areas

Sub-criterion	Threshold
(A) Threatened species	
A(i) Site contains one or more **globally threatened** species	Site known, thought or inferred to contain **≥1%** of the global population AND/OR **≥5%** of the national population OR the **5 "best sites"** for that species nationally, whichever is most appropriate
A(ii) Site contains one or more **regionally threatened** species	Site known, thought or inferred to contain **≥5%** of the national population, OR the **5 "best sites"** for that species nationally, whichever is most appropriate
A(iii) Site contains one or more **highly restricted endemic** species that are potentially threatened	Site known, thought or inferred to contain **≥1%** of the global population AND/OR **≥5%** of the national population, OR the **5 "best sites"** for that species nationally, whichever is most appropriate
A(iv) Site contains one or more **range restricted endemic** species that are potentially threatened	Site known, thought or inferred to contain **≥1%** of the global population AND/OR **≥5%** of the national population, OR the **5 "best sites"** for that species nationally, whichever is most appropriate
(B) Botanical richness	
B(i) Site contains a **high number of species** within **defined habitat or vegetation types**	For each habitat or vegetation type: up to 10% of the national resource can be selected within the whole national IPA network OR the **5 "best sites"** nationally, whichever is the most appropriate
B(ii) Site contains an **exceptional number of species of high conservation importance**	Site known to contain **≥3%** of the selected national list of species of conservation importance OR the **15 richest sites** nationally, whichever is most appropriate
B(iii) Site contains an **exceptional number of socially, economically or culturally valuable species**	Site known to contain **≥3%** of the selected national list of socially, economically or culturally valuable species OR the **15 richest sites** nationally, whichever is most appropriate
(C) Threatened habitat	
C(i) Site contains **globally threatened or restricted** habitat/vegetation type	Site known, thought or inferred to contain **≥5%** of the national resource (area) of the threatened habitat type OR site is among the best quality examples required to collectively prioritise **20–60%** of the national resource OR the **5 "best sites"** for that habitat nationally, whichever is the most appropriate
C(ii) Site contains **regionally threatened or restricted** habitat/vegetation type	Site known, thought or inferred to contain **≥5%** of the national resource (area) of the threatened habitat type OR site is among the best quality examples required to collectively prioritise **20–60%** of the national resource OR the **5 "best sites"** for that habitat nationally, whichever is the most appropriate
C(iii) Site contains **nationally threatened or restricted** habitat/vegetation type, AND/OR habitats that have **severely declined in extent** nationally	Site known, thought or inferred to contain **≥10%** of the national resource (area) of the threatened habitat type OR site is among the best quality examples required to collectively prioritise up to **20%** of the national resource OR the **5 "best sites"** for that habitat nationally, whichever is most appropriate