PV NATURE

PROJECT IDEA NOTE

Ecoexist: Coexisting with Elephants Okavango Delta

Version 1.3
July 2025

Developed by: Gazelle Ecosolutions Botswana Pty Ltd and Ecoexist

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Overview

Project Title:	Ecoexist: Coexisting with Elephants
Location:	Botswana, North-West District, NG11 Wildlife Management Area
Project description:	The "Coexisting with Elephants" project protects one of the largest Elephant migration corridors in the world. Located in the heart of the Okavango Delta Panhandle region in northwestern Botswana, it is home to over 16,000 elephants and 20,000 people across 800,000 hectares, 83,000 hectares of which are wildlife corridors that channel Elephant and other wildlife movement between villages and field areas to critical resources. The proposed pilot project area of the Endorotsha corridor is 12,360ha, called the Endorotsha Elephant corridor, located near the village of Gunotsoga. Ecoexist, a renowned NGO with over a decade of operational experience mitigating human-wildlife conflict in the region, in partnership with Gazelle, a pioneering environmental services firm in Botswana, are collaborating with the local community to drive conservation efforts in the Endorotsha Elephant corridor. The project promotes elephant-aware farming practices in the area (solar-powered electric fences, chili bricks, beekeeping, etc), awareness programs in schools (best practices for coexisting with elephants in corridors, in the water, near villages, etc) and an "Elephant express" bus system for schoolchildren to safely travel through corridors between villages in the Panhandle region. The project builds upon over a decade of research and intervention work by Ecoexist, starting in 2013, to understand Elephant and wildlife behaviour and is a practical example of how local communities can benefit & coexist with elephants.
Project Area:	The proposed project area covers 12,360hectares located in Botswana's NG11 Wildlife Management Area which forms the bulk of the Okavango Delta Panhandle region. The Panhandle is one of the largest biodiversity hubs, home to some of the world's largest Elephant population. The proposed project is a pilot between Gazelle, Ecoexist, and the community of Gunotsoga. After 12 months of project implementation, (approximately September 2025) a review of the project performance and stakeholder consultation will take place to consider an extension of the project area.
Project Coordinator:	Gazelle: Amod Daherkar (Co-founder, CEO) amod@thegazelle.co Ecoexist: Dr. Graham McCulloch (Co-founder, Director) gmc.ocb@gmail.com
Project Participants:	Ecoexist Team: - Employs a team of 34 staff members. - Operates an office in the town of Gunotsoga and an off-grid research base within the project area.

	- The research base is used for patrols and conservation research. Community of Gunotsoga: - The village has a population of approximately 1,200 people. - Ecoexist works closely with the Community Trust in Gunotsoga, which includes the Kgosi (Chieftain) and elected representatives. Memorandum of Understanding (MOU): - Ecoexist and the Community Trust have an MOU approved by the Gunotsoga Land Board and the Technical Advisory Committee (TAC). - The MOU outlines the implementation of elephant aware farming, which empowers farmers to be more resilient to the impacts of elephant conflict and climate change – requiring protection of fields using elephant deterrent techniques, conducting conservation agriculture and respecting and not cultivating on the elephant corridors. - Includes provisions for patrols to prevent encroachment and eliminate illegal poaching. Proposed Project Area: - Focuses on Gunotsoga and its immediate surroundings. - Unlikely to involve or expand into the vicinity of other villages and communities.
Project Interventions:	Protection: working with the local communities and government authorities, the project will help fund various interventions that will protect this vitally important wildlife corridor, by - Working with the land allocation authorities to maintain the corridor and prevent conversion to agriculture. - Monitoring the corridor use by elephants and other wildlife. - Providing funds to operate crucial transport of children to school, across the corridor. - Support farmers from the village to protect their fields and conduct conservation agriculture, to improve yields and food security.
Expected Benefits:	The sale of Plan Vivo Biodiversity Certificates will help finance Ecoexist's conservation interventions in the Okavango Delta. Without long-term financial support through Plan Vivo Biodiversity Certificates (PVBCs), implementing project activities would be challenging due to the high costs of salaries, equipment, research efforts, and transportation. The remote and dynamic nature of the Okavango Delta makes conservation efforts particularly expensive, as maintaining

	strong incentive structures to protect this unique wilderness requires substantial resources. i. Biodiversity: The project area is a vital habitat for diverse wildlife, including key large carnivores like lions and leopards, as well as herbivores such as elephants, buffalo, and hippos. These species are crucial to the ecological balance of the delta but face ongoing threats from poaching and habitat degradation. Ecoexist aims to address these threats by implementing community-based conservation strategies that promote coexistence between wildlife and local communities. ii. Environmental benefits: The project is designed with minimal environmental impact, focusing solely on wildlife monitoring, anti-poaching efforts, and reducing human-wildlife conflict. By employing biodiversity monitoring tools such as camera traps, spoor counts, and transect surveys, Ecoexist collects valuable data that guide conservation strategies without disrupting local ecosystems. Currently, these tools are used intermittently and sparsely throughout the 13 Elephant migration corridors in the Delta. The project will enable the full utilization of these methods in the Endorotsha corridor to take inventory of, track, and protect wildlife. iii. Socioeconomic benefits: The project does not increase emissions or harm local communities; instead, it enhances local livelihoods by fostering sustainable conservation practices and engaging communities in wildlife protection efforts. The project will help expand "Elephant Aware" farming practices to build resilience in local farming community (e.g. through solar fencing, workshops on deterrents such as bees, chilli bricks, etc.) and develop positive socioeconomic relationships with Elephants in the area, through supporting SME start-ups linked to a wildlife economy. Through the financial backing of PVBCs, Ecoexist can continue to support essential conservation actions in the Okavango Delta, ensuring the protection of this globally significant ecosystem and its remarkable biodiversity.
Methodology Design:	The project conforms to the Plan Vivo Biodiversity Methodology v1. It is classified as a terrestrial conservation project and meets Key Biodiversity Area Criteria A (Threatened Species, e.g. Elephants).
PIN Version:	Pin Version 1.3
Date Approved:	17th July 2025

1 General Information

1.1 Project Rationale

The project area is part of the Okavango River systems which terminates in the Okavango Delta located in Northern Botswana. The Okavango Delta is an alluvial, endorheic fan system comprised of an ever-changing mosaic of permanently flooded, seasonally flooded and permanently dry habitats. Internationally, it has been recognised as a near pristine, key biodiversity area (IUCN) and has been declared a World Heritage Site, an Important Bird Area (IBA) and a Ramsar Site. Not only does the area sustain viable populations of endangered African megafauna, e.g. Lions, Cheetahs, Wild Dogs and Elephants, it also boasts large populations of less known species, including 24 globally threatened bird species. The Okavango Delta is an outstanding example of an (near)-intact ecosystem formed by complex hydrological, geomorphological and biological interactions.

Northern Botswana is home to about half of the entire African Elephant population left in all of Africa, currently comprised of 130,000 individuals in the region. The northern part of the Okavango Delta, referred to as the Okavango Delta Panhandle has a total population of approximately 20,000 elephants roaming across 20,000 km2. Here, these elephants coexist with approximately 24,000 people in the Western panhandle and 15,000 in the Eastern Panhandle. This coexistence results in clashes between wild animals and humans over space, water and food. The Okavango Panhandle is Botswana's hotspot for human wildlife conflict due to the relative high ratios of elephants and humans present in the limited land available. Mitigation of this conflict holds the key to the success of future nature conservation efforts, securing a place for both wildlife (and elephants in particular) and humans in these ecosystems.

Ecoexist, a registered non-profit organisation has been actively working with local communities to secure a future for both, elephants and humans. Conflict manifests itself mainly due to the destruction of crops, damage caused to property, e.g. water supply systems, fences etc or due to harm and sometimes death of humans caused by elephants. One mitigation measure taken by Ecoexist is the establishment of elephant corridors, ensuring safe passage from the wooded hinterlands, through the agriculturally dominated landscape to the source of water, the Okavango River. These corridors, however, are threatened by encroaching human activity, such as the establishment of fields, temporary or permanent establishment of structures and others.

The Ecoexist Project is dedicated to mitigating the human-wildlife conflict and reduce encroachment into the corridors through community involvement beginning at the school level and ending at the household level by providing guidance and support to implement better agricultural practices. So far, Ecoexist holds 15 annual outreach events at schools and reached 100 households who registered for "Elephant Aware" farming. Suitable land for farming has been identified (65 000 ha) where conflict free farming can secure the economic survival of the people. The 65,000 hectares of farming land is under the authority of land board and outside of the project boundaries, it is not for sale and belongs to the community, allocated to individuals form the community, through an official allocation process administered by the Tawana Land Board authority.. However, the project will support Elephant Aware farming programs to support farmers across the Panhandle and especially in areas near the project site where conflict with elephants may occur. No community members will be moved from the corridors, but the land authority has agreed to allocate them new land outside the corridors if they so desire.

Human-elephant conflict arises when elephants, attracted to nutrient-rich crops, raid farmlands, leading to significant economic losses for farmers. In retaliation, farmers may attempt to deter or harm elephants, which can escalate into violent encounters. Elephant Aware Framing seeks to mitigate these conflicts through sustainable, non-violent strategies that both protect livelihoods and conserve elephant populations: deploying passive elephant deterrent techniques around fields and property, practicing conservation or regenerative agriculture and avoiding cultivating on the corridors. Ecoexist enters a contract with specific farmers so that they comply with the guidelines they have set to mitigate said conflict, which in turn benefits the farmers both by protecting their livelihoods and lives but also support from Ecoexist for Elephant deterrents and crop management. They also link elephant aware farmers to new markets where they can benefit from premium prices for their surplus produce as a result of conducting pro-nature practices. It is very important to note that although this is something that Ecoexist is already doing, it is very expensive and complicated to get locals to implement new methods for farming, so the additionality in this case would financial so that there is a monetary incentive, offsetting the opportunity cost of leaving the corridors open, to keep the corridors intact and protect both the farmers and the elephants.

1.1.1 Conservation Projects Justification*

Important Plant Area (IPA) Criteria

1. Criterion A(ii): Regionally Threatened Species

For Botswana, botanical records are few. Overall, the IUCN lists only 4 endangered species for the entire country[1]. Classified as endemic or near endemic are only a few species (13), most of them not occurring in the Okavango Delta. On a regional level however, despite the non-existence of an endangered species list for plants, species reported as rapidly declining are mainly associated riverine, large tree species. The decline has been attributed to changing flood regimes and an increase in tourism related activities, resulting in an increased demand for dugout canoes made from the specimen as well as an increased pressure through the high population of elephants in the area. Jackalberry (Diospyros mespiliformis), Kiaat (Pterocarpus angolensis), Zambezi Teak (Baukiea plurijuga), Sycamore Fig (Ficus sycamorus) and various tall Acacia species (Vachelia spp) and many other woodland trees fall into this category.

2. Criterion B(i): High Number of Species within Defined Habitat or Vegetation Types

The Okavango Delta has an exceptionally high plant biodiversity[2]. The number of species found within the system is 1300 vascular plant species across all habitats. This number sets the Okavango Delta as the second most biodiverse swamp ecosystem worldwide, surpassed only by the Brazilian Pantanal. Plant diversity is exceptionally high at ecotones where wet and dry habitats meet[3]. Island and island margins have been reported to show very high species richness with 20 – 80 species recorded at plot sizes of only 70 m^2. Graminoid dominated grassland ecosystems not only support a high number of

[1] International Union for Conservation of Nature (IUCN): https://www.iucn.org : IUCN is a global authority on the status of the natural world, including threatened species and ecosystems. Information on species such as the African elephant and the Slaty Egret can be found in the IUCN Red List.

[2] Okavango Research Institute (ORI): https://www.orc.ub.bw :ORI is part of the University of Botswana and focuses on research related to the ecology and conservation of the Okavango Delta, including flora, fauna, and ecosystem dynamics

[3] Harry Oppenheimer Okavango Research Centre HOORC: https://www.orc.ub.bw :HOORC conducts scientific research on the Okavango Delta, with a focus on floodplain grasslands, water management, and biodiversity conservation.

species, but they are also of economic importance for the local inhabitants of the areas where these systems are used for Molapo farming (farming in floodplains) and as grazing grounds for livestock. Woody vegetation plays an important role in supply of building materials for structural components of houses as well as fences. In Botswana culture, the collection of plant-based resources plays an important role, especially in the micro-economy of woman. For instance, various grasses as well as leaves of palm trees (mainly Hyphaene petersiana) form the basis for basket production, while the sap of various woody species, e.g. jackalberry (Diospyros mespiliformis) is used as a colouring agent. Species, such as water lilies (Nymphaea spp.), raisin bush berries (Grewia spp) and many others are used for food production.

3. Criterion C(i): Threatened Habitats

The Okavango Delta supports several globally threatened habitats[4], including permanent swamps, seasonal floodplains, riverine woodlands and deciduous dry forests. These habitats are essential for the survival of many plant and animal species, but they are increasingly threatened by human activities such as agriculture and unsustainable land use, the increasing occurrence of wildfires, increasing grazing pressure through livestock, increasing browsing pressure through elephants[5], human induced, direct or indirect alterations of hydrological flood regimes and many others. In adjacent to the project area, the most affected habitats are papyrus and reed swamp ecosystems, here the main threat stems from increasing burn frequencies, altering productivity, nutrient availability, release and retention, alterations of flow dynamics and many others. Floodplain ecosystems are mainly threatened by increasing conversion into farming areas (Molapo farming) while riverine woodlands are threatened by conversion to farmland, residential properties, deforestation further, these areas are subject to immense damage caused by elephants.

Additional KBA and IPA Criteria

1. Criterion C: Ecological Integrity (KBA)

The Okavango Delta is one of the last remaining large-scale intact wetlands in the world, making it a site of exceptional ecological integrity. The Delta's seasonal flood dynamics create a mosaic of habitats that support a wide range of species[6], maintaining the ecological processes that sustain this unique ecosystem. UNESCO's World Heritage designation of the Okavango Delta highlights its importance as a globally significant natural site[7]. The project's efforts to maintain the Delta's ecological integrity by preventing habitat fragmentation and promoting sustainable land use practices align with Criterion C.

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[4] Botswana Department of Environmental Affairs (DEA): http://www.mewt.gov.bw/DEA :The DEA is responsible for environmental management and conservation in Botswana, including projects related to wetland conservation and threatened species.

[5] Elephants Without Borders (EWB): https://www.elephantswithoutborders.org: EWB conducts research and conservation activities focused on elephant populations in southern Africa, including aerial surveys and reports on migration corridors.

[6] BirdLife International: https://www.birdlife.org : BirdLife International is a global authority on bird conservation and provides detailed information on bird species such as the Slaty Egret and their habitats.

[7] . UNESCO World Heritage Centre: https://whc.unesco.org/en/list/1432 :The Okavango Delta is designated as a UNESCO World Heritage Site due to its ecological and biodiversity significance. Detailed information about the site's designation and importance can be found here.

2. Criterion C(iii): Nationally Threatened Habitats (IPA)

The project also qualifies under IPA Criterion C(iii), as it focuses on protecting nationally threatened habitats. The Okavango Delta's wetlands, which are vital for biodiversity, have been designated as a Ramsar site[8], underscoring their national and international significance. However, these wetlands are under threat from human activities such as water diversion and agricultural expansion.

Conclusion

The proposed conservation project in the Okavango Delta Panhandle qualifies under multiple Key Biodiversity Area (KBA) and Important Plant Area (IPA) criteria, making it an ideal candidate for registration under PV Nature. By focusing on the protection of endangered species like the African elephant, regionally threatened plant species, and nationally and globally significant habitats, the project addresses critical conservation needs in one of the world's most important ecosystems. Through integrated efforts to reduce human-wildlife conflict, promote sustainable land use, and preserve the ecological integrity of the Delta, the project supports both biodiversity conservation and community development in this unique and globally significant landscape.

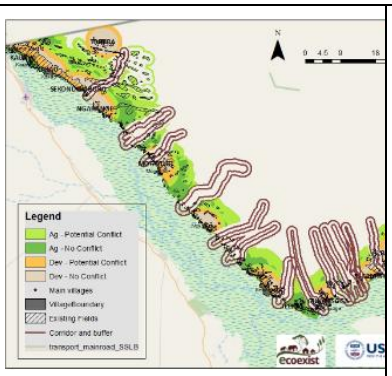
2.1 Project Interventions

Table 1 – Project Interventions

Intervention Type	Project Intervention	Expected Benefits
Conservation	Increased anti-poaching wildlife patrols The project will deploy patrols in key areas to monitor biodiversity deter poaching activities and safeguard elephant and other wildlife populations. Training and equipping local community members to monitor wildlife will not only help in data collection but also foster a sense of ownership and responsibility towards conservation. Establishing and protecting elephant corridors will ensure safe passage for elephants, reducing human-wildlife conflict and promoting genetic diversity.	Decreased illegal poaching.

[8] Ramsar Convention on Wetlands: https://www.ramsar.org :The Okavango Delta is a Ramsar Wetland of International Importance, and the Ramsar Convention provides resources on the protection of wetlands globally.

Improved Management	Increased support for Elephant Aware farming program	Reduction of human wildlife conflict inside and in the vicinity of the project area. Protecting wildlife corridors will facilitate safe movement of elephants and other species, connecting fragmented habitats and improving ecosystem resilience. Farmers are harvesting higher yields on plots that are easier to manage and protect from elephants, reducing the need to expand fields, or adopt 'slash and burn' practices in search of fresh soils. Better soil reduces the need to clear more habitat for crops and enables farmers to stay within cluster fields that can be protected from elephants. Higher yields mean farmers are less susceptible to the impacts of partial crop loss by elephants, building a more resilient farming strategy. The Elephant Aware farming program strengthens community cohesion by encouraging cooperative management of resources, leading to better coordinated planting and harvesting strategies. It also enhances farmer confidence in managing risks associated with elephants, increasing their willingness to invest in long-term soil fertility and sustainable farming. Furthermore, it builds a locally-relevant model that can be scaled or replicated in other elephant-impacted regions.
Conservation	Protection of the largest elephant migration corridor in the Okavango Delta Panhandle (one of 13 main corridors is included in the project)	This will reduce human wildlife conflict and support a deeper understanding of the flora & fauna in the corridors while protecting biodiversity there. Protecting this corridor will ensure that elephants maintain access to seasonal water sources and foraging areas critical

	 *Figure 1: LUCIS map of easter panhandle corridors* Competition between elephants and people is often intensified when land uses overlap, and land allocation is haphazard and poorly planned. Conflicting national policies can impede elephant movements while unwittingly putting farmers and their fields in the middle of elephant pathways.	for their survival, especially during droughts. The corridor's preservation also safeguards ecosystem services like pollination and seed dispersal that elephants contribute to, benefiting broader biodiversity. Additionally, maintaining connectivity reduces the risk of inbreeding in elephant populations, promoting long-term genetic health.
Improved Management	Elephant Economy – Improving and Diversifying Livelihoods Because of Elephants Facilitating private sector support for community-based tourism and other opportunities for people to gain economic benefits from living near elephants – establishing an Elephant Aware Economy. It is important to find ways to improve and diversify livelihoods, this involves increasing benefits from living with live elephants, encouraging people to be safe around elephants, and facilitating elephant themed enterprise development. This will contribute to improved	Human-Elephant conflicts can bring a lot of costs to people from chronic stress of living with elephants, through damage to food resources, property and loss of lives. This drives a reduction in tolerance and negative perceptions towards elephants, which can exacerbate the intensity of the conflict. Often, these costs far outweigh the benefits that people derive from living with elephants. One of our goals is to turn this equation around. We'd like to see people benefiting more from living so close to so many elephants. By supporting start-ups with an elephant-themed product or service, we are creating an "elephant economy" in the Okavango. This entails facilitating communication, reaching out to private sector investors, developing partnerships and creating market linkages for products and services,

	perceptions and stewardship among communities and reduce vulnerability to engage in wildlife crime.	including community-based, elephant themed tourism experiences. A Panhandle Cultural Fair has been held on numerous occasions to showcase local cultural arts and products, primarily with elephant themes, identifying talents and products with potential for viable enterprise, while helping market the Panhandle as an elephant-based destination where people live with elephants. According to government statistics, approximately 80% of the livelihood in the Okavango panhandle relies on subsistence agriculture. We are working hard with subsistence arable farmers to bridge the divide between the wildlife and agriculture sectors, by developing a value chain for their surplus produce, grown using “elephant aware” practices. We have developed conservation agreements with farmers who practice “Elephant Aware Farming” – farming outside corridors, passively protecting their fields from elephants and practicing sustainable agricultural techniques – which is marketed as such and allows them to access markets that gain premium prices for their “Elephant Aware” produce. By monetizing peaceful coexistence, the elephant economy reduces reliance on unsustainable practices such as bushmeat poaching or encroachment into protected areas. This economic diversification reduces household vulnerability to climate and market shocks, and encourages youth engagement through creative industries like crafts, design, and storytelling. It also amplifies the cultural value of elephants, turning them into icons of opportunity rather than agents of loss.

Conservation	Managing Conflict We focus on improving short-term strategies for conflict management by working with and for the government and communities to develop a Community-Based Conflict Mitigation approach that incorporates shared responsibility, human-human conflict resolution, and a set of holistic and innovative elephant deterrent techniques.	Support farmers and communities to identify, demonstrate and learn best practices to deter elephants from fields and crops and how to be safer around elephants. Though farmers throughout the Panhandle face the day-to-day struggle of protecting their fields from elephants, they often work in isolation of each other. A "Community-Based Conflict Mitigation approach entails a shared responsibility, collective action and exchange of lessons learnt on what does work. It also strives to improve communication and relationships between the government and local communities, part of a strategy to address human-human conflict. It has resulted in a set of effective, affordable, and adaptive tools and techniques to prevent negative interactions with elephants. Some effective field deterrents range from low-cost tradition methods of drumming and placing tin cans and plastic on fences, to farming and adopting chili pepper fencing and briquettes, and bee-hive fences, to more techniques that require more costly equipment like solar lights, solar electric fences. A multi-layered approach is preferable, targeting most or all an elephant's senses: sight, hearing, smell, touch, and taste. It also includes adapting practices to elephant feeding and movement behavior, like planting unpalatable crops, earlier in the planting season when there are less elephants around. Importantly, these mitigation measures are implemented using a landscape approach, avoiding blocking movement corridors and other essential resource use areas, focusing on area or zone-based interventions, like protecting clusters of fields, with more than 100

		farmers inside a single fence, which is located away from elephant corridors. Our work to improve safety for people in their everyday lives has resulted in building partnerships to establish an "Elephant Express" service to assist children and clinic-goers to travel safely across elephant corridors. We also help to build and spread knowledge of how to behave if you see an elephant when you are on foot, using local experts and a collaborative curriculum for education talks in villages and schools. This approach enhances community resilience by equipping people with knowledge, tools, and networks to respond proactively to elephant presence. It empowers women and marginalized groups by including them in training and decision-making, helping shift power dynamics in favour of more inclusive coexistence. The cumulative effect of these deterrents, awareness campaigns, and field demonstrations contributes to a cultural shift in how elephants are perceived—from pests to partners in shared landscapes.
Protection/Conservation	Improved understanding of socio-ecological landscape through research & Knowledge sharing. The project will promote continual learning about elephants and people to fill knowledge gaps and inform policy decisions and change. So far, we have a research program with graduate students focusing on understanding the social and ecological landscape. This involves conducting satellite collaring telemetry studies and population surveys of	The knowledge generated contributes to national and regional policy processes and can inform smarter land-use planning that avoids future conflicts. Supporting local students and researchers builds a pipeline of conservation professionals with contextual expertise, ensuring long-term sustainability. Importantly, participatory research also increases local trust in science, as findings are shared transparently and used to co-develop solutions with communities. Human wildlife conflict is complex and requires an understanding of both the people and animals, and the multiple aspects and factors that influence it. It

	elephants to record elephant numbers and movements in northern Botswana and the KAZA region and informing national and regional elephant management strategies.	requires understanding factors and people involved from multiple sectors and disciplines, and is influenced by social, biological, political, economic, and cultural elements! Ecoexist has adopted a multi-disciplinary research program, collaborating with numerous academic institutions across different sectors to unravel some of the complexities to human elephant conflict in the Okavango Delta, with a focus on providing more evidence to inform solution design and implementation. Research topics include a broad range of topics, with state of the art multi-disciplinary approaches, incorporating ecological, biological, social, economic and political multi-disciplinary approaches and analysis: how best to monitor human-elephant conflict incidents data and understand what socio-ecological factors contribute as drivers of conflict; monitoring elephant movements and understanding the socio-ecological factors influencing them; understanding the socio-economic impact and opportunities of living with elephants; investigating the overlap in resource use between people and elephants and how to predict land use conflicts in multiple-use, social-ecological landscapes; testing various elephant deterrents and the ecological, social and political factors influencing their adoption and success; monitoring the role of different agricultural techniques and cropping strategies in reducing conflict; gaining an understanding of how people are adapting to a life a with elephants; investigating the role of institutions in managing conflict; conducting aerial surveys to monitor elephant population numbers and trends, and; understanding

		the feeding ecology of elephants and how it influences crop raiding behavior.

2.2 Project Boundaries

Table 2- Project Boundaries

Location:	Botswana, Ngamiland district
Geographic Coordinates:	NW: 18°40'25.23"S, 22°31'14.62"E NE: 18°38'50.64"S, 22°36'37.07"E SW: 18°48'18.01"S, 22°34'26.30"E SE: 18°46'31.98"S, 22°39'28.78"E
Project Region(s):	2,000,000 ha
Project Area(s):	12,360 ha
Protected Areas:	NG11 Wildlife Management Area encompasses the project, along with NG 10, 11, 12, 13, 23A, 23, and 22 being in the surrounding areas.

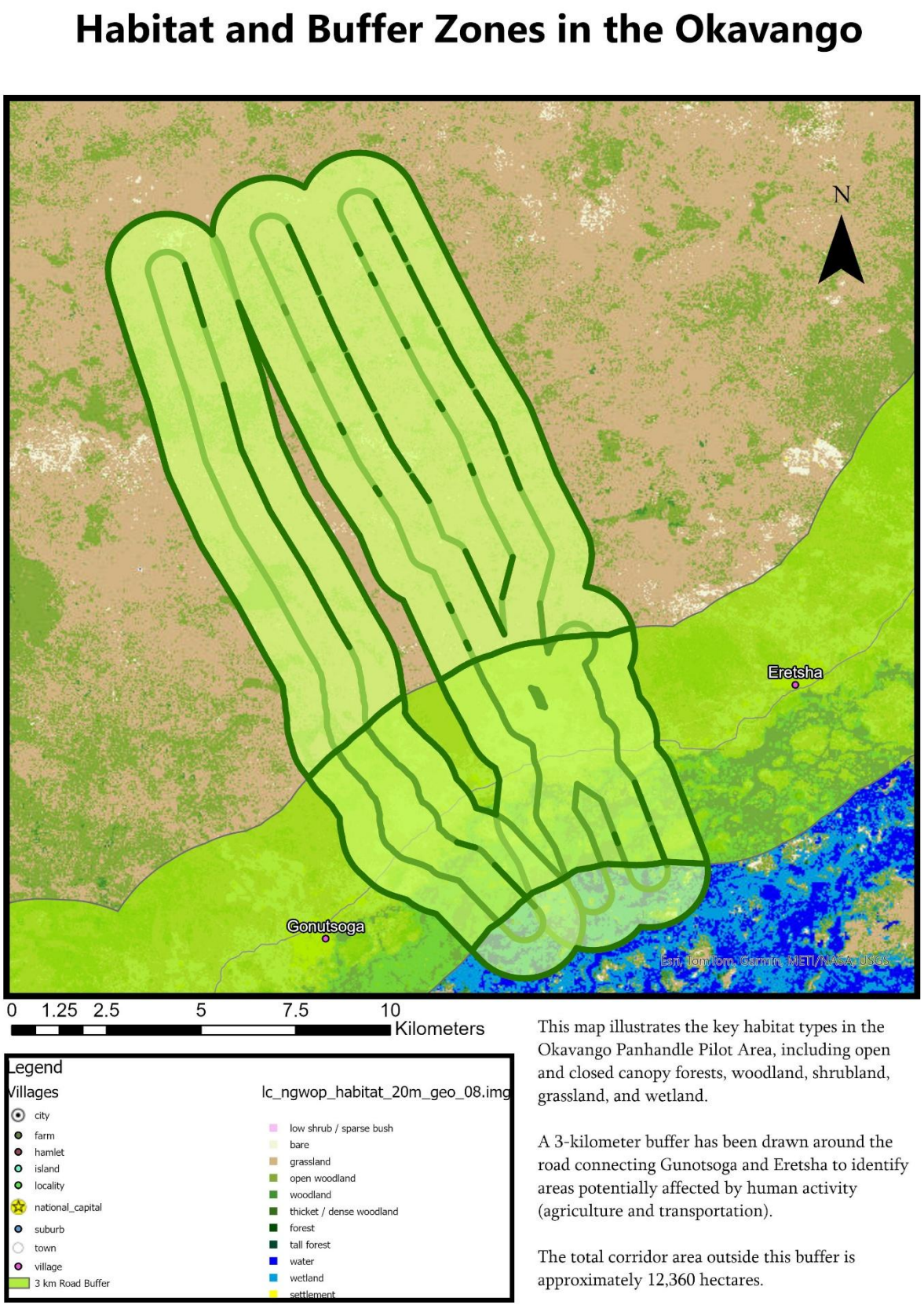


Figure 2: Habitat Map of Endorotsha Corridor, Eastern Okavango Panhandle

2.3 Land and Management Rights

The project area is classified as tribal land, one of three land-tenure designations in Botswana. Roughly 70% of Botswana is tribal land, 25% state-owned, and 5% being privately owned freehold leases. Most land in the country is considered tribal and citizens can obtain land grants or leases from the Land Board and the land is heritable but not saleable (Adams et. Al. 2003). In this case, the Tribal Land Act of 1968 (amended 1993) governs tribal land and rights to it held by Botswana citizens. It also vests administrative power from tribal chiefs to the twelve district land boards across Botswana which have the authority to allocate land, cancel customary rights, and rezone agricultural land for commercial, residential, and industrial uses. The act also allows for certificates evidencing rights to water wells, boreholes, and residential plots via common-law leases of land which can be used to obtain mortgages (COHRE 2004[9]; Adams et al. 2003[10]; Taylor 2007[11]).

Therefore, the Community Trust of Gunotsoga's customary rights to the region is under the Tribal Land Act of 1968, The Tribal Grazing Lands Policy of 1975, and the State Land Act of 1966. The Trust has a signed MOU in place with Ecoexist with the approval of the Tawana Land Board (relevant land board authority in the project's region of northern Ngamiland District) and the Technical Advisory Committee (TAC) which is a government sanctioned agency providing guidance to local communities. Additionally, Ecoexist also has a research permit (issued annually under the authority of the Government of Botswana's Ministry of Environment and Tourism) to conduct research and conservation activities sanctioned in Ecoexist's founding charter. Therefore, Ecoexist (and Gazelle) has the rights to operationalize project activities and has the approval and participation of the local Gunotsoga Community Trust, which holds customary and legal rights to the proposed project area.

Communications with the Gunotsoga community are primarily conducted by the Ecoexist team and evidence of a meeting on 15/05/2024 is given in annex 5. Throughout the project development process, the Trust committee members will be regularly kept up to date. Ecoexist maintains regular communication with all community members through their community officers. Each community officer is assigned to one of 14 villages in the Okavango Panhandle region and maintain communication with the relevant local Kgosis (tribal chiefs) and government ministries.

[9] https://www.cohre.org/

[10] Adams, Martin, Faustin Kalabamu, and Richard White. "Land tenure policy and practice in Botswana-Governance lessons for southern Africa." *Journal fur Entwicklungspolitik* 19.1 (2003): 55-74.

[11] Taylor, Michael. " Rangeland tenure and pastoral development in Botswana: Is there a future for community based management"; Common southern Africa occasional paper series 16 (2007).

Figure 4: Meeting between the Ecoexist team and the Gunotsoga leading entities, including the Kgosi and members of the Land Board

Additionally, the proposed project plans to provide further local employment by promoting citizen science. By involving the local community in the process of collecting field data (e.g., woody above 2m, woody below 2m, etc.) the project will be directly integrated into the community while creating employment. This builds on existing programs Ecoexist have implemented in the region which have generated employment and economic growth (i.e. elephant aware farming interventions, farmer cooperatives, creating markets for local produce, supporting local craft businesses, etc).

The project observes all relevant regional land national laws governing land-use, land-tenure, tribal land rights, and wildlife management.

2 Stakeholder Engagement

2.4 Stakeholder Identification

Stakeholder Type	Name/Title	Details
		Long-Term Impacts: Over time, Ecoexist's participatory conservation model contributes to the institutionalization of locally led, ecologically sound land-use planning. It enables communities to become stewards of biodiversity through structured engagement and trust-based partnerships. The long-term presence of Ecoexist ensures that conservation interventions are not externally imposed but locally adapted, continuously evaluated, and culturally relevant. The model itself becomes scalable, offering a framework for regional replication across other parts of the KAZA Transfrontier Conservation Area. As community agency increases, so does their ability to advocate for their rights and co-manage

		conservation landscapes beyond the life of donor funding.
Primary	Small-scale farmers	The project targets small-scale farmers who face significant challenges due to elephants in their agricultural areas. These farmers are the primary beneficiaries of Ecoexist's interventions, which include promoting sustainable farming practices that reduce crop loss while ensuring the preservation of crucial elephant habitats. **Immediate Impacts:** Through Ecoexist's support, farmers receive timely access to spatial risk maps, low-cost elephant deterrent systems, and community-based early warning mechanisms, allowing them to anticipate and respond to elephant movements more effectively. These tools lead to an immediate reduction in crop loss and decrease the need for unsafe night guarding. As a result, household food security stabilizes, stress levels decline, and farmers regain confidence in cultivating land previously deemed too risky. Community field days and farmer exchange visits further accelerate the uptake of effective practices across neighboring areas. **Long-Term Impacts:** In the long term, farmers adopt a conservation-conscious mindset, integrating wildlife considerations into their agricultural planning. As alternative livelihood streams—such as honey production or wild product value chains—take root, economic vulnerability to elephant-related losses declines. Farmer networks formed around shared experience and training begin to formalize, serving as platforms for innovation, peer support, and collective advocacy. This leads to a cultural and behavioral shift in how farmers relate to elephants—from viewing them as a persistent threat to understanding them as part of a shared and manageable landscape. As farmers become key actors in coexistence strategies, they play a greater role in shaping district-level development plans that align conservation and agriculture.
Primary	Women in local communities	A critical element of Ecoexist's approach is the empowerment of women within these communities. Women are encouraged to take on leadership roles in managing and implementing the project. Training programs are provided to

		build their capacity in conservation practices, community organization, and conflict resolution, ensuring they play a central role in the project's success. **Immediate Impacts:** Women gain immediate benefits through targeted leadership training, participation in income-generating cooperatives, and inclusion in planning meetings where their voices were historically absent. Access to small grants or community development funds supports women-led initiatives such as conservation gardens, chili fencing units, or craft-based enterprises. These opportunities translate into increased household income, higher status in the community, and a stronger sense of agency among women participants. The project also fosters safe spaces for dialogue on gender and conservation, strengthening intra-community support systems. **Long-Term Impacts:** Over time, women become central actors in the governance of land and wildlife, both formally—through village committees and conservation bodies—and informally—by transmitting conservation ethics and practices to children and peers. Female leadership becomes normalized in project areas, influencing future generations and ensuring that conservation interventions reflect the full range of community knowledge and priorities. Gender equity improves not just as a standalone goal, but as a functional component of more resilient and cooperative community systems. This contributes to a long-lasting cultural transformation where women's empowerment is interwoven with ecological stewardship and community resilience.
Secondary	Donors & Government	There is close collaboration with many organizations, universities, communities, government departments, and private sector partners in Botswana and around the world. By working with many partners, and by taking a holistic approach to reducing human-elephant conflicts, Ecoexist is facilitating communication and coordination across sectors and creating an enabling environment for effective policies and programs.

		N**ational and International Partners and Collaborators** • Ministry of Environment, Wildlife and Tourism • Ministry of Agriculture • Department of Wildlife and National Parks • Department of Agricultural Research • Department of Crop Production • Tawana land Board and associated sub–Land Boards • Botswana Human Wildlife Coexistence Working Group • KAZA Secretariat • KAZA Elephant Sub Working Group • Texas A&M University • The University of Oxford • Center for Conflict and Development • Botswana University of Agriculture and Natural Resources (BUAN) • University of Cape Town • Okavango Community Trust • Okavango Research Institute • University of Botswana • Pabalelo Trust • CLAWS **Donors** • The Howard G. Buffett Foundation • EU • United States Agency for International Development (USAID) Resilient Waters Program • USAID Southern Africa Regional Environment Program (SArEP) • Wild Philanthropy • Paul G. Allen Family Foundation • WWF Namibia • KAZA KFW • Foundation Good Planet • WWF Namibia - USAID Combatting Wildlife Crime Project • WWF Namibia Dutch Lottery DreamFund • Elephant Crisis Fund • Save the Elephants, Elephants & Bees Programme • Empowers Africa • Amarula Trust • Omogolo Trust • Natural Selection Conservation Trust • Wilderness Safaris • Great Plains

		• BeaBond • Applied Biodiversity Science NSF-IGERT Program at Texas A&M University • National Environment Research Council

2.2 Project Coordination and Management

Gazelle and Ecoexist are the project coordinator organizations that take overall responsibility for the project. Gazelle's primary responsibility includes methodological design, application, data modelling, and documentation. Ecoexist's primary responsibilities include enforcing implementation of project interventions with the elephant corridor, data collection, and monitoring. Responsible parties for each coordination and management function of the project are detailed in Table 4.

Gazelle is an environmental services firm with a combined 75 years of operational experience between the team. Dr. Thoralf Meyer, Gazelle's Chief Scientist, has over 25 years of ecology, remote-sensing, and research experience in Botswana. He is responsible for pioneering the identification and study of allometric relationships of woody vegetation in the Kalahari, the publication of the very first spectral endmember data sets for the region and founded a successful GIS firm and environmental consultancy in Botswana. In this capacity he wrote 75 plus documents for the corporate world and government institutions. He has also conducted numerous workshops to build local capacities in the fields of GIS, GPS, Remote Sensing and rangeland monitoring. The Gazelle team brings experience in environmental engineering, computational engineering, finance, and ecology to the KBC. Gazelle is also one of the first nature-based carbon project developers in Botswana and has pioneered methodology development, implementation, and policy-level advocacy for carbon and biodiversity markets in southern Africa.

Ecoexist was founded in 2013 by a multidisciplinary team including Dr. Anna Songhurst, Dr. Graham McCulloch, and Dr. Amanda Stronza. Ecoexist takes a holistic approach to finding practical, affordable, effective, and lasting ways for people and elephant to coexist. In a place of heightened competition for resources, Ecoexist strives to find ways for people and elephants to share space by ensuring they are available to both. The organization addresses the need for people to be safe, food secure and gain benefits from living with elephants, while ensuring critical habitat security and safe passage for elephant populations. Ecoexist works on the ground and at the policy level to create an enabling environment for coexistence. Developing and facilitating multi-stakeholder partnerships is fundamental to the team's approach and contributes, alongside awareness, education, and policy-level engagement as key contributors to the long-term success of efforts taken. Ecoexist's approach is evidence-based with all activities being monitored through ongoing research improving knowledge of the issues and providing evidence to guide interventions and inform policy.

A copy of registration certificates for both project coordinators is provided in Annex 2.

No external organizations (and no organizations outside Botswana) have been contracted to function as the project coordinator or to conduct monitoring work. The PIN has been jointly prepared by both Gazelle and Ecoexist (both co-coordinators) and although in this case not required, a signed statement from both parties acknowledging and consenting to the PIN submission is given in Annex 2.

Table 3- Responsibility for Project Coordination and Management Functions

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

2.3 Project Participants

EcoExist and Gazelle are co-coordinators while the community of Gunotsoga The project includes Ecoexist Project whose mission is to undertake a holistic approach towards research and conservation in the Okavango Delta. The expected benefits of the project will go directly back to the community (farmers in the vicinity of the project area and the villagers in Gunotsoga) involved with the work Ecoexist is doing. The project area falls under the village (and tribal leadership) of Gunotsoga which has a population of approx 950 people, (114 household (HH)s, with 5.6 plc per HH). Approx 70% of households in the community are subsistence farmers with rain-fed crop-growing and cattle and small livestock (goats). This includes improved livelihood for the individuals from the local community who are participating.

Gazelle is headquartered in Maun, Botswana and has operational experience, capacity, and infrastructure across most of the country. Ecoexist operates a research camp in the Okavango Delta Panhandle region adjacent to the project area and is primarily responsible for implementation with decades of experience in the region. Ecoexist also operates an office in Maun, Botswana alongside in-situ research operations in the Delta. Project participants include the community in the village of Gunotsoga which has a population of close to 1200 people (300 households) and is within 3 kilometres of the western project boundary (shown in section 1.3). The village of Gunotsoga is considered a Type I Participant. None of the potential project participants are non-residents within the project area. The land is zoned legally as NG11, a designated pastoral/arable/residential area and used for communal farming purposes under the Tribal Land Act of 1968 which governs tribal land and rights to it held by Botswana citizens (this act was amended in 1993). It also vests administrative power from tribal chiefs to the twelve district land boards across Botswana which have the authority to allocate land, cancel customary rights, and rezone agricultural land for commercial, residential, and industrial uses. The act also allows for certificates evidencing rights to water wells, boreholes, and residential plots via common-law leases of land which can be used to obtain mortgages (COHRE 2004[12]; Adams et al. 2003[13]; 2008a; Taylor 2007[14]). In the case of this proposed project, the project area falls under the jurisdiction of the Seronga Sub-land Board authority with customary rights being held by the people of Gunotsoga. None of the project areas were acquired, purchased, or leased in any capacity for the purpose of inclusion in the proposed project. The project area, now designated as an Elephant migration corridor per the Land-use Conflict Identification Strategy (LUCIS) model adopted in 2018 by the Tawana Land Board. The corridor helps protect the movement of the area's elephants (Eastern Panhandle elephant count is close to 20,000) while mitigating human-wildlife conflict through elephant-awareness.

2.4 Participatory Design

The project's primary implementation coordinator is Ecoexist which has been operating in the project area since 2013. Founded by Dr. Anna Songhurst, Dr. Graham McCulloch, and Dr. Amanda Stronza, Ecoexist was founded from a long-term research project on the social and environmental drivers of

[12] https://www.cohre.org/

[13] Adams, Martin, Faustin Kalabamu, and Richard White. "Land tenure policy and practice in Botswana-Governance lessons for southern Africa." *Journal fur Entwicklungspolitik* 19.1 (2003): 55-74.

[14] Taylor, Michael. " Rangeland tenure and pastoral development in Botswana: Is there a future for community based management"; Common southern Africa occasional paper series 16 (2007).

human elephant conflict in the area. Project interventions (detailed in section 3.4) were co-designed and developed with communities in the Okavango Panhandle over the last 10 years and informed by evidence through long-term multi-disciplinary research conducted by the Ecoexist team and 11 post graduate students, The Ecoexist team includes a total staff of 34 employees of which 40% are women and 90% are locals from the Okavango region. Ecoexist has been a strong driver of local employment, job creation, and conservation with a track record of working with local communities, Kgosis (tribal chiefs), Land Board, Ministry of Agriculture, and other relevant authorities. Each village (in this case the proposed pilot project only involves one – Gunotsoga) has a community officer who is tasked with maintaining a relationship between Ecoexist and their respective village. The community officers report any poaching incidents, relevant community affairs, and coordinate communication with the local government ministries to ensure consistent access to streamlined, transparent, and timely communication between all parties. Project planning (from a methodological perspective involving sampling plans, data collection, etc) is determined by the Ecoexist and Gazelle teams as the co-coordinators for the project. EcoExist employs exclusively locals from the surrounding villages of the Panhandle, 27 in the field base in Eretsha village and 7 at the administrative hub in Maun. Consistent with the participatory approach adopted by Ecoexist since its inception, all project design decisions involve key decision makers from both the coordinators and the community through consultation. Ecoexist primarily manages implementation, enforcement, and community relations given its strong track record in the Panhandle while Gazelle acts as the technical partner for processing survey data, writing project documentation and managing external relations. All parties involved strive to promote diversity and inclusion wherever possible. A strong component of the project implementation will involve strengthening the existing relationship with this community and its various governance bodies/institutions in the co-design and implementation of the project, through engagement in monitoring activities, scaling up existing interventions and establishing additional interventions or additionality that will help promote coexistence between the community and the elephants and other wildlife in the area, e.g. through wildlife economy enterprise development and support.

It is important to denote some distinctions: when it comes to the technical implementation of the project, i.e. placement of camera traps and AudioMoths, remote sensing work, etc (which will be handled also by whoever the third-party PV works with to ensure data management) the design was left purely to the Ecoexist and Gazelle teams. This is due to the experience from both teams, the already established and accepted corridors by the communities as set by Ecoexist (showcasing the community's respect and acceptance for Ecoexist's work). The Gazelle Ecosolutions team also has extensive experience with monitoring ecological factors through remote sensing and is therefore included in the technical design of the project.

However, on the community participation facet of the project, the community is thoroughly included in the process (as they have been with Ecoexist for years). Each of the community officers comes from their own village and are therefore by all sense of the word locals, which means they are tightly bound to the community. This ensures that whatever they do is in benefit for both the community and Ecoexist, as they have a voice in Ecoexists actions and can make sure that there is transparency and every concern is heard from both sides. The leaders at Ecoexist (Graham and Anna) have also been deeply involved with the communities for over 10 years and are respected by the communities as they have fostered positive relationships and make sure that people from each village are represented and hired. This would only increase with the existence of project, as more locals could be hired simply for project purposes, providing further jobs to the community while making sure that project activities are maintained and the corridors remain safe (additionality), something that is hard to do with the current funds and capabilities of the Ecoexist team.

To ensure meaningful community participation, particularly in benefit-sharing and project design, the project will go beyond traditional consultation and adopt a structured participatory process as guided by the Plan Vivo Biodiversity Standard. While Ecoexist and Gazelle serve as coordinating entities responsible for technical components such as sampling frameworks, survey methodologies, and data management, critical decisions around project governance, equitable benefit-sharing, local implementation responsibilities, and land-use priorities will be co-developed with affected communities from the outset.

This participatory approach will involve representative planning processes at the village level, including structured workshops, focus groups, and inclusive community assemblies. These forums will ensure the voices of women, youth, traditional leaders (Kgosis), livelihood user groups, and other vulnerable or often-overlooked constituencies are actively incorporated into project design. In cases where trade-offs exist (e.g., between conservation area designation and access to resources), transparent deliberation and collective decision-making will guide the process.

2.5 FPIC Process

The Ecoexist biodiversity project, focused on mitigating human-elephant conflict in Botswana's Okavango Delta, follows the Free, Prior, and Informed Consent (FPIC) process as outlined by Plan Vivo to ensure the ethical engagement of local communities. The FPIC process guarantees that the consent of all stakeholders, particularly indigenous and marginalized communities, is obtained ethically before any project activities begin, ensuring that these communities are active participants in decision-making.

The Ecoexist project prioritizes obtaining consent freely, ensuring that community members are not subject to coercion, manipulation, or undue influence. Meetings and consultations are designed to create a safe environment where all individuals, regardless of their social or economic status, feel empowered to voice their opinions. Community leaders, elders, and other influential figures are engaged in early discussions to ensure that the process is culturally sensitive. The Ecoexist team ensures that local voices drive the project forward, with no pressure or obligation imposed on the community to participate in conservation efforts. This free participation is fundamental in fostering trust and collaboration.

Ecoexist ensures that consent is secured well in advance of any project implementation. The project team conducts initial consultations to introduce the project objectives, expected outcomes, and potential impacts. These consultations are carried out with sufficient lead time to allow the community to deliberate internally and discuss the implications of their participation. The goal is to provide all stakeholders with enough information and time to make informed decisions without rushing or external pressure. This prior engagement also includes setting timelines that accommodate the local community's schedules, ensuring that their consent is meaningful and considered.

To ensure that consent is informed, Ecoexist provides transparent and detailed information about every aspect of the project. This includes potential environmental, social, and economic impacts of the biodiversity conservation activities. Information is conveyed in clear and accessible language, with translation into local dialects as necessary. Visual aids, participatory workshops, and community discussions are used to explain the project's technical aspects, ensuring that all community members, including those with lower literacy levels, can fully understand what the project entails.

Additionally, Ecoexist works closely with local leaders and cultural custodians to ensure that the information provided is relevant to the community's needs and perspectives. This involves practical co-design and implementation of interventions and field visits to demonstrate activities, such as elephant corridor management or alternative crop practices, so that stakeholders can visualize the changes before they agree to participate. Ecoexist has had a long history of success with this community through this participatory process.

Consent is obtained explicitly through community meetings, written agreements, or culturally appropriate documentation methods. Ecoexist ensures that all key stakeholder groups are represented, including women, youth, and marginalized community members, in the decision-making process. These agreements are not a one-time event but are revisited regularly as the project evolves. Community members have the right to withdraw their consent at any time if they feel the project no longer aligns with their interests or if unforeseen negative impacts arise. This ongoing consent process ensures that the community retains control over the project's trajectory and their involvement.

The FPIC process is participatory by design, with a strong emphasis on collaboration and co-management. Ecoexist regularly holds community meetings to gather input and feedback throughout the project's lifecycle. Detailed records of these engagements are kept, including meeting minutes, agreements, and any grievances raised by community members. This documentation is essential for transparency and accountability, both to the local community and to external partners and donors.

An effective grievance redress mechanism is established to address any concerns that community members may have about the project. Ecoexist provides clear channels for community members to voice complaints or raise issues, and these grievances are handled swiftly and transparently. This mechanism ensures that the project remains responsive to the community's needs and helps maintain trust between the project team and local stakeholders.

Ecoexist also uses the FPIC process as an opportunity to build the capacity of local communities. Training programs are conducted to enhance local knowledge of biodiversity conservation and sustainable land use practices. For example, the community might receive training in "Elephant Aware" farming techniques, which are designed to reduce conflict with wildlife while enhancing agricultural productivity. This capacity building empowers the community not just to participate in the project but to take ownership of conservation efforts, ensuring long-term sustainability.

The FPIC process is not a one-time event but a continuous dialogue between Ecoexist and the local communities. As the project progresses, Ecoexist remains committed to revisiting agreements and ensuring that the community's consent is ongoing. This iterative approach respects the community's right to self-determination and ensures that conservation efforts are aligned with local needs and priorities.

By adhering to the FPIC principles as outlined by Plan Vivo, Ecoexist ensures that their biodiversity project in the Okavango Delta is not only ethical and inclusive but also sustainable in the long term, fostering a genuine partnership between conservationists and local communities. This process lays the foundation for a project that benefits both people and wildlife in one of Africa's most iconic ecosystems.

3 Project Design

3.1 Biodiversity Baseline

The baseline scenario represents the conditions and trends in the project area in the absence of the Ecoexist Elephant Conservation Project. Ngamiland District in Botswana faces severe environmental and socio-economic challenges. Without intervention, the following key issues persist:

1. **Deforestation and Land Degradation**: The area experiences significant deforestation due to agricultural expansion and fuelwood collection. Shifting cultivation practices lead to soil erosion, reduced soil fertility, and loss of biodiversity. Degraded lands fail to support healthy ecosystems, leading to further environmental decline.

2. **Human-Elephant Conflict**: As human population grows and encroaches on elephant habitats, conflicts between humans and elephants intensify. Elephants raid crops, leading to significant economic losses for farmers. This results in retaliatory killings of elephants and deepening animosity towards wildlife conservation efforts.

3. **Poaching and Illegal Wildlife Trade**: The lucrative illegal wildlife trade poses a severe threat to elephant populations. Poachers target elephants for their ivory, reducing population numbers and disrupting social structures within elephant herds. Anti-poaching efforts are often under-resourced and ineffective.

4. **Climate Change**: The impacts of climate change exacerbate existing environmental challenges. Increased temperatures, changing precipitation patterns, and extreme weather events lead to water scarcity, reduced agricultural productivity, and further strain on natural resources.

5. **Livelihood Vulnerability**: Local communities primarily depend on subsistence agriculture, making them highly vulnerable to environmental changes and economic shocks. Limited access to education, healthcare, and alternative livelihoods perpetuates cycles of poverty and environmental degradation.

Without the project, these conditions continue to deteriorate, leading to a vicious cycle of environmental degradation, human-wildlife conflict, and poverty. The baseline scenario underscores the urgent need for integrated conservation and development interventions to address these interconnected challenges.

3.2 Socioeconomic Baseline

The livelihood baseline provides a comprehensive understanding of the socio-economic conditions of the local communities within the project area. Key aspects include:

1. **Agricultural Practices**: Most households engage in subsistence farming, growing crops such as maize, millet, sorghum, watermelons and other crops. Farming practices are largely traditional, with limited access to modern inputs, irrigation, and agricultural extension services. Crop yields are often low, and farmers face significant losses due to wildlife incursions and climatic variability.

2. **Livestock Rearing**: Livestock, including cattle, goats, and chickens, are integral to the livelihoods of local communities. Livestock rearing provides a source of food, income, and

cultural value. However, overgrazing contributes to land degradation, and livestock are vulnerable to diseases and wildlife predation.

3. **Income and Employment**: Off-farm income opportunities are limited, with few formal employment options available. Some community members engage in small-scale trade, crafts, and casual labor to supplement their agricultural income. Poverty rates are high, and households struggle to meet basic needs such as food, education, and healthcare.

4. **Access to Services**: Access to essential services such as education, healthcare, clean water, and sanitation is limited. Schools and healthcare facilities are often under-resourced and located far from communities. This lack of access exacerbates vulnerability and reduces opportunities for socio-economic advancement.

5. **Human-Wildlife Conflict**: Human-wildlife conflict, particularly with elephants, significantly impacts livelihoods. Crop raiding by elephants leads to substantial economic losses for farmers, reducing food security and income. The fear of wildlife also limits the ability of communities to expand agricultural activities and invest in long-term improvements.

6. **Community Organizations and Governance**: Traditional leadership structures play a crucial role in community governance. However, the capacity of local institutions to manage natural resources and address conflicts is often limited. Strengthening community organizations and governance mechanisms is essential for effective project implementation.

The livelihood baseline highlights the interconnectedness of environmental and socio-economic challenges faced by local communities. Addressing these challenges through integrated conservation and development initiatives is critical for improving livelihoods and promoting sustainable resource management.

3.3 Environmental Baseline

The ecosystem baseline provides an in-depth analysis of the environmental conditions and biodiversity within the project area. Key components include:

1. **Biodiversity**: The Ngamiland District is home to diverse flora and fauna, including significant populations of African elephants, various antelope species, predators such as lions and leopards, and numerous bird species. The area supports critical habitats, including savannas, wetlands, and riverine forests. Biodiversity is under threat from habitat loss, poaching, and human-wildlife conflict.

2. **Habitat and Land Use**: The project area comprises a mosaic of land uses, including agricultural lands, communal grazing areas, and natural habitats. Degradation of habitats due to agricultural expansion, overgrazing, and unsustainable harvesting of natural resources reduces ecosystem resilience and biodiversity. Restoring and protecting habitats is essential for maintaining ecosystem functions and services.

3. **Water Resources**: Water availability is a key factor influencing both human and wildlife populations. The Okavango Delta, a unique and biodiverse wetland system, plays a critical role in providing water resources for the region. However, water availability is influenced by seasonal variations, climate change, and competing demands from agriculture and wildlife.

4. **Soil and Vegetation**: Soil erosion and degradation are prevalent due to deforestation, overgrazing, and inappropriate agricultural practices. This leads to reduced soil fertility, loss of vegetation cover, and decreased agricultural productivity. Soil conservation and sustainable land management practices are needed to restore soil health and productivity.

5. **Climate and Weather Patterns**: The project area experiences a semi-arid climate with distinct wet and dry seasons. Climate change poses significant risks, including increased temperatures, altered precipitation patterns, and more frequent extreme weather events. These changes impact water availability, crop yields, and the overall resilience of ecosystems and communities.

6. **Human Impact**: Human activities, including agriculture, livestock rearing, and settlement expansion, have significant impacts on the environment. Unsustainable resource use and habitat encroachment exacerbate environmental degradation and increase the vulnerability of ecosystems. Engaging communities in sustainable practices is crucial for reducing human impact and enhancing ecosystem resilience.

The ecosystem baseline underscores the need for integrated conservation efforts that address both environmental and socio-economic challenges. Protecting and restoring habitats, promoting sustainable land use, and enhancing community resilience are key strategies for achieving long-term conservation and development goals.

3.4 Project Logic

The project logic outlines the theory of change and the pathway through which the Ecoexist Elephant Conservation Project aims to achieve its objectives. Key components include:

1. Problem Statement: The project area faces severe environmental degradation, human-wildlife conflict, and socio-economic challenges. Without intervention, these issues will continue to deteriorate, leading to loss of biodiversity, reduced carbon sequestration, and declining livelihoods.

2. Goal: The overarching goal of the project is to conserve elephant populations, restore degraded habitats, and improve the livelihoods of local communities through integrated conservation and development interventions.

3. Objectives:

    - Reduce human-elephant conflict through community-based conflict mitigation strategies.
    - Enhance anti-poaching efforts and improve wildlife monitoring to protect elephant populations.
    - Promote sustainable agricultural practices to improve food security and reduce environmental impact.
    - Develop eco-tourism and alternative livelihoods to diversify income sources and reduce dependence on agriculture.

4. Interventions:
    - Human-Elephant Conflict Mitigation: Implement measures such as early warning systems, crop protection strategies, and community education programs to reduce conflicts and promote coexistence.
    - Anti-Poaching and Wildlife Monitoring: Strengthen anti-poaching patrols, train community members in wildlife monitoring, and deploy technology to enhance surveillance and data collection.
    - Habitat Conservation: Protect indigenous tree species, protect some trees from damage and wildlife corridors.
    - Sustainable Agriculture: Introduce conservation agriculture techniques, provide training and technical support to farmers, and promote practices that improve soil health and reduce crop losses.
    - Eco-Tourism and Alternative Livelihoods: Develop eco-tourism initiatives, provide training in hospitality and tourism management, and support community-based enterprises to generate income and reduce pressure on natural resources.
5. Outcomes:
    - Reduced human-elephant conflict and improved community attitudes towards wildlife conservation.
    - Increased elephant populations and reduced poaching incidents.
    - Restored habitats, increased carbon sequestration, and enhanced biodiversity.
    - Improved agricultural productivity, food security, and livelihoods for local communities.
    - Diversified income sources and reduced dependence on environmentally destructive practices.
6. Impact:
    - Long-term conservation of elephant populations and ecosystems.
    - Enhanced resilience of local communities to environmental and economic shocks.
    - Sustainable development that balances conservation and livelihoods, contributing to global climate goals and biodiversity targets.

The project logic provides a clear and structured pathway for achieving the project's goals and objectives. It emphasizes the interconnectedness of conservation and development, highlighting the importance of integrated approaches to address complex socio-environmental challenges.

Table 4- Initial Project Logic

	Description	Assumptions/Risks
Outcomes – Intended overall project aim		
Biodiversity Benefit	The primary biodiversity benefit of this project is the preservation of critical wildlife corridors in the Okavango Delta, specifically focusing on maintaining the movement routes for African elephants (Loxodonta Africana) and other keystone species. Protecting these corridors will prevent habitat fragmentation, which is crucial for maintaining genetic diversity and ecosystem resilience in the Delta. Additionally, reducing human-elephant conflict will decrease retaliatory killings and ensure that elephant populations remain stable. The project will also protect associated biodiversity, including rare and endangered dryland and wetland species that depend on the same habitats, such as African Wild Dog, Cheetah, Wattled Crane, Slaty Egret (Egretta vinaceigula) and other wetland-dependent species.	**Assumptions:** The effectiveness of this project relies on local community engagement and the successful implementation of "Elephant Aware" practices. It also assumes that alternative livelihoods and sustainable farming practices will reduce the pressure on critical habitats. **Risks:** The project may face challenges if there is resistance from farmers who are reluctant to change traditional practices. Additionally, external factors such as climate variability could exacerbate resource competition and limit the success of conservation efforts.
Socioeconomic Benefit	By reducing crop loss and damage from elephants, the project will improve food security and economic stability for local farmers. Increased crop yields will result in higher incomes, while sustainable market access for wildlife-friendly products will create new economic opportunities. Additionally, the project promotes community ownership of conservation efforts, which can enhance social cohesion and local leadership. The involvement of women in leadership roles will further empower marginalized groups within the community, improving gender equity.	**Assumptions:** The project's success depends on sustained market demand for wildlife-friendly products and effective training for local farmers in sustainable practices. **Risks:** Potential risks include market fluctuations that could affect the profitability of sustainable products and potential challenges in accessing new markets for these products. For context, farmers in the elephant aware farming program are paid Above (involved community to talk about what pricing they would be okay with for it to be above local market rate and it tends to be around 2 bags at a time, is around 250 pula (150 pula

		per bag). The other market is from the board and they buy produce at around 120-150 pula/kg. Ecoexist facilitates market access and the manufacturing industry in nearby Maun buys high quantities at 300 pula/per bag and that is twice the amount they get from parastate. That is a big incentive). (Once you sign conservation agreement, they can get that price for all of that surplus. Attracts farmers to come on board and learn about Elephant Aware Practice and respecting the corridors) The brewery is able to turn that price and turns it into premium beer at a premium level, craft beer better than St. Louis and Black Labels.) This is guaranteed through the contract and prices for surplus produce from elephant aware farming are established through a co-design, consultative process between the farmers and Ecoexist and the market buyers. However, this is usually offset by market demand for the product as it is sold mostly to the food and beverage manufacturing industry in Maun. Evidence of sufficient benefit from premium prices paid by the market for this surplus elephant aware grain has already been documented by Ecoexist and the market-linked incentives to maintain elephant aware farmers is now well established – this gives this project the opportunity to scale this

		model to benefit additional farmers.
Environmental Benefit	The project contributes to the preservation of key ecosystem services, including water regulation and soil conservation. By protecting the Okavango Delta's wetlands, the project will help maintain water quality, support pollinator populations, and prevent soil erosion. These ecosystem services are essential for both biodiversity and human communities in the Delta. Furthermore, the project will contribute to climate resilience by preserving carbon-rich wetlands and promoting climate-adaptive farming practices.	**Assumptions:** Effective land-use planning and conservation measures will maintain ecosystem services and improve climate resilience. **Risks:** The unpredictability of climate change could affect the project's ability to maintain ecosystem services, particularly if severe droughts or floods occur.
Outputs		
Output 1	Training of 100+ farmers in "Elephant Aware" farming practices. This includes providing tools such as chili fences, beehive fences, and alternative crop strategies that deter elephants while ensuring farmers' livelihoods. Workshops will cover sustainable agriculture techniques, elephant behaviour, and the importance of biodiversity conservation.	**Risks:** Farmers may be resistant to change due to the cultural attachment to traditional farming methods or scepticism about the effectiveness of new practices. **Mitigation:** To address these risks, Ecoexist will collaborate closely with local leaders and provide demonstration plots that show the benefits of these practices in action. Continuous support and mentoring will be provided to build trust and confidence in the new methods.
Output 2	Establishment of community-based monitoring teams equipped with mobile technology for real-time data collection. These teams will monitor elephant movements, crop raiding incidents, and other human-wildlife conflicts, allowing for timely interventions and early warning systems.	Risks: Lack of technical literacy among community members could hinder the effective use of mobile technology. Mitigation: The project will provide thorough training and ongoing technical support to ensure community members are comfortable using the technology. Additionally, user-friendly interfaces and simple reporting procedures will be

		developed to facilitate participation.
Output 3	Development of wildlife-friendly land-use plans that prioritize the protection of elephant corridors while integrating sustainable agriculture. These plans will be created in collaboration with local governments, conservation organizations, and community members to ensure they are feasible and widely accepted.	**Risks:** Conflicting interests between conservation and agricultural expansion could create tensions during the development of land-use plans. **Mitigation:** The project will facilitate multi-stakeholder dialogues that bring together all relevant parties to find balanced solutions. Compensation schemes or alternative livelihoods may be offered to farmers who agree to set aside land for conservation purposes.
Output 4	**Establishment of market linkages for sustainable products**	**Economic Barriers:** Limited access to markets for wildlife-friendly products due to geographical remoteness and lack of infrastructure. **Social Barriers:** Farmers may lack knowledge or experience in marketing sustainable products, which could result in low participation or engagement. **Logistical Barriers:** Inadequate transportation networks may hinder the ability to get products to market in a timely and cost-effective manner.

3.5 Proposed Biodiversity Monitoring

Table 5- 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			
Audio Recorders such as audio moths	Birds	Birds are highly sensitive to ecological changes and serve as critical indicators of environmental health. The Okavango Delta, as a unique and biodiverse wetland, is home to a range of bird species, including migratory birds such as the African Skimmer and endemic species like the Slaty Egret. Graham McCulloch (PhD), who has extensive experience in the Okavango region, adds significant value with his expertise in bird surveys, ensuring accurate species identification and habitat assessments.	Several groups of migratory birds occur here therefore monitoring will need to occur in both the wet and the dry season. Nocturnal species will be monitored during night surveys.
High Resolution Imagery	Plants (herbaceous and woody plants <2m in height)	The combination of high-resolution imagery, spot and line transect methods, and IR distance calculators is ideal for the complex vegetation structure in the delta. These tools help measure canopy height, cover, plant biomass, and species composition—key indicators of habitat health in a seasonally flooded environment.	Grasslands are regularly burned in the dry season therefore monitoring will need to be done in the short rainy season. Dry hot season will be avoided, as no leaves on canopy and no herbaceous layer. Transects of 5 meters by 50 meters will be set up along the project area to properly quantify and indicate the species being observed.

Camera Traps will be one of the ways to conduct mammal surveys..	Mammals	The Okavango Delta is renowned for its rich mammalian biodiversity, with large populations of elephants, buffalo, and several large carnivores forming essential parts of the food web. Monitoring these species provides insights into the overall health and stability of the ecosystem.	The project area is renowned for numerous mammal species that make up much of the higher food chain and essential for a healthy ecosystem. Camera traps will be placed strategically to monitor mammal species across wet and dry seasons. Spoor counts will be used to track large herbivores and carnivores, focusing on water-dependent species in the dry season. Spoor Counts: The Okavango's expansive floodplains and drier woodland edges provide ideal environments for conducting spoor (track and sign) surveys. These can be used to monitor large herbivores like elephants and predators like lions, leopards, and wild dogs, providing data on habitat use and movement patterns. Camera Traps: Given the delta's dense and varied habitats, camera traps are an excellent tool for capturing data on mammals, especially elusive or nocturnal species. Camera traps can be deployed in both flooded and dry areas to monitor species' behavior and population densities throughout the seasonal cycles.
High Resolution Imagery	Plants (herbaceous and woody plants >2m in height)	The Okavango Delta has a diverse range of woody plants and tall grasses that play critical roles in supporting wildlife, stabilizing the soil, and contributing to the delta's hydrology. High-resolution	Grasslands are regularly burned in the dry season therefore monitoring will need to be done in the short rainy season. Dry hot season will be avoided, as no leaves on canopy and no

		imagery and IR distance calculators are essential for monitoring the canopy height and biomass of these larger plants, which reflect the health and productivity of different habitat types.	herbaceous layer. Transects of 5 meters by 50 meters will be set up along the project area to properly quantify and indicate the species being observed.

3.6 Additionality[15]

Table 6- Initial Barrier Analysis

Project Intervention	Main Barriers	Activities to Overcome Barriers
1. Implementation of "Elephant Aware" farming practices	Elephant-aware farming is currently on-going but we would like to make this permanent and expand it across the Panhandle to make it a viable long-term solution. **Economic Barriers**: Farmers may lack the financial resources to invest in deterrents and alternative crops that are less attractive to elephants. **Social Barriers**: Traditional farming practices are deeply ingrained in the community, and there may be resistance to adopting new methods**. Environmental Barriers**: Environmental conditions, such as water scarcity or soil degradation, may limit the success of new farming practices. There is a large amount of financial additionality in this project. We would also like to emphasize that while a lot of these projects have been implemented and sometimes implemented at a small scale, there is a long way to go and due to the natural financial shortcomings of conservation efforts, it is extremely hard to implement these without any more financial backing. This is what the	**Overcoming Economic Barriers**: Provide microloans or grants to farmers to support the initial costs of adopting new practices. Partner with local governments and NGOs to subsidize the purchase of deterrent tools and alternative seeds. **Overcoming Social Barriers**: Engage local leaders and trusted community members to promote the benefits of "Elephant Aware" farming. Use demonstration plots and peer-to-peer mentoring to showcase the success of these practices. **Overcoming Environmental Barriers**: Introduce climate-resilient farming techniques, such as drought-tolerant crops and water conservation methods, to ensure the sustainability of new practices in challenging environmental conditions.

[15] See Baseline Scenario and Additionality Assessment Tool

	Biodiversity Credits would allow, not to mention fostering further community engagement in their ecosystem and the creation of project/elephant/wildlife related jobs	
2. Creation of community-based monitoring teams	**Technical Barriers**: Community members may lack experience with mobile technology and data collection. **Social Barriers**: Initial distrust or lack of interest in monitoring roles may reduce participation. **Logistical Barriers**: Ensuring consistent communication and coordination across remote areas may be challenging.	**Overcoming Technical Barriers**: Provide extensive hands-on training and continuous technical assistance to community members. Develop user-friendly mobile applications that simplify data entry and reporting. **Overcoming Social Barriers**: Highlight the importance of monitoring for community safety and conservation. Provide incentives for participation, such as stipends or recognition programs. This however, will be handled cautiously to avoid bias and over expectations. **Overcoming Logistical Barriers**: Establish reliable communication networks and provide transport support for monitoring teams operating in remote areas. Regular check-ins and coordination meetings will ensure that all teams remain engaged and well-supported.
3. Development of wildlife-friendly land-use plans	**Legal Barriers**: Complex land tenure systems may complicate the development of consensus on land-use changes. **Social Barriers**: Conflicts of interest between agricultural expansion and conservation goals may arise among stakeholders. **Political Barriers**: Potential lack of support or coordination from local governments.	**Overcoming Legal Barriers**: Work closely with local governments and legal experts to clarify land tenure and user rights. Secure agreements from landowners and stakeholders early in the process to prevent conflicts later. **Overcoming Social Barriers**: Facilitate open dialogues with all stakeholders to find common ground and address competing interests. Use compensation schemes or alternative livelihoods to incentivize participation in

		conservation efforts. **Overcoming Political Barriers**: Engage government officials and policymakers early in the project to secure their support. Align project goals with national conservation policies and development plans to ensure political backing.
4. Establishment of market linkages for sustainable products	**Economic Barriers:** Limited access to markets for wildlife-friendly products due to geographical remoteness and lack of infrastructure. **Social Barriers:** Farmers may lack knowledge or experience in marketing sustainable products, which could result in low participation or engagement. **Logistical Barriers:** Inadequate transportation networks may hinder the ability to get products to market in a timely and cost-effective manner.	**Overcoming Economic Barriers:** Partner with local and international NGOs, government programs, and private sector entities to develop robust market linkages for sustainable products. Facilitate access to markets through cooperatives or Farmer Producer Organizations (FPOs) that can aggregate produce and negotiate better prices. **Overcoming Social Barriers:** Provide training programs on business skills, product branding, and market requirements to ensure farmers understand how to capitalize on sustainable practices. Use success stories from similar projects to inspire confidence in market opportunities. **Overcoming Logistical Barriers:** Work with local authorities and businesses to improve infrastructure, such as roads and storage facilities. Establish cooperative transportation solutions that reduce individual costs by pooling resources. Where feasible, explore digital platforms for selling products directly to consumers, bypassing traditional market barriers.

Table 7- Threat Analysis

Major threat to biodiversity	Main Barriers	Activities to mitigate threat
1. Habitat destruction due to agricultural expansion	**Barriers**: Population growth and economic pressure on farmers to expand cropland into wildlife corridors. Lack of awareness of the importance of preserving biodiversity. Weak enforcement of land-use regulations.	**Mitigation:** Implement community education programs that emphasize the importance of wildlife corridors and biodiversity. Develop and enforce wildlife-friendly land-use plans in collaboration with local governments. Provide alternative livelihoods and financial incentives for farmers to preserve critical habitats. Regularly monitor land use to prevent encroachment
2. Human-elephant conflict leading to retaliatory killings	**Barriers**: Farmers face significant economic losses from crop raiding, leading to fear and retaliation against elephants. Lack of effective deterrents and response systems to manage conflict.	**Mitigation:** Train farmers in "Elephant Aware" practices and provide deterrent tools such as chili fences, beehive fences, and early warning systems. Establish community monitoring teams to track elephant movements and provide timely alerts to farmers. Promote the development of compensation schemes for farmers who suffer losses from elephant raids
3. Illegal poaching of elephants	**Barriers:** High economic incentives for poaching due to the demand for ivory. Lack of resources for enforcement and anti-poaching patrols in remote areas. Weak penalties for poaching offenses. The remoteness of certain regions in the Okavango Delta makes monitoring and enforcement challenging. Cultural acceptance of traditional hunting practices, which may overlap with illegal poaching activities.	**Mitigation:** Strengthen anti-poaching efforts by partnering with local authorities and conservation organizations to improve surveillance and enforcement. Increase community awareness of the long-term benefits of elephant conservation, such as eco-tourism. Implement alternative livelihood programs for communities that may otherwise engage in poaching activities. Lobby for stricter penalties for poaching and more resources for law enforcement. Enhance community-based anti-poaching patrols by training local community

		members and equipping them with necessary tools. Establish conservation education programs that focus on changing cultural perceptions and promoting the protection of elephants as a valuable resource for eco-tourism. Leverage technology, such as drone surveillance and GPS tracking, to improve monitoring of remote areas.
4. Climate variability impacting water and food resources	**Barriers:** Increased unpredictability in rainfall patterns and prolonged droughts could exacerbate competition for water and food resources between humans and wildlife. This may lead to more frequent human-elephant conflicts. Lack of climate-resilient infrastructure in local communities.	**Mitigation:** Promote climate-adaptive agricultural practices, such as planting drought-resistant crops and improving water conservation techniques (e.g., rainwater harvesting). Implement ecosystem-based adaptation strategies, such as restoring wetlands that can buffer against extreme climate events. Establish community-based climate monitoring and early warning systems to help anticipate and mitigate the impacts of climate variability on both wildlife and human communities.
5. Decline in eco-tourism due to increased human-wildlife conflict	**Barriers:** Human-wildlife conflict, especially involving elephants, can deter tourists from visiting the Okavango Delta. Negative perceptions of the region due to safety concerns could reduce tourism revenue, which is critical for conservation funding.	**Mitigation:** Implement conflict resolution strategies that improve safety for both wildlife and tourists, such as designated wildlife viewing areas that minimize the risk of human-wildlife encounters. Promote the region's conservation successes through targeted marketing campaigns that highlight the positive impact of biodiversity protection on tourism. Develop community-based eco-tourism initiatives that directly benefit local populations, providing an economic incentive for conservation efforts. Engage with local tourism operators to ensure they are involved in conservation planning and support efforts to minimize conflicts.

3.7 Exclusion List

Refer to Annex 3

3.8 Environmental and Social Screening

Refer to Annex 4 for more details.

3.9 Stacking and Double Counting

The project does not currently and does not plan to stack or double count.

3.10 Relevant Legislation and Policies

Table 8- National Level Legislation, Policies and Instruments

Legislation/ Policies	Yes/No/Unsure	Details
Does the country receive or plan to receive results-based biodiversity or climate finance through bilateral or multilateral programs?	No	
Are there any other relevant regulations, policies or instruments?	Yes	The project areas are classified under Botswana Law as “communal land” and located in an area zoned for tribal land use. The implementation of project activities is not mandated under any law, statute, regulatory framework, agreement, settlement, or other legally binding government mandate that would result in similar GHG mitigation outcomes. A summary of six main statutes governing Botswana’s formal and customary laws regarding land-use are summarized below. However, it is important to note none of the laws mandate in any capacity practices which would otherwise take place in a business-as-usual scenario resulting in similar conservation outcomes as the project activities. - (1) The State Land Act, 1966: governs the management of state-owned land such as urban land (in cities and townships), national

		parks, and forest reserves by the national and local governments alongside the allocation of urban land to individuals and entities. - (2) The Tribal Land Act, 1968: governs tribal land and rights to it held by Botswana citizens (this act was amended in 1993). It also vests administrative power from tribal chiefs to the twelve district land boards across Botswana which have the authority to allocate land, cancel customary rights, and rezone agricultural land for commercial, residential, and industrial uses. The act also allows for certificates evidencing rights to water wells, boreholes, and residential plots via common-law leases of land which can be used to obtain mortgages (COHRE 2004; Adams et al. 2003; ROB 2008a; Taylor 2007). - (3) The Tribal Grazing Lands Policy, 1975: allows for the privatization of grazing land by providing Land Boards with the authority to grant entities and individuals leasehold rights to tracts of unfenced, communal land regardless of tribal affiliation. - (4) The Town and Country Planning Act, 1977: The Town and Country Planning Act, 1977, governs the development of rural and urban land (Adams et al. 2003; Taylor 2007). - (5) The National Agricultural Development Policy, 1991: permits owners of boreholes to apply for 50-year leases to an area of 6400 square hectares around their boreholes. Leaseholders are permitted to fence the area and have exclusive rights to all natural resources within the area. - (6) The Sectional Titles Act, 1999 (Adams et al. 2003; Taylor 2007; ROB 2008a; ROB 2010b): allows for the transfer of rights to sections of developments and properties, such as in condominium and industrial developments, upon approval of a sectional plan for the property. The Sectional Titles Act applies to all types and classifications of land

		(COHRE 2004; Adams et al. 2003; ROB 2008a; Taylor 2007; ROB 2010b). In summary, the project activities are entirely additional as none of what is planned is mandated in any existing statutes.

4 Governance and Administration

4.1 Governance Structure

The project co-coordinators Gazelle and Ecoexist take primarily responsibility for technical project development and field operations/implementation respectively (roles and responsibilities for each co-coordinator is detailed in table 4 section 2.2). An organogram is provided below which details the flow of information and decision-hierarchy regarding project stakeholders:

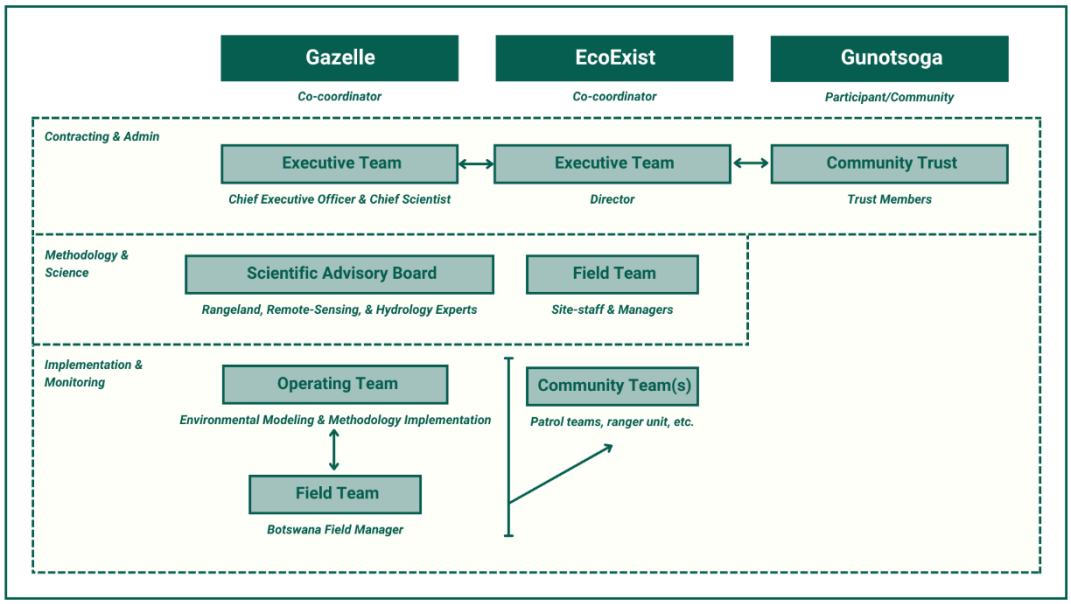


Figure 5: Organogram of Gazelle Ecosystems

All decisions must involve and go through the community and the community's consent (provided via consultation with the Trust) is the backbone of trust for the proposed project. The trust maintains customary and legal rights to the project region (further detailed in section 4.2) and is therefore the primary participant (type I). Key representatives from both co-coordinators (Amod Daherkar from Gazelle and Dr. Graham McCulloch from Ecoexist) are involved in all key decisions. Also, regardless of the primary responsibilities (as assigned in table 4 section 2.2), both co-coordinators and their respective leadership teams are involved in the decision-making process. Given the decades of rich operational experience of both organizations in Botswana, effort is taken to ensure all voices are heard. Most importantly, it cannot be stressed enough that community involvement is paramount to the project's design and long-term success. Community involvement is not limited to information and consent. Rather, the project aims to directly involve the community in implementing project interventions and data collection while creating local employment.

4.2 Legal and Regulatory Compliance

A summary of legal and customary rights to the project area is given in section 1.4 as follows: The project area is classified as tribal land, one of three land-tenure designations in Botswana. Roughly 70% of Botswana is tribal land, 25% state-owned, and 5% being privately owned freehold leases. Most land in the country is considered tribal and citizens can obtain land grants or leases from the Land Board and the land is heritable but not saleable (Adams et. Al. 2003). In this case, the Tribal Land Act of 1968 (amended 1993) governs tribal land and rights to it held by Botswana citizens. It also vests administrative power from tribal chiefs to the twelve district land boards across Botswana which have the authority to allocate land, cancel customary rights, and rezone agricultural land for commercial, residential, and industrial uses. The act also allows for certificates evidencing rights to water wells, boreholes, and residential plots via common-law leases of land which can be used to obtain mortgages (COHRE 2004; Adams et al. 2003; Taylor 2007).

Therefore, the Community Trust of Gunotsoga has customary rights to the region under the Tribal Land Act of 1968, The Tribal Grazing Lands Policy of 1975, and the State Land Act of 1966. The Trust has a signed MOU in place with Ecoexist with the approval of the Tawana Land Board (relevant land board authority in the project's region of northern Kgalagadi District) and the Technical Advisory Committee (TAC) which is a government sanctioned agency providing guidance to local communities. Additionally, Ecoexist also has a research permit (issued on 16/09/2022 under the authority of the Ministry of Environment and Tourism as attached below) to conduct research and conservation activities sanctioned in Ecoexist's founding charter. Therefore, Ecoexist (and Gazelle) has the rights to operationalize project activities and has the approval and participation of the local Gunotsoga Community Trust which holds customary and legal rights to the proposed project area.

PRIVATE BAG BOX 199
GABORONE
BOTSWANA

TEL: (+267) 3914955
FAX: (+267) 3951092

REFERENCE: ENT 8/36/4 LIII (68)

REPUBLIC OF BOTSWANA

MINISTRY OF ENVIRONMENT
AND TOURISM

16th September 2022

Anna Songhurst
P.O Box HA122HAK,
Maun, Botswana

+267 73149517
+267 76865083
Email: anna.songhurst@hotmail.com

Dear Dr Songhurst,

AMENDMENTS TO RESEARCH PERMIT: ENT 8/36/4 XLV (110)- UNDERSTANDING UNDERLYING DRIVERS OF HUMAN-ELEPHANT CONFLITS AND MONITORING A HOLISTIC APPROACH TO FOSTER COEXISTENCE

We are pleased to confirm the following amendments to your research permit **"Ent 8/36/4 Xlv (110) - Understanding Underlying Drivers of Human-Elephant Conflicts and Monitoring a Holistic Approach to Foster Coexistence"**

1. Validity of the permit is extended from date of expiry until **31st July 2025**.

2. Please note that the conditions stipulated in the original permit still apply.

Yours faithfully

Olebeng K.Raperekisi
FOR/PERMANENT SECRETARY

MINISTRY OF ENVIRONMENT, NATURAL RESOURCES CONSERVATION & TOURISM
RESEARCH & DEVELOPMENT UNIT
16 SEP 2022
P/BAG BO 199, GABORONE

Vision: A World Leader in Environmental Sustainability

BOTSWANA

Figure 6: Research Permit granted to Ecoexist team from The Ministry of Environment and Tourism, Government of Botswana

Communications with the Gunotsoga community are primarily conducted by the Ecoexist team and evidence of a meeting on 15/05/24 is given in annex 5. Throughout the project development process, the Trust committee members will be regularly kept up to date. Ecoexist maintains regular communication with all community members through their community officers. Each community officer is assigned to one of 14 villages in the Okavango Panhandle region and maintain communication with the relevant local Kgosis (tribal chiefs) and government ministries.

Additionally, the proposed project plans to provide further local employment by promoting citizen science. By involving the local community in the process of collecting field data (e.g., woody above 2m, woody below 2m, etc.) the project will be directly integrated into the community while creating employment. This builds on existing programs Ecoexist have implemented in the region which have generated employment and economic growth (i.e. elephant aware farming interventions, farmer cooperatives, creating markets for local produce, supporting local craft businesses, etc).

The project observes all relevant regional land national laws governing land-use, land-tenure, tribal land rights, and wildlife management.

4.3 Financial Plan

Financing to fund the project will be jointly provided by both project co-coordinators (Gazelle and Ecoexist) based on their respective cash balanced on-hand and budget allocations. Currently, there is no plan to raise debt, sell equity, or leverage any external financing for the proposed project. Revenues from PVBCs will fund ongoing project interventions (detailed in section 3.4). The 40% of revenues kept by the co-developers will cover administrative costs, overhead, and operations. Revenues used to fund project interventions (e.g. elephant aware farming, data collection, monitoring, community engagements, etc.) will come from the 60% reserved for the continuation of other project activities. Detailed financial breakdowns will be provided in the PDD.

5 Annexes

Annex 1 – Project Boundaries and Habitat Types

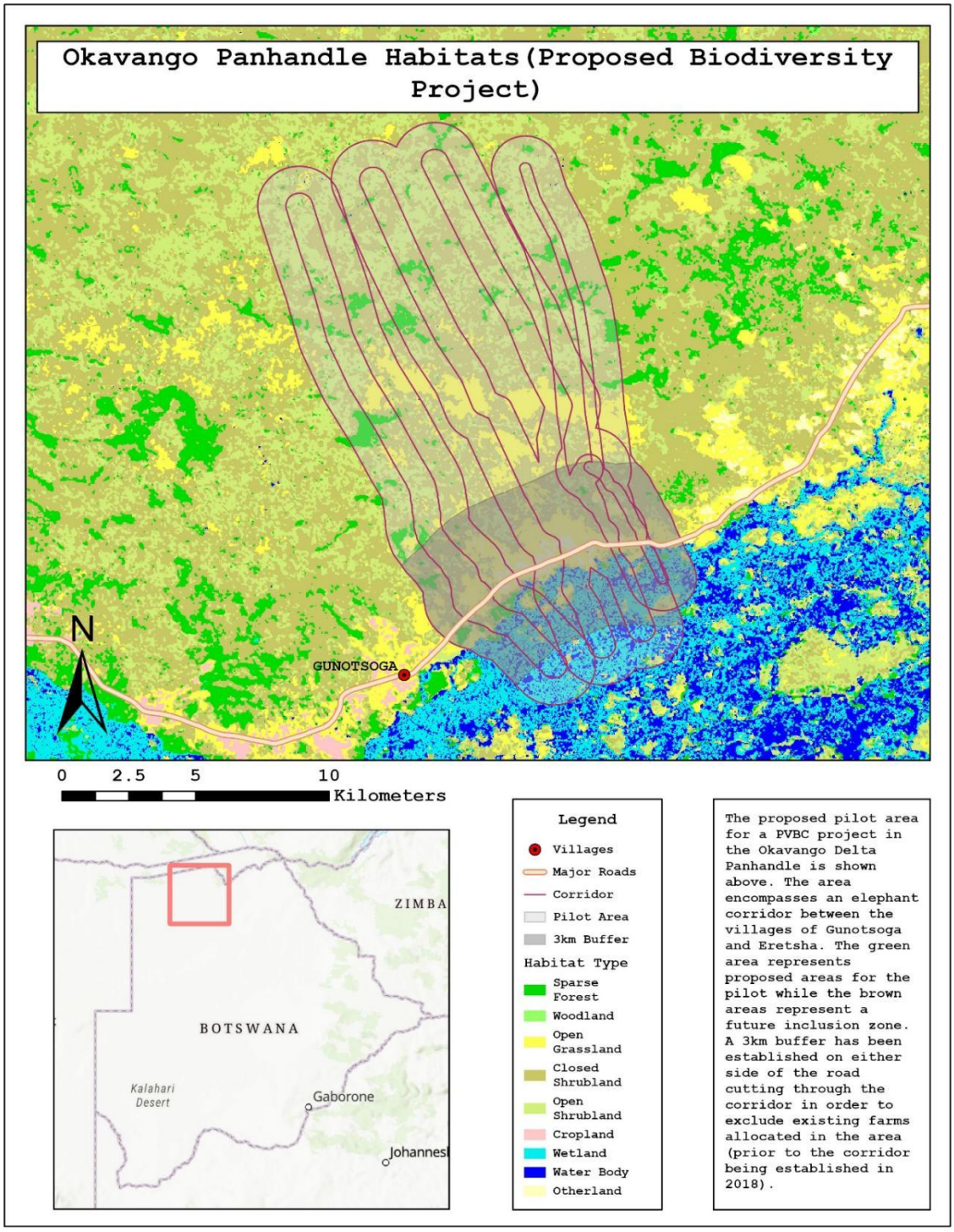


Figure 6: Habitat Map of Endorotsha Corridor, Eastern Okavango Panhandle

This is the proposed pilot project area with a habitat map laid onto it, with the darker area being excluded representing a 3km buffer from the road (as explained in the map). The habitats identified in the area include Sparse Forest, Closed Shrubland, Open Grassland, and Open Shrubland. Below is a clearer map with the buffer of the pilot project area but without the habitat overlay for a clearer satellite picture for understanding of the proposed pilot area.

Annex 2 – Registration Certificate

Company Extract

General Details

UIN	BW00004297548
Company Name	Gazelle Ecosolutions Botswana Proprietary Limited
Company Type	Private Company
Company Status	Registered
Incorporation Date	15 August 2022
Have own constitution?	No
Annual Return Filing Month	August

Addresses

Registered Office Address	Plot 2464, Sedie Ward, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Principal Place of Business	Plot 2464, Sedie Ward, Maun, Botswana

Directors

Thoralf Meyer

Residential Address	Matsaudi, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Appointment Date	15 August 2022

Secretaries

Betty Gretel Toteng

Residential Address	Tribal Lot 53, Matlapana Ward, Maun, Botswana
Postal Address	P.O.Box Ha 3 Hak, Maun, Botswana
Appointment Date	15 August 2022

Company Extract

Shareholders

Thoralf Meyer

Residential Address	Matsaudi, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Appointment Date	15 August 2022

Mihir Yogesh Bendre

Residential Address	Matsaudi Ward, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Appointment Date	15 August 2022

Benjamin Thomas Breed

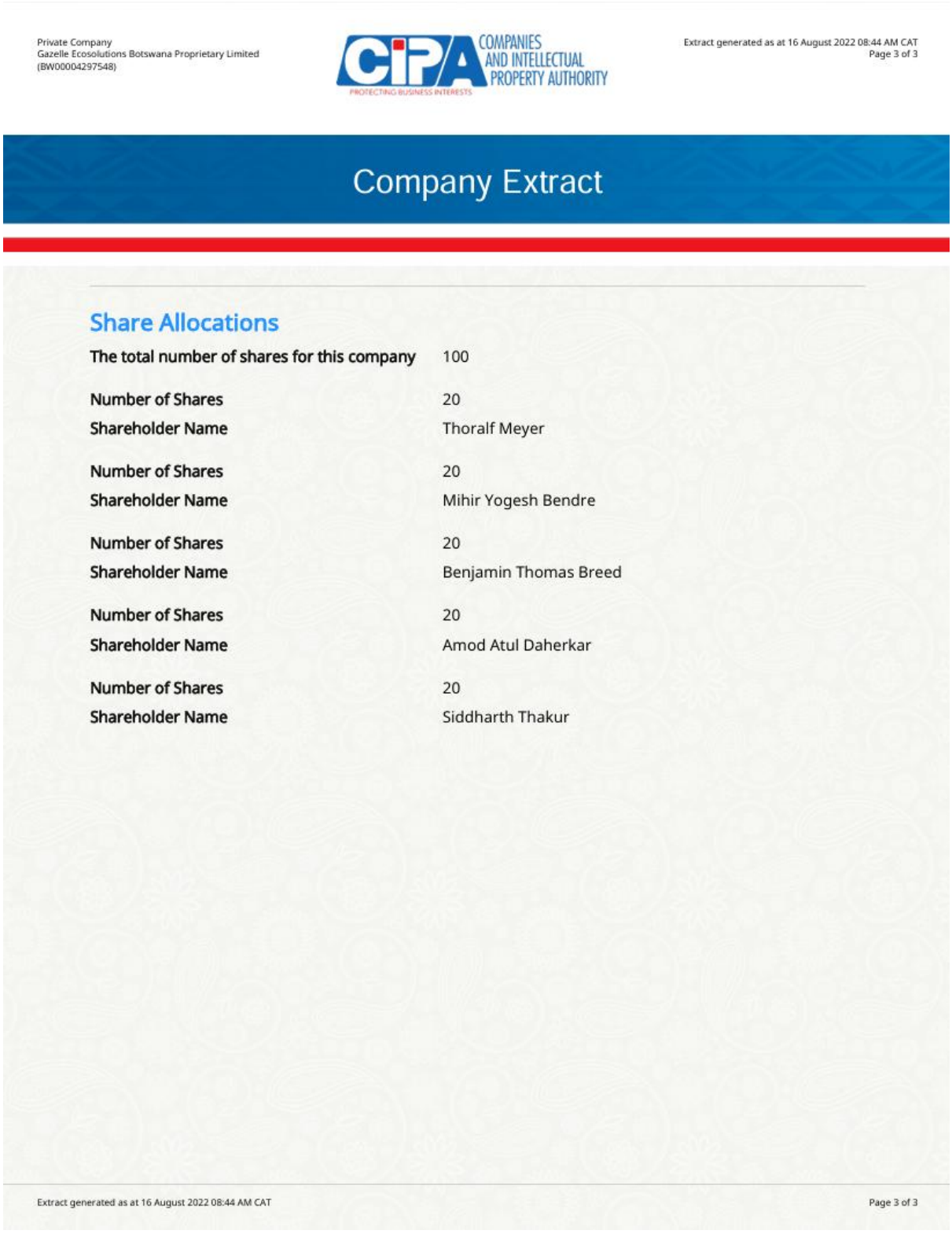
Residential Address	Matsaudi Ward, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Appointment Date	15 August 2022

Amod Atul Daherkar

Residential Address	Matsaudi Ward, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Appointment Date	15 August 2022

Siddharth Thakur

Residential Address	Matsaudi Ward, Maun, Botswana
Postal Address	Private Bag 28, Maun, Botswana
Appointment Date	15 August 2022



Private Company
Gazelle Ecosolutions Botswana Proprietary Limited
(BW00004297548)

COMPANIES AND INTELLECTUAL PROPERTY AUTHORITY
PROTECTING BUSINESS INTERESTS

Extract generated as at 16 August 2022 08:44 AM CAT
Page 3 of 3

Company Extract

Share Allocations

The total number of shares for this company	100
Number of Shares	20
Shareholder Name	Thoralf Meyer
Number of Shares	20
Shareholder Name	Mihir Yogesh Bendre
Number of Shares	20
Shareholder Name	Benjamin Thomas Breed
Number of Shares	20
Shareholder Name	Amod Atul Daherkar
Number of Shares	20
Shareholder Name	Siddharth Thakur

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Page 3 of 3

Figures 8,9, and 10: Registration Certificate

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
Harmful and unsafe 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

This will be handled separately following the recommended approval process.

Annex 5 – Notification of Relevant Authorities

Here is a picture of the conversation held between the Ecoexist team and the Kgosi (village leader) of Gunotsoga with members of the landlord also present. This picture depicts the positive and constant conversation and involvement that the Ecoexist team has with the local entities that hold power and influence in their communities.

Figure 11: Meeting between the Ecoexist team and the Gunotsoga leading entities, including the Kgosi and members of the Landboard

ANNEX 6- Research Permit

PRIVATE BAG BOX 199
GABORONE
BOTSWANA

TEL: (+267) 3914955
FAX: (+267) 3951092

REFERENCE: ENT 8/36/4 LIII (68)

REPUBLIC OF BOTSWANA

MINISTRY OF ENVIRONMENT AND TOURISM

16th September 2022

Anna Songhurst
P.O Box HA122HAK,
Maun, Botswana

+267 73149517
+267 76865083
Email: anna.songhurst@hotmail.com

Dear Dr Songhurst,

AMENDMENTS TO RESEARCH PERMIT: ENT 8/36/4 XLV (110)- UNDERSTANDING UNDERLYING DRIVERS OF HUMAN-ELEPHANT CONFLITS AND MONITORING A HOLISTIC APPROACH TO FOSTER COEXISTENCE

We are pleased to confirm the following amendments to your research permit **"Ent 8/36/4 Xlv (110) - Understanding Underlying Drivers of Human-Elephant Conflicts and Monitoring a Holistic Approach to Foster Coexistence"**

1. Validity of the permit is extended from date of expiry until **31st July 2025.**

2. Please note that the conditions stipulated in the original permit still apply.

Yours faithfully

Olebeng K.Raperekisi
FOR/PERMANENT SECRETARY

MINISTRY OF ENVIRONMENT, NATURAL RESOURCES CONSERVATION & TOURISM
RESEARCH & DEVELOPMENT UNIT
16 SEP 2022
P/BAG BO 199, GABORONE

Vision: A World Leader in Environmental Sustainability

BOTSWANA

Annex 7– Deed of Trust

DoT ECOEXIST.PDF

Annex 8– Letter of Intent to collaborate and work together on elephant aware framing and enterprise development

Business Name- Shandirika Farming Cooperative 26-AUGUST 2024

RE: Confirmation letter of seeking more support and desire to continue partnership on our Elephant aware Enterprise development.

Dear Sir/Madam

Shandirika Farming cooperative as an Elephant Aware Enterprise based in the eastern panhandle will like to confirm its wellness on working with Ecoexist to find more support to help grow the enterprise financial and on any other support needed.

More impotently on areas like;

- Facilitate elephant aware enterprises to access to new markets for further agricultural value chain development and improving livelihood opportunities.
- Empower entrepreneurs and business in the areas of governance, business management, financial management, marketing and PR, to build capacity.
- Find resources and equipment to make our business work and create revenue that will sustain the enterprise.
- Help diversify and get products to the market e.g Milling.
- More of the agricultural implements to enhance productions.

Hoping for more assistance

Yours faithfully

SHANDIRIKA AGRICULTURAL MANAGEMENT ASSOCIATION
shandirikaama@gmail.com
+267 76465080

K. Mmusi
Mrs koi Mmusi (Chairperson)

L. Tlale
Mrs Lenkokame Tlale(V-secretary)

6 APPENDICES

Appendix 1 – 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		

Appendix 2 – 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