PV NATURE

PROJECT IDEA NOTE

Wild Elephant Forest

Zimbabwe

Version 1.4
30 May 2025

Developed by:

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www.wildislife.org

Contents

Overview

Project Title:	Wild Elephant Forest
Location:	Zimbabwe, Matabeleland North, Hwange and Binga Districts
Project description:	The project protects key forest areas within the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA) in Zimbabwe. The forests namely, Panda Masuie, Fuller, Kavira are protected areas under the Forestry Commission. They are primarily on aeolian Kalahari sands which are dominated by Zambezi teak woodlands as well as other habitat types including; mopane woodlands, riverine vegetation and grasslands. The forests are situated in between or adjacent to national parks and are important habitat refugia, as well as being crucial in ecological connectivity in the wider landscape. They harbour a variety of different plant, animal and bird species. Elephants are the keystone species, with lions as the apex predator. An impressive 54 species of large mammals (excluding rodents and bats) are found in the project area, including the charismatic **megafauna** such as *Loxodonta Africana* (Elephant), *Giraffa camelopardalis* (Giraffe), *Syncerus caffer* (Buffalo), *Panthera leo* (Lion) and *Panthera pardus* (Leopard) occur within the forests, in varying densities. The forests provide important resources for communities such as grazing, firewood, honey, access to sacred sites and medical herbs. In addition to being a source of natural resources, the forests are very important to community livelihoods through employment and other income generating activities. The forests and their biodiversity are threatened by poaching, deforestation and excessive fire.
Project Area:	**Project Area** The first phase will concentrate on the three gazetted forests and their immediate neighbours (Project Area) • Panda Masuie Forest: 34 500 ha • Fuller Forest: 20 300 ha • Kavira Forest 29 200 ha Total: 84 000 hectares **Project Region** The second phase could expand to a number of neighbouring communal areas in Hwange and Binga Districts. Estimated potential area 200 000 - 300 000 hectares (Project Region).
Project Coordinator:	Wild is Life

Project Participants:	Project participants: Hwange Rural District Council, Binga Rural District Council, Mvutu Chieftainship, Shana Chieftainship, Saba Chieftainship. First phase: Estimated 300-400 households (Masuwe, Saba, Katete, Jambezi, Chidobe, Mvutu, Nekabandama, Lumbora, Sikobelo, Simangani and Sidinda communities) Second phase: Estimated 1000 - 3000 households
Project Intervention(s):	The main interventions are: 1. Expanding and improving effectiveness of ranger patrols. - Diversified training, equipping with new technology, recruitment and training of new rangers from the community, increased incentives for rangers. 2. Improvement of ranger welfare and expansion of conservation infrastructure. - This is the establishment of better ranger camps, with improved communication, improved ablutions and other facilities. 3. Fire management and control program. Annual burning of fireguards, strips of 30m along outside boundaries of forest areas. To prevent rampant forest fires in the hot season. May also include controlled burning of certain blocks, every 3-5 years to maintain natural fire cycles. Restoration of degraded areas - planting of indigenous trees in areas that are degraded and experiencing erosion 4. Community development programs, led by community needs and focused on • Water infrastructure • Education infrastructure • Livestock health program • Road infrastructure • Provision of suitable agriculture inputs • Improved farming practices (i.e. composting and rotation). Agroforestry and restoration (Phase 2). - This is the targeted planting of nitrogen fixing trees in fields and along contours on community land. The goal is to improve the fertility of the soil and reduce the need for the clearing of fresh fields which causes deforestation and loss of biodiversity. This is one of the main threats to the area and declining soil fertility is a primary driver.
Expected Benefits:	The main benefits of the project are the preservation and or increase of biodiversity across the project area, as a result of interventions that stem drivers of biodiversity loss including poaching, deforestation and fire. The socio-economic benefits to the surrounding communities, will be income, stable employment, learning and training activities, investment into community infrastructure.

	The project has a zero off-take policy in the area. No logging of trees or hunting of animals is permitted. The fire management and water provision strategies will be closely monitored to ensure there are no unforeseen negative impacts from these interventions.
Methodology Design:	Conservation Certificates - (Phase 1) Conservation and Restoration Certificates (if possible) - Phase 2 - Meets at least one KBA requirement regarding Wild dogs, see section 1.2 - Further literature required to see whether it potentially meets other KBA requirements regarding Southern Ground Hornbill and Cheetah - The project area is situated close to or in between two KBA's (Chizarira NP and Hwange NP), and therefore forms an important ecological link between the two. Please state whether the project is focusing on conservation or restoration certificates.
PIN Version:	Version 1.4
Date Approved:	18/6/2025

1 General Information

1.1 Project Rationale

The world continues to face unprecedented biodiversity loss due various factors driven by anthropogenic actions with habitat loss, fragmentation and degradation being the major drivers. The KAZA landscape in Matabeleland North Zimbabwe is no exception, with most of its ecosystems under threat. The Matabeleland North region hosts most of Zimbabwe's biodiversity hotspots and some of the world's iconic protected areas and species. According to the Global Forest Watch, Matabeleland North region had 1.02Mha of natural forest extending 14% of its land area and between 2001 and 2023 the region lost 9.61KHa of tree cover, equivalent to 11% decrease in tree cover. This alone underscores the urgent need to protect the remaining forest for the benefit of biodiversity and local livelihoods. Securing these habitats and the conservation of biodiversity is essential for maintaining ecosystem services and safeguarding human livelihoods living in close proximity to these biodiversity hotspots.

Despite the increasing threat on biodiversity and the importance of biodiversity conservation, a number of ecosystems still remain under protected. Current conservation efforts are often fragmented, with limited funding. The lack of economic incentives for landowners and local communities to conserve biodiversity hinders effective conservation. Since time immemorial, there has always been an extricable link between human livelihoods, development and the environment. For communities to effectively protect the biodiversity, they need to access direct benefits from conservation initiatives. In Zimbabwe, biodiversity protection lags behind mainly due to the shortage in conservation financing. The Zimbabwe Parks and Wildlife Management Authority and Forestry Commission mandated with the protection of wildlife and forests respectively, do not have enough resources to fulfil their conservation mandate.

The project targets three forests within the KAZA Landscape in Matabeleland North namely; Kavira, Fuller and Panda Masuie Forests all managed by the Forestry Commission. The Wild Elephant Forest project will help secure these critical habitats and provide economic incentives for landowners and local communities to conserve and restore critical habitats for endangered and threatened species. This project is important because the forests under consideration are under-protected, and depleted of biodiversity due to anthropogenic factors. This has diminished their value and original purpose, both to local communities, the flora and fauna that inhabit them and the nation at large.

These areas are under-protected due to the socio-economic collapse that the country has faced leading to serious under-funding whereby even rangers and other frontline workers are often not paid promptly or in full. This leads to a demotivated workforce and resultant increase in illegal activities such as deforestation and commercial poaching as evidenced in most of Zimbabwe's protected areas. To achieve effective protection of biological diversity there is need for direct, substantial benefit to accrue to the community and those involved in the protection of biodiversity. Popularly, it is well known that biodiversity conservation is difficult to achieve when there are no direct benefits for the communities living with wildlife.

In addition, the value generated for the Forestry Commission and local communities is limited, and been in decline. The three alternative land uses suitable to these forests are; trophy hunting, logging and tourism. None of these have proved to be successful or resilient enough in generating sufficient funding for their protection, or to derive meaningful benefits to local communities. Currently, philanthropic donor funding is the main driver of activities but the reliability and sustainability of this is uncertain. Therefore the desire to pursue this approach with Plan Vivo.

Communities benefit from the forests in a number of direct and indirect ways such as grazing, firewood, honey, wild foods, spiritual sites and rituals, employment, income and ecosystem services such as

pollination and water catchment. However, all of these benefits can be expanded and improved from their current state, through this program with Plan Vivo.

The forests are very important in terms of connectivity particularly for **megafauna** that have home ranges that extended beyond Hwange National Park. In the case of Panda Masuie, it joins Kazuma Pan National Park to Zambezi National Park, providing functional connectivity for a huge range of species which include; *Loxodonta Africans* (elephants), *Lycon pictus* (wilddogs), *Panthera lio* (Lion) and *Syncerus* caffer (Buffalo). In the case of Kavira Forest it is a proven refuge as part of the increasingly tenuous connectivity between Hwange National Park and Chizarira National Park. Fuller Forest is an important piece of habitat that connects the Matetsi complex of protected areas to the lower Matetsi River.

The forests provide vital watershed protection for a number of rivers in the marginal and dry area. Without protection the Masuwe, Dibangombe and Matetsi Rivers would be severely degraded mainly due to siltation.

The forests are all situated within the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA), the largest Transfrontier Conservation area in the world, and home to more than half the world's remaining elephants. They are also closely linked to other protected areas in the area which include national parks (full protection without settlement, hunting or logging), safari areas (where sustainable consumptive such as hunting is permitted, but no logging or settlement). National Parks and Safari Areas fall under the Parks and Wildlife Act and are administered and managed by the Zimbabwe Parks and Wildlife Management Authority. The forests, on the other hand, allow community access for specified user rights (e.g. grass and firewood collection, bee hives). They fall under the Forest Act and are administered and managed by the Forestry Commission.

The area is extremely diverse and part of one of few habitats in the world that can support substantial numbers of megafauna such as Elephant, Giraffe, Lion, Buffalo, Hippo and many other species including critically endangered species such as African Wild Dog and Southern Ground Hornbill, both of which breed within the project area.

1.1.1 Conservation Projects Justification*

The project qualifies for both a Key Biodiversity Area and Important Plant Area. The project meets the KBA criteria for Wild dogs (*Lyacon pictus;* IUCN Red List Status: Endangered)[1]. The national population is estimated to be: 405 individuals (IUCN, 2012). The project area is estimated to have 22-24 mature adults (camera trap data and physical sightings during annual game counts) which equates to 5.4%-5.9% of the population size. Panda Masuie has an estimated 12-14 animals while Fuller has eight. However, the wild dog population within the forests is highly fluid and varies often given the vast movements of the species. The Panda Masuie Wildlife Population census report of 2024 established that the project area wild dog population also includes at least five (5) reproductive units. This is backed by the Painted Dog Conservation Research Annual Report for the year 2021 which gives a demographic profile of the painted dog population within the adjacent Hwange National park[2]. According to the report, the wild dog population comprises of 120 individuals characterized by 43 adult males, 46 adult females and 31 pups.

[1] Woodroffe, R. & Sillero-Zubiri, C. 2020. Lycaon pictus (amended version of 2012 assessment). The IUCN Red List of Threatened Species 2020: e.T12436A166502262. https://dx.doi.org/10.2305/IUCN.UK.2020-1.RLTS.T12436A166502262.en

[2] Also refer to the Painted Dog Conservation Research Annual Report 2021 for more information on habitat use, dispersal and threats in Hwange National Park.

Plate 1 below is a picture captured from camera traps in Panda Masuie Forest at Giraffes Pan showing 10 adult wild dogs.

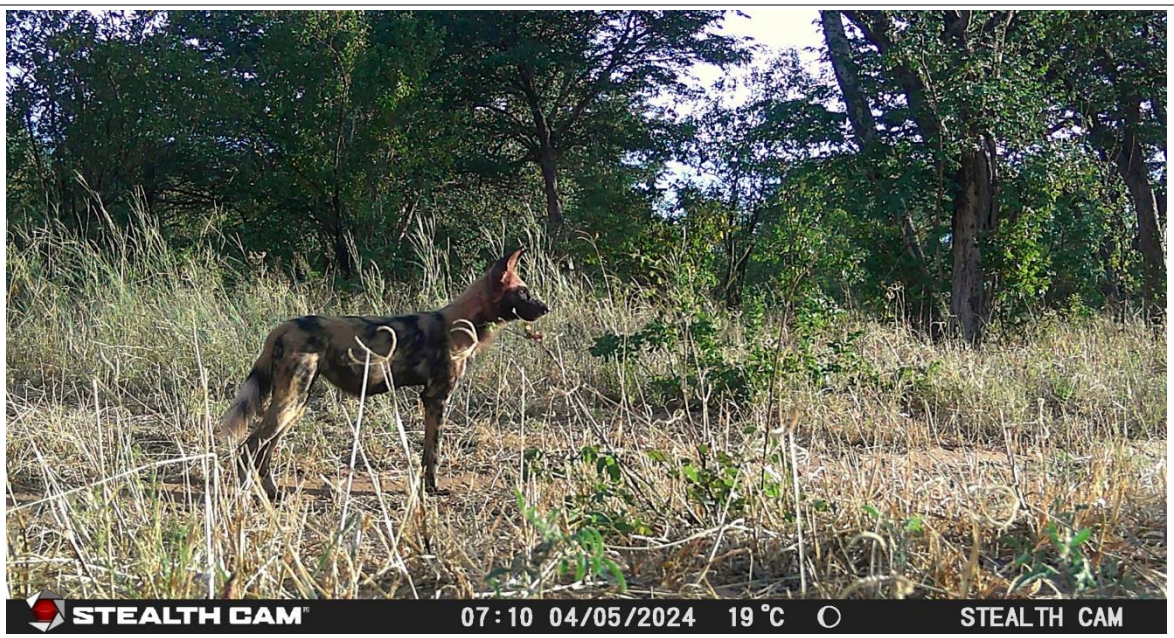

Plate 1: Lycon pictus captured on camera traps in Panda Masuie Forest.

Given the migration patterns of the dogs, it is evident that the population of the adjacent connecting habitats such as Panda Masuie and Fuller Forests comprises of more than 5 reproductive units. Panda Masuie and Fuller forests are important dispersal routes for *Lyaco pictus* thus they are critical habitats important in facilitating gene flow and colonisation[3]. Protecting these forests will increase connectivity between Hwange National and other KAZA National Parks. Wild dogs are regarded as cooperative breeders living in packs of up to 30 individuals and both sexes are known to disperse from their natal pack over distances of 2km to 476Km to find unrelated mates and avoid inbreeding[4]. Sandoval-Seres *et al*.2022 assessed the dispersal of a female wild dog with the KAZA landscape through a GPS collar and they observed that the wild dog moves from Hwange National Park to Chobe National Park (a distance of 430km) through Fuller and Panda Masuie Forests. Thus the two Forest areas provide habitat connectivity and critical habitat for an endangered species. Figure 1-1 below shows the dispersal route of a collared female wild dog.

Recent sightings of *Smutsia temminckii* (Temminck's pangolin) have been recorded in the project area and also confirmed by camera trap data. *Smutsia temminckii* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2019 and it is listed as Vulnerable under criteria A4cd[5]. Plate 2 below shows a picture of a pangolin sighting in the project area. Pangolins are very cryptic animals and because of their crepuscular and nocturnal they are seldom seen. There is however data paucity on the population and demographic structure of the pangolin even in Hwange National Park. There are no documented

[3] Van Der Meer, E. (2011). *Is the grass greener on the other side?: testing the ecological trap hypothesis for African wild dogs (Lycaon pictus) in and around Hwange National Park* (Doctoral dissertation, Université Claude Bernard-Lyon I).

[4]Sandoval-Serés, M. E., Moyo, W., Madhlamoto, D., Madzikanda, H., Blinston, P., Kotze, R., ... & Loveridge, A. (2022). Long-distance African wild dog dispersal within the Kavango-Zambezi transfrontier conservation area. *African Journal of Ecology*, *60*(4).

[5] Pietersen, D., Jansen, R. & Connelly, E. 2019. Smutsia temminckii. The IUCN Red List of Threatened Species 2019: e.T12765A123585768. https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T12765A123585768.en. Accessed on 28 May 2025.

records of the population size, however isolated sightings have been recorded in Hwange and the surrounding forests, including the targeted project areas.

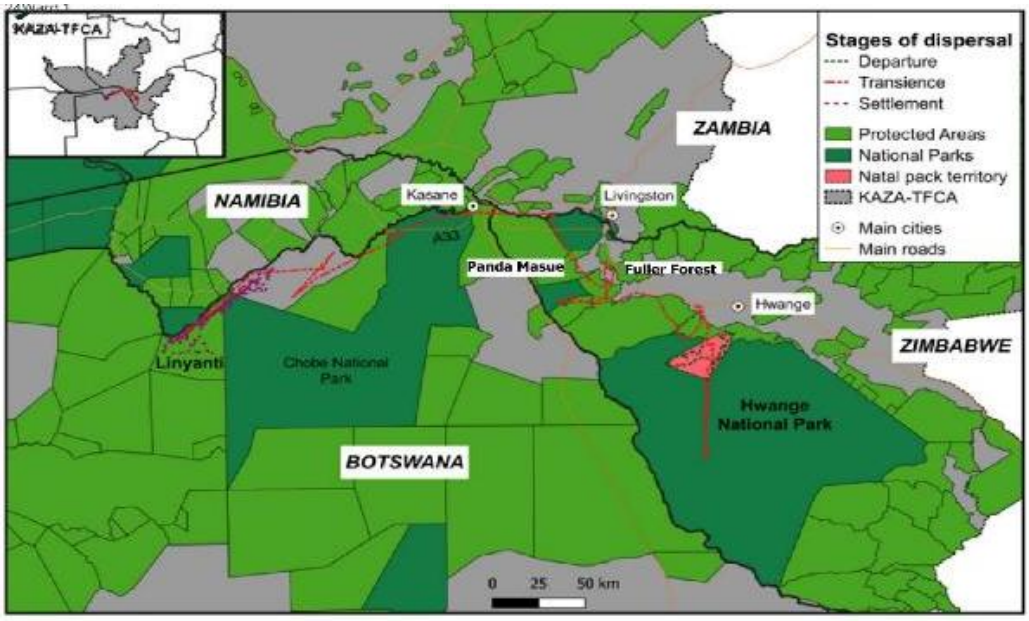

Figure 1-1: Dispersal movement of African wild dog female FEMALE146.02. Which dispersed from Hwange National Park (Zimbabwe to Linyanti (Botswana) through Panda Masuie and Fuller Forests. The maps shows the dispersal route in red (Extracted from Sandoval-Seres et al., 2022).[6]

Plate 2: Smutsia temminckii (Pangolin) sighting in Panda Masuie Forest

Data from the recently deployed camera traps confirms sighting of the *Torgos tracheliotos* (Lappet Faced Vulture); IUCN Red List Status: Endangered*)* (Lappet Faced Vulture)[7]. Plate 3 shows a Wake of vultures

[7] BirdLife International. 2021. *Torgos tracheliotos*. *The IUCN Red List of Threatened Species* 2021: e.T22695238A205352949. https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T22695238A205352949.en. Accessed on 28 May 2025.

scavenging on an elephant carcass captured on camera traps that were recently deployed in Panda Masuie forest. Given the number of individuals in the picture, the project area could also qualify for KBA status criteria for the Lappet Faced Vulture. The global population of the Lappet faced Vulture is estimated at 6500 individuals. More individuals of this species are more likely to be captured with increased time frame for the camera traps. The project area is also known to host the white-backed vulture (*Gyps africanus;* IUCN Red List Status: Critically Endangered*).* The presence of such species of high conservation value the need to secure these habitats for the protection of various species of high conservation value.

Plate 3: A Wake of vultures gathered around an elephant carcass in Panda Masuie Forest. A Torgos tracheliotos (Lappet faced vulture) was captured from the camera traps recently set up in the forest

The project area could also meet the KBA criteria for cheetah (*Acinonyx jubatus;* IUCN Red List Status: Vulnerable*)*). The global population size and number of mature adults is estimated to be 6,517 (Durant et al. 2024)[8]. The Zimbabwean cheetah population is estimated to be between 150-170 individuals (ZPWMA, 2018). A nationwide survey conducted between 2013 and 2015 revealed that the cheetah population in Zimbabwe had declined by 90% from a population of 1,500 to an estimate of 150-170 individuals[9]. The survey also identified three central cheetah populations in Zimbabwe which are; the Zambezi Valley Population, the Hwange-Matetsi-Victoria Falls population and the Lowveld population. The Hwange-Matetsi-Victoria Falls population is considered the most viable as it is connected to the other cheetah populations in Botswana, Namibia, Zambia and Angola through the KAZA TFCA. The targeted forests, Panda Masuie, Kavira and Fuller forests are key connectivity habitat mosaics within the KAZA landscape. Recent estimates (2023) indicate that the cheetah population has faced a further decline from 150-170 to only 83 adult individuals[9]. Based on camera trap data, Panda Masuie has a minimum of five cheetah and it seems reasonable to assume that Fuller could have two individuals, thus the project area has a total of 7 mature individuals (8% of the national population and 0.1% of the global population). It is assumed that

[8] Durant, S.M., Groom, R., Ipavec, A., Mitchell, N. & Khalatbari, L. 2024. *Acinonyx jubatus* (amended version of 2023 assessment). *The IUCN Red List of Threatened Species* 2024: e.T219A259025524. https://dx.doi.org/10.2305/IUCN.UK.2024-1.RLTS.T219A259025524.en. Accessed on 09 May 2025.

[9] Cheetah Conservation Project Zimbabwe (2023). Progress Report

we the deployment of more camera traps in the project areas, more numbers are likely to be recorded which could trigger KBA status. Plate 4 is a picture of a cheetah that was capture on one of the camera traps.

Plate 4: Acinonyx jubatus (Cheetah) capture on camera in Panda Masuie Forest.

The project will improve forest protection and management and, with the engendering of an elevated conservation ethic in the neighbouring communities, these interventions should see wild dog and cheetah numbers rise.

In addition, the project area and region is situated in between two national parks classified as KBAs (Hwange NP and Chizarira NP)

The project area also supports significant populations of elephants *(Loxodonta Africana*). *Loxodonta africana* (African Savanna Elephant) has most recently been assessed for *The IUCN Red List of Threatened Species* in 2020. *Loxodonta africana* is listed as Endangered under criteria A2bd[10]. The African Elephant Status Report 2016 estimated a continental population of 415,428 (+/- 95% C.I. 20,111) for both African Savanna and African Game counts conducted in Panda Masuie Forest alone estimate the population to be in excess of 500. Plate 5 below is a picture of elephant sightings in the project area, Panda Masuie Forest.

[10] Gobush, K.S., Edwards, C.T.T, Balfour, D., Wittemyer, G., Maisels, F. & Taylor, R.D. 2022. Loxodonta africana (amended version of 2021 assessment). The IUCN Red List of Threatened Species 2022: e.T181008073A223031019. https://dx.doi.org/10.2305/IUCN.UK.2022-2.RLTS.T181008073A223031019.en. Accessed on 28 May 2025.

Plate 5: Loxodonta africana (Elephant) sightings in Panda Masuie forest. Indications of a bigger elephant population in the project area.

Southern Ground-hornbill (*Bucorvus leadbeateri*) has most recently been assessed for *The IUCN Red List of Threatened Species* in 2016. *Bucorvus leadbeateri* is listed as Vulnerable under criteria A4bcd[11]. The actual population of the species has not been quantified, and no data on population numbers are available for Zimbabwe[12]. However, Chiweshe (1994) recorded a total of 354 birds in protected areas, commercial farms and communal lands. In another study, a total of 2218 birds were recorded in 686 separate group sightings (Chiweshe, 2007). The study also revealed that the highest productivity was in communal lands, with 32% of the birds seen being young while the protected areas and commercial farmlands had 17% and 20% respectively. Plate 6 shows a sighting of the southern ground hornbill in Panda Masuie forest.

Plate 6: Bucorvus leadbeateri (Southern Ground Hornbill) captured on camera in Panda Masuie Forest

[11] BirdLife International. 2016. Bucorvus leadbeateri. The IUCN Red List of Threatened Species 2016: e.T22682638A92955067. https://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22682638A92955067.en. Accessed on 29 May 2025.

[12] Chiweshe, N., 2007. The current conservation status of the Southern ground hornbill Bucorvus leadbeateri in Zimbabwe.

The project areas has a significant number of Giraffes. Giraffe *Giraffa camelopardalis* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2016. *Giraffa camelopardalis* is listed as Vulnerable under criteria A2acd[13]. The global Giraffe population is estimated to 68,293 mature individuals and is currently experiencing a decline. The population in Hwange National park is estimated to be 1600 individuals (2% of the global population), declining from a population 14 500 in the last 25 years. Plate 7 below shows 7 mature adults capture on camera traps in Panda Masuie Forest.

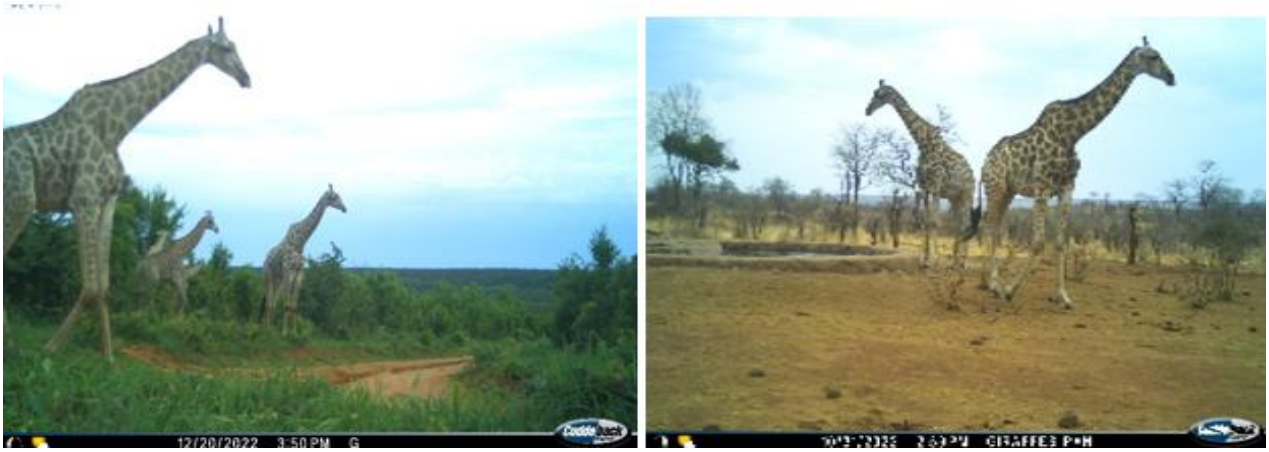

Plate 7: Giraffa camelopardalis (Giraffes) captured on camera in Panda Masuie Forest

The project areas has a diverse carnivore population which includes; lion, leopard, hyena and wild dogs, signifying a healthy ecosystem. Leopard *Panthera pardus* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2023. *Panthera pardus* is listed as Vulnerable under criteria A2cd[14].

Plate 8: Panthera pardus (Leopard) captured on camera in Panda Masuie Forest.

[13] Muller, Z., Bercovitch, F., Brand, R., Brown, D., Brown, M., Bolger, D., Carter, K., Deacon, F., Doherty, J.B., Fennessy, J., Fennessy, S., Hussein, A.A., Lee, D., Marais, A., Strauss, M., Tutchings, A. & Wube, T. 2018. *Giraffa camelopardalis* (amended version of 2016 assessment). *The IUCN Red List of Threatened Species* 2018: e.T9194A136266699. https://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T9194A136266699.en. Accessed on 29 May 2025.

[14] Stein, A.B., Gerngross, P., Al Hikmani, H., Balme, G., Bertola, L., Drouilly, M., Farhadinia, M.S., Feng, L., Ghoddousi, A., Henschel, P., Jhala, Y.V., Khorozyan, I., Kittle, A., Laguardia, A., Luo, S.-J., Mann, G., Miquelle, D., Moheb, Z., Raza, H., Rostro-García, S., Shivakumar, S., Song, D. & Wibisono, H. 2025. Panthera pardus (amended version of 2024 assessment). The IUCN Red List of Threatened Species 2025: e.T15954A274970607. Accessed on 29 May 2025.

Lion *Panthera leo* has most recently been assessed for *The IUCN Red List of Threatened Species* in 2023. *Panthera leo* is listed as Vulnerable under criteria A2abcd[15]. The last game count carried out in 2024 in Panda Masuie Forest recorded a total of ten lions.

Plate 9: Panthera leo (Lion) captured on camera in Panda Masuie forest.

As an IPA, the forests are an important stronghold for Zambezi Teak trees (*Baikiaea plurijuga*). The project may fill the criteria of being >5% of the national population. The Zambezi Teak is near threatened and a slow growing hardwood tree endemic to the Kalahari Sands of the region. In addition these forests protect other important tree species such as Manketti/Mongongo (*Schinziophyton rautanenii*) and Mukwa (*Ptercarpus angolensis*), whose viability is being threatened in unprotected areas. Plate 5 below shows the general outlook of the remaining intact forest clouds in the targeted forest areas.

Plate 10: General outlook of vegetation structure in one of the target forests, Panda Masuie Forest. (Photo credits: Donal Boyd)

[15] Nicholson, S., Aebischer, T., Asfaw, T., Bauer, H., Becker, M., Bertola, L., Breitenmoser, U., Carlton, E., Fraticelli, C., Henschel, P., Hunter, L., Laguardia, A., Loveridge, A., Ndiaye, M., Roy, S., Sogbohossou, E., Scott, C., Strampelli, P. & Venkataraman, M. 2025. Panthera leo (Green Status assessment). The IUCN Red List of Threatened Species 2025: e.T15951A1595120251.Accessed on 29 May 2025.

Plate 11 below shows the general vegetation structure and composition at one of the Rager bases on the shores of Lake Kariba in Kavira Forest.

Plate 11: Ariel view of a ranger base on Lake Kariba in Kavira Forest

Fuller Forest mostly dominated by teak woodland vegetation, particularly the Kalahari sand teak forests common in that North West Matabeleland. Baikiaea plurijuga is the principal upperstorey species. The dorminant vegetation is also associated with occurence of Pterocarpus angolensis, Schinziophyton rautanenii, Guibourtia coleosperma, Afzelia quanzensis, Combretum collinum, and Erythrophleum africanum. All these species are important for community livelihoods as the are commonly harvested for **construction, fencing, commercial timber, fuel-wood, and wood for implements**. However, harvesting practices have impacted the density and stability of many species, raising concerns about sustainability. The implementation of the project will ensure that the remaining intact teak forests will be protected. Plate 12 shows an Ariel view of the forest with a vlei utilized by wildlife particularly in the dry season.

Plate 12: Aerial view of Fuller Forest showing a vlei, a critical grazing area for wildlife.

1.2 Project Interventions

Table 1 – Project Interventions

Intervention Type	Project Intervention	Expected Benefits
Conservation	Expansion and improvement of ranger patrols, as well as ranger welfare.	Reduced loss of biodiversity. Increase of species numbers Reduced poaching of endangered/threatened species (i.e. lion, leopard, pangolin, and elephant). Reduced deforestation. Maintenance and enhancement of ecological connectivity. Maintenance and improvement of river catchment areas

		Improved morale, leading to greater protection of biodiversity. Increased community benefits through training and employment of rangers leading to increased income and responsibility.
Conservation	Fire management and control (fireguards and controlled burning)	Reduced hot (late season) destructive fires. Reduced loss of biodiversity Community benefits through employment and training, leading to increased income and responsibility. Community benefits through reduced human wildlife conflict due to greater availability of food in forest.
Community well-being	Community Development Construction of community led infrastructure program. Based on experience priority areas likely to be: Water infrastructure, education infrastructure, community health, livestock health, road infrastructure.	Improved community welfare through better sanitation leading to improved community health through water interventions. Expanded community income opportunities through water provision such as market gardening, tree orchard establishment Improvement of education and child welfare. Increased income due to increased survival of livestock Improved community health and well-being through support of existing health facilities. Improved access to market, education and healthcare

		through improved road infrastructure. Reduced pressure on biodiversity and natural ecosystems due to survival or income pressure from communities.
Community well-being	Community Empowerment Provision of training on improved farming practices, livestock husbandry, provision of suitable inputs i.e. seed. Training of vocational skills.	Increased income from improved agriculture and animal husbandry. Increased food security Increased disposable income, leading to positive impact on health and education access.
Restoration	Restoration	Reduced erosion and siltation of rivers. Improved cattle health and community income
Restoration	Agroforestry - Targeted tree planting in fields and along contours. Primary focus on nitrogen fixing indigenous tree species i.e. *Acacia* species and *Faiderbia albida* (formerly classified as *Acacia albida*).	Increased soil fertility Increased food security Increased income Reduced deforestation Reduced biodiversity loss. Maintaining/expanding ecological connectivity

1.3 Project Boundaries

Table 2 Project Boundaries

Location:	Zimbabwe, Matabeleland North Province. Binga and Hwange Districts.
Geographic Coordinates:	Enter Latitude and Longitude for the Project Area. - Sent as shape files. Panda Masuie Forest: 18°07'13"S 25°37'25"E Fuller Forest: 18°07'37"S 25°55'08"E Kavira Forest: 17°57'38"S 27°01'27"E
Project Region(s):	Proposed: Matabeleland North Province
Project Area(s):	Panda Masuie: 34 500 ha, Fuller Forest: 20 300 ha, Kavira Forest 29 200 ha **Total: 84 000 hectares**
Protected Areas:	Within project area: Panda Masuie Forest, Fuller Forest, and Kavira Forest. Adjacent to project area: Zambezi National Park, Kazuma Pan National Park, and Matetsi Safari Area, Units: 1, 6 and 7.

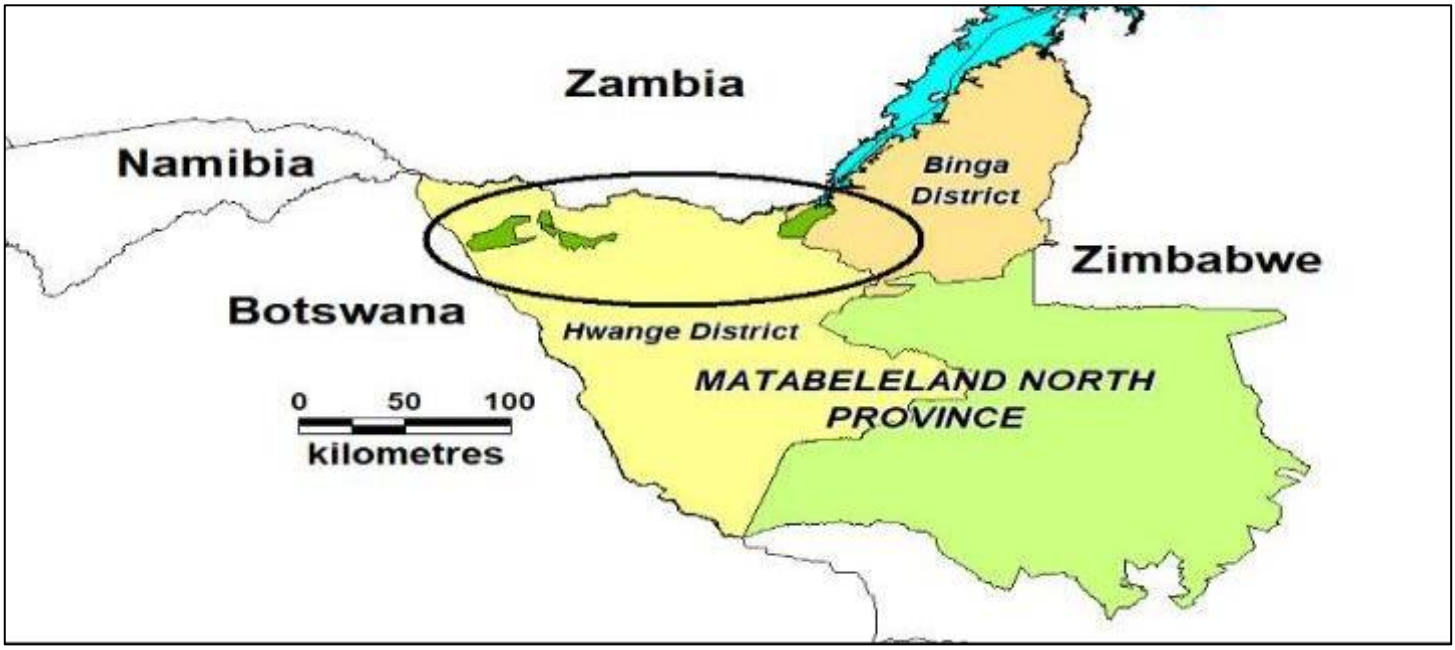

Figure 1-2: Project location map

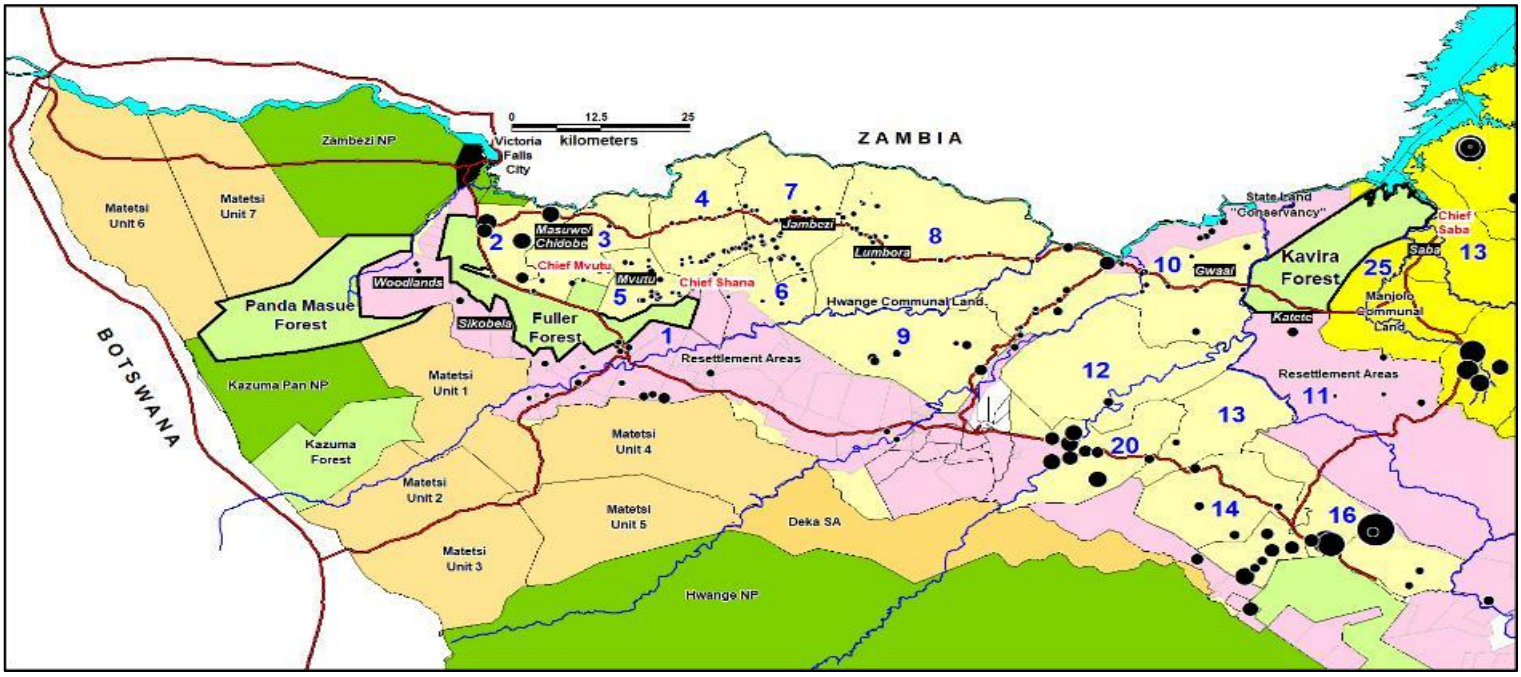

Figure 1-3: Target project areas showing the project beneficiaries and surrounding land uses

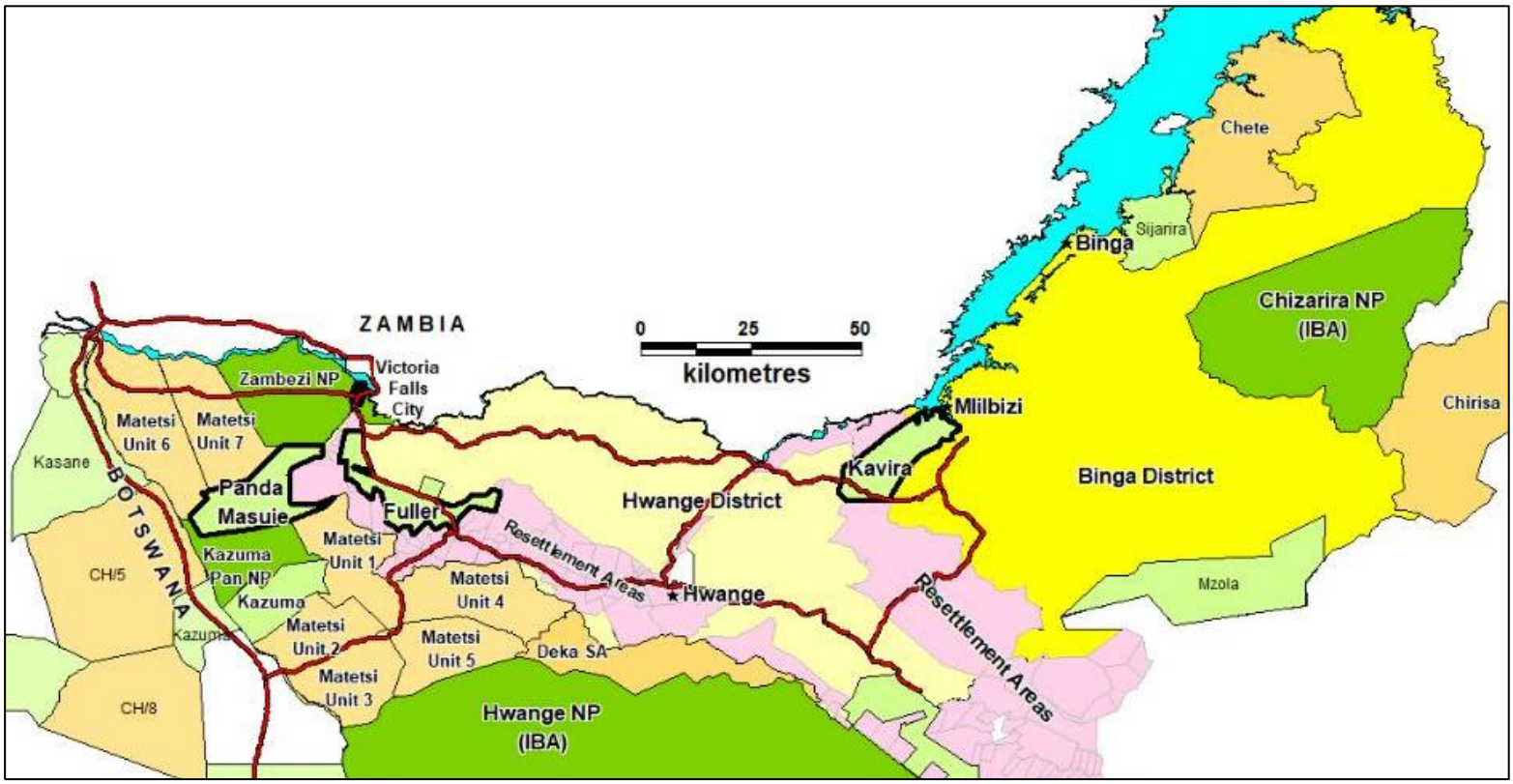

Figure 1-4: Target project areas regional perspective

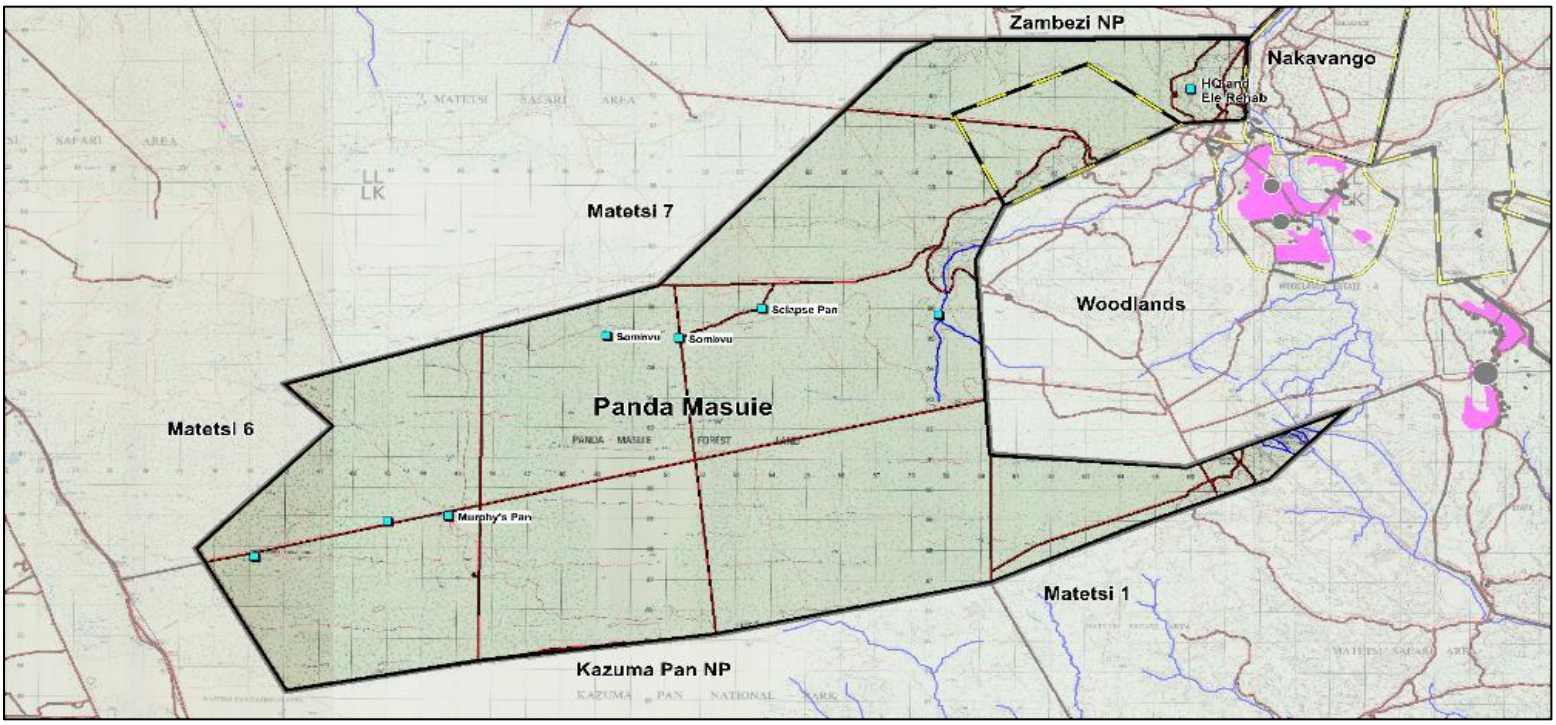

Figure 1-5: Panda Masuie forest block

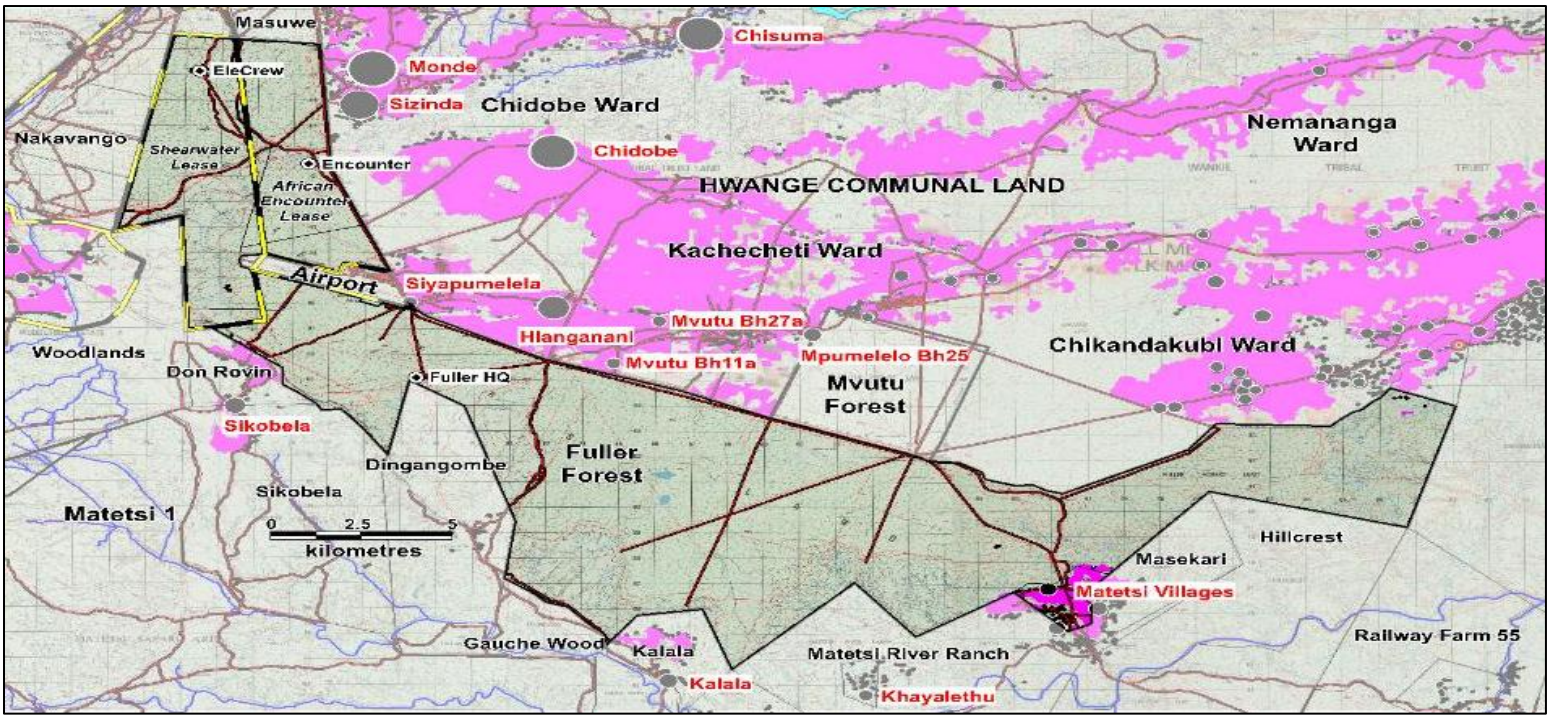

Figure 1-6: Fuller Forest block and general topography of the forest

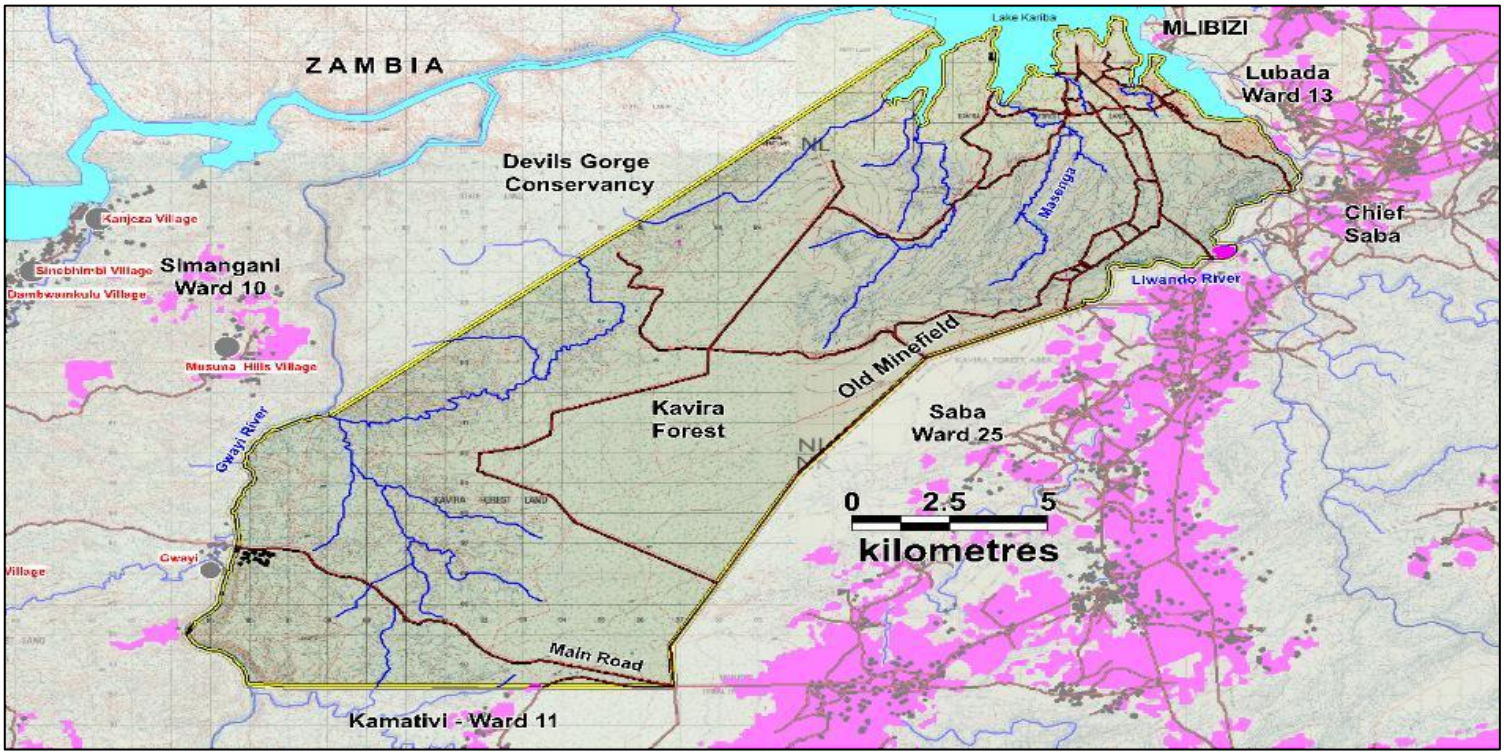

Figure 1-7: Kavira forest topographic setting.

1.4 Land and Management Rights

The three forest areas are all state forests managed by the Forestry Commission and belonging to the citizens of Zimbabwe.

All forests are under either lease agreements (Panda Masuie and Kavira) or under a Co-Management Agreement (Fuller) between Wild is Life and Forestry Commission. Communities are able to legally access and use the forests for a variety of non-destructive uses (e.g. dead firewood collection, livestock grazing, honey collection) and communities such as Masuwe, Saba, Katete, Jambezi, Chidobe, Mvutu, Nekabandama, Lumbora, Sikobelo, Simangani and Sidinda do access these forests for these purposes. The functionality of this could be improved and this would help both the communities and forest management in the longer-term.

This utilisation is higher where communities are settled closer to the forest (Kavira and Fuller) and also where lion and hyena numbers are low (Kavira and Fuller).

Through Forestry Commission's existing structures, we aim to formalise these arrangements with communities by resuscitating the simple permit system that is provided for in the Forest Act, but is no longer functioning.

The project aims to maintain and expand user rights, so that communities maintain their rights and benefits from the forest.

2 Stakeholder Engagement

2.1 Stakeholder Identification

Primary Stakeholders:

Forestry Commission. Forestry Commission is the national authority for forests in Zimbabwe. They are the owners of the forests which are state forests. They play an important role, especially with regards to anti-poaching (Forest Protection Unit (FPU) and fire management. They are responsible for the leases and co-management agreements that allow Wild Is Life to operate.

Local Communities: Saba, Katete, Jambezi, Chidobe, Mvutu, Nekabandama, Lumbora, Sikobelo, Simangani and Sidinda communities.

These are all local communities who reside close to the project area and will be voluntary project participants with the option to opt in or out of the project. All of the above communities fall under the Mvutu, Shana and Saba chieftainships, as the traditional authority. The Community Boards are an important face of, and linkage to, the individual community members. In phase 2 the number of local stakeholders voluntarily participating on the project is expected to increase significantly as more communities are brought on board. Table 1 shows the various wards that share a boundary with the targeted forest areas. However, more accurate data will be collected at the village level during the PDD stage. Although this shows information at the ward level, the initial implementation of the project will focus on the immediately affected villages with a total of 300-400 households. Regardless of the focus at village level, the councillors for the listed wards will be involved in the project planning and implementation representing their respective villages.

Table 3: Population structure for the wards surrounding the targeted project areas

District	Ward Name	Ward #	M	F	Total	# of HH	Avg. HH size
Hwange	Matetsi (Woodland & Sikobela)	1	2,529	2,487	5,016	1,242	4.0
	Chidobe	2	3,141	3,039	6,180	1,578	3.9
	Masuwe	3	1,786	1,883	3,669	926	4.0
	Chikandakubi (Mvutu)	5	1,219	1,431	2,650	670	4.0
	Jambezi	7	1,628	1,748	3,376	864	3.9
	Gwaai	10	2,111	2,378	4,489	1,249	3.6
	Katete	11	1,767	1,980	3,747	926	4.1
Binga	Mlibizi	13	2,154	2,573	4,727	1,291	3.7
	Saba	25	1,778	2,168	3,946	923	4.3

Source: Zimbabwe household Census Report 2022

Secondary Stakeholders:

Zimbabwe Parks and Wildlife Management Authority - National Authority for wildlife and national parks. The Authority has the mandate for the management and protection of all wildlife in the country and needs to be fully consulted as it will also be a beneficiary of outcomes resulting from the project.

District Authorities - Hwange and Binga Rural District Councils - Rural District Councils (RDCs) in Zimbabwe play a crucial role in natural resources management and serve as an appropriate authority for various functions which include developing and implementing forest management plans and issuing of permits.

Other Stakeholders

Veterinary Department. - State veterinary authority. Responsible for permits and play a role in providing supplies for livestock health.

Agritex. Agricultural extension services, Zimbabwe Republic Police (ZRP). Law and Order. Office of the President and Cabinet (OPC) - Oversight.

Tourism Operators: Fuller Forest has several leases with tourism stakeholders in the northern section. These operators would need to be consulted and advised on project activities.

Wild is Life will be the project coordinator and is the leaseholder for the three forests.

2.2 Project Coordination and Management

The project coordinator organisation that will take responsibility for the development and management of the project is Wild is Life.

Wild is Life has been operational in wildlife rescue and rehabilitation and rewilding, ecotourism, education, landscape conservation in Zimbabwe since 1998. The organisation is a family run organisation, founded and run by the Danckwerts family, together with more than 100 people making up the team, with a wide range of experience and skillsets.

The Danckwerts family has been in Zimbabwe for five generations and has been a pioneer and leader in terms of respectful and real engagement with local communities. This was started in the 1930's, long before it was required, or even accepted, in the society of the time. This participation and contributions to the community for the past 90 years is the main reason why Wild is Life is still headquartered on Chedgelow Farm, despite the land reform program in Zimbabwe.

Forestry Commission is the landowner and will play an important role in the project, through conservation extension services, engaging with communities, providing law enforcement and other activities, including administration through the Forest Act.

Hwange and Binga Rural District Councils will play an important role in engaging with communities and the development and maintenance of community infrastructure.

The Mvutu, Shana, and Saba Chieftainships will play an important role in communicating and engaging with communities, guiding development and spiritually sanctifying project activities.

A community board which also includes the local leadership and ward councillors will be set-up and will be there to represent the interests of local communities, make decisions about project design and implementation and oversee the distribution of benefits. The community board will promote community led conservation. The board will monitor project effectiveness and evaluate outcomes to ensure that conservation objectives are met.

It is envisioned that the biodiversity monitoring will be guided by Plan Vivo, but can be implemented in-house by the Wild is Life team, who already have experience in camera trapping, vegetation mapping, acoustic monitoring, management of SMART systems etc.

The Wild is Life team in the forests are made up almost exclusively by people from the surrounding communities and this includes management roles.

Table 4 Responsibility for Project Coordination and Management Functions

Project Coordination and Management Function	Responsible Party/Parties
Stakeholder engagement during project development and implementation	Wild is Life (WIL) Forestry Commission (FC)
Ensuring conformance with the Plan Vivo Biodiversity Standard (PV Nature) and compliance with applicable policies, laws and regulations	WIL
Developing technical specifications, land management plans and project agreements with project participants	WIL FC Community Boards (CBs)
Ensuring that the PDD is updated with any changes to the project	WIL
Registration and recording of land management plans, project agreements, and sales agreements	WIL FC CBs
Managing project finances and dispersal of income to project participants as described by the benefit sharing mechanism	WIL
Managing Plan Vivo Biodiversity Certificates in the Plan Vivo Registry	WIL
Preparing annual reports and coordinating validation and verification events	WIL
Securing certificate sales and other means of funding the project	WIL
Assisting Project Participants to secure any legal or regulatory permissions required to carry out the project	WIL FC CBs

Providing technical assistance and capacity building required for project participants to implement project interventions	WIL FC
Monitoring progress indicators, socioeconomic indicators and climate indicators and providing ongoing support to project participants	WIL
Measurement, reporting and verification of biodiversity benefits	WIL

2.3 Project Participants

Phase 1 does not have communities within the project area, except a small settlement inside Kavira Forest (Katete). The voluntary project participants are selected on the basis of their proximity to the project area. The villages which are adjacent and nearest to the project area will be immediate project beneficiaries.

However, given the village populations which maybe too small, most of the beneficiaries will come from the various wards within the project region which is proposed to be Hwange, Binga and Lupane Districts. These communities include, but not limited to: Masuwe, Saba, Katete, Jambezi, Chidobe, Mvutu, Nekabandama, Lumbora, Sikobelo, Simangani and Sidinda - all of which the project coordinator has existing relationships with.

Phase 2 will have many communities within the project area, who reside in the communal areas. This needs to be defined in discussion with Plan Vivo as the areas are very large, yet split into different wards.

Therefore, most of the project participants will be Type 1.

Table 1: Project Participants

Participant	Type	Project Phase	Relevant Communities	Brief Overview (Impact, Influence and role) Benefit Sharing Mechanism?
Ward 1 - Hwange	1	1	Masuwe, Sikobela	Approximately 130 households in northern area
Wards 2, 3, 4, 5, 6 and 7 - Hwange	1	1	, Mvutu, Lumbora, Jambezi	Approximately 20,000 people in 3,800 households.
Ward 10 - Hwange	1	1	Simangani	Approximately 4,500 people in 1,400 households
Wards 13, 25 - Binga	1	1	Saba,	Approximately 9,000 people in nearly 2,000 households

Participant	Type	Project Phase	Relevant Communities	Brief Overview (Impact, Influence and role) Benefit Sharing Mechanism?
Wards 8, 9 - Hwange	1	2	Nekabandama, Sidinda	

2.4 Participatory Design

The proposed participatory process, following approval by Plan Vivo, will be along the same lines that all previous community projects and initiatives have been implemented so far which emphasise voluntary participation and transparency . Wild is Life has been working with communities in this area since 2016 and the relationship has been one characterised by community participation and open and transparent communication. The approach has always been a listening one, listening to the needs and challenges of the communities and thereafter co-designing interventions that are feasible and not environmentally negative.

Initially, meetings are held at communal meeting places within communities to facilitate community participation in planning and ensuring that their voices are heard. Together with the traditional elders (chiefs and village heads). Elders are asked to present challenges that that they face or issues they have with the project or Forestry Commission and Wild is Life. Meeting minutes are taken and approved by all parties. Usually a political representative is also present, usually in the form of the elected ward councillor.

Thereafter, a survey is conducted at household level. This has been done successfully in past and requires the elders blessing. During this a survey is conducted of each household within the community. Elders, women and even children are encouraged to participate in the household surveys if they are willing. The results are kept anonymous.

The data is then collated and presented back to the traditional leadership for further discuss of which approach to take and what the priorities are.

From our experience, this method is preferable as it is culturally appropriate by first approaching the traditional leaders and elected officials, and then is compared with the grassroots household level.

Encouragingly, surveys done in the past have shown very strong correlation in needs and challenges articulated by the leadership, with those of the grassroots household level.

Occasionally, and when needed, larger meetings are held whereby all members of the village are invited to attend the meeting and voice any concerns and share ideas. However, these can be more tedious and less productive, but are necessary in some instances.

This participatory approach will be used during the development of the PDD to ensure that project interventions reflect community thinking and remain real, world to them. It will also assist with the development and honing of the benefit sharing mechanisms. It also bolsters the free, prior and informant consent component of the project design (see section 2.5)

2.5 FPIC Process

This process will follow the requirements of Plan Vivo.

In principle though, the process should involve both political leadership (elected councillors) and traditional leadership (chiefs and headmen). The method that will be developed will take into account any Zimbabwean legal and advisory guidance for dealing with communities. Care will be taken to avoid capture of benefits by elites and transparency is seen as being vital to ensure that does not occur. As outlined in the previous section (participatory design) WIL already has an open method of dealing with communities to ensure that their views are aired. It will be vital to ensure that they also believe that they are included in project design and that the project benefits are valid and reflect their wishes. A three step plan is proposed for the FPIC process which recognises the village and district level political structures. Community structures start from the grassroots which the existing Village Development Committees (VIDCOs) which are mainly made up of the local village leadership. From the VIDCOs there is the Ward Development Committee (WARDCO) which represents the interests of the communities at council level. The WARDCO are led by the elected councillor who reports to the Rural District Council. The Rural District is led by the District Development Coordinator (DDC), a political position, who oversees developments in the respective districts. The DDC is also responsible for the coronation of Traditional Chiefs. Therefore, the three step plan involves first engaging with the DDC who coordinates all development activities in the district and also communicates with the Traditional Chiefs. Once permission has been granted, the next phase of engagement will be the traditional chiefs and then lastly the village. At the village level, group meetings will be conducted followed by individual household consultations.

The meetings are proposed to take place at village level and will be open to all members. Prior communication will be made and the village leaders will be the hosts and chairs of the meetings.

Furthermore, a grassroots survey at household level is also needed so that people can feel free to speak openly and share their concerns and ideas in a private way.

A grassroots survey has already been completed for Masuwe, Mvutu and Sikobelo communities in 2018 and this will be used as a learning process for the PDD.

3 Project Design

3.1 Biodiversity Baseline

Without the proposed combination of interventions, the forests will all be negatively affected. There is some variation here, but all project areas face common threats of: bush meat poaching, ivory poaching, or other poaching such as for traditional or Chinese medicine. The threat of bush meat poaching is highest in Fuller and Kavira due to their proximity to settlement. The threat of ivory poaching is high across all forests. Elephants will be targeted for their ivory and they will either be killed and/or migrate out the area due to their strong perception of safety. The forests are exposed due to their proximity to Zambia across the Zambezi River where traditionally the ivory poachers come from. In addition, Panda Masuie is close to Botswana.

Other mammal species will be widely targeted and killed either for subsistence or more of a treat for commercial meat purposes. The practice of snaring is highly indiscriminate and affects all mammal species including highly endangered species such as Wild dogs.

Wire is easily available and snaring can and will decimate the mammal populations within the area without intervention. This is a problem across all of the forests and worse in areas close to settlements

or roads. The project will improve the existing roads within the protected areas, many of which are overgrown, especially in Fuller and Kavira Forests. It is unlikely that fresh roads will be cut, as the current road network would be sufficient if the quality is improved and maintained. The maintenance of roads is a crucial and resource intensive activity but vital to ensure proper protection across the forests.

The monitoring of these roads will be done by the ranger team, and access to the public is restricted.

Further, a growing threat to the biodiversity is targeted poaching for traditional medicine. Vultures, the highly endangered Southern Ground Hornbill and Pangolin are particularly threatened by this, as well as predators such as lions and leopards (the latter are also threatened by retaliatory killing in response to livestock deaths).

As far as deforestation goes, the threat is highest in Kavira where it is already taking place for both agriculture and hardwood timber.

The project area is known to be a water stressed region and water scarcity influence the movement of megafauna particularly megafauna into surrounding areas which include communal areas with the consequence of increased human-wildlife interactions and conflict. This is exacerbated in the dry season due to the fact that most of the waterholes are seasonal, holding water for a small portion of the year. Wild Is Life is already actively ameliorating the situation by improving water supply in the forest areas through the installation of solar-powered boreholes to ensure consistent water supply. Plate 4 shows a solar powered borehole in Panda Masuie Forest which is some of the actions implemented on the ground to address water scarcity issues in the project areas.

Plate 13: Water supply through solar-powered boreholes for consistent water supply even in the dry season

Without intervention, there will be game water supply shortages, widespread fires, especially in areas close to agriculture. Farmers burn their maize stover usually in September in anticipation of the rains. These fires often spread and occur at the hottest and windiest time of the year often resulting in substantial damage to the forests. In areas neighbouring the project area, where fire has occurred more frequently than natural fires, the habitat has noticeably changed from Savannah woodland to scrubland, making it less diverse for most species, especially affecting birds and large mammals. A historical

assessment of burning frequency will be carried in conjunction with the Forestry Commission, with additional use of remote sensing data. This will be used to devise a robust fire monitoring and habitat programme to assess fire impact over the project lifespan. If required, rotational controlled burns will be carried out using best practice methodology (3-5 years on average), but only after an in-depth assessment. Controlled burns will be set early in the season to avoid hot and less controllable fires. The project will move from an uncontrolled burning regime to a controlled burning regime with prevention of fires as the initial step.

Species of concern:

Mammals: Elephants, wild dog, leopard, lion, cheetah, pangolin, giraffe, buffalo, sable.

Birds: Southern Ground hornbill. Kori Bustard, Lappet-faced and white-back vultures.

Main habitat types: Teak forest/woodland. Mopane woodland, riverine forest, grassland, lakeshore/floodplain.

3.2 Socioeconomic Baseline

All local stakeholder groups are threatened by poverty primarily due to limited economic opportunities, poor soils and unreliable rainfall patterns. In some cases, wildlife threatens people's livelihoods through crop raiding or predation.

The main value for people living in the area is livestock, particular cattle and goats. The grazing is good in most areas and well suited. To rearing cattle and goats, as well as chickens and guinea fowl. However, lack of veterinary support services and difficulty in accessing the market diminishes the potential of this value.

Programs to be implemented through this project will improve access to grazing, veterinary services and the market, and this will enable greater food and financial security.

In addition, the substantial employment opportunities to be created through the project and supporting services will have a huge impact in an area where stable income and formal employment is very low. The project will aim to generate equitable employment opportunities for both man and women which will also help in empowering women and addressing historical gender imbalances. Wild is life is already actively creating opportunities for the communities surrounding Panda Masuie Forest where they currently have active operations. Plate 3 shows how both men and women are actively involved in the protection of wildlife.

Plate 14: Rangers deployed for the protection and monitoring of illegal activities in the forests

Lastly, improvement and protection of ecosystem services primarily watershed, pollination and soil quality will improve food security and income. The proposed methods for human-wildlife conflict mitigation such as chilli bombs and beehive fences will also provide alternative income generating activities for the communities who in previous years could not derive any tangible benefit from

conservation activities. Organic honey and chilli are in high demand and the implementation of such projects plus improved road access and market linkages will generally improve the livelihoods of the community members, particularly women who disproportionately experience the impacts of biodiversity loss and climate change. Various trials of chilli use in conflict mitigation and beehive fences have been tested in various communities in Zimbabwe such as the Mavuradonha Wilderness Area and Muzarabani communities living in close proximity to the area with promising results for both Human-elephant conflict and livelihood improvements.

Plate 15: Chili as a mechanism for human wildlife conflict mitigation also has got potential opportunities as an alternative generating activity for the communities

3.3 Environmental Baseline

Being a remote area there is relatively little detailed information on the environment and the following description is from an amalgamation of maps, reports and publications.

Natural Regions: The area is classified as Region 4 and 5, with 5 being found on the lower ground around Kavira Forest. Natural Regions are established on the basis of rainfall, soil types and vegetation, amongst others. Region 5 is generally considered unsuitable for crop production because of the uneven topography and poor soils[16]. Region 4 is also considered to be unsuitable for crop production except for some drought-resistant crop varieties of sorghum, millet and maize.

[16] Mugandani, R., Wuta, M., Makarau, A., & Chipindu, B. (2012). Re-classification of agro-ecological regions of Zimbabwe in conformity with climate variability and change. *African crop science journal*, *20*, 361-369.

Soils: Panda Masuie and Fuller Forests are on Aeolian Kalahari Sands which are generally poor and well drained. Kavira Forest is underlain by Regosols which are generally poor, very shallow and overlie weathered rock.

Rainfall: There is a rainfall gradient from west to east with higher rainfall in west (700-800 mm/annum; Panda Masuie and Fuller) decreasing to 500-600 mm annum in the east (Kavira). Rainfall is erratic and droughts are common[17]. Climate change models predict increasing temperatures coupled with more severe droughts and generally decreasing rainfall[8]. Figure 3-2 below shows the annual precipitation trends of the project area.

3.4 Project Logic

Table 5 Initial Project Logic

	Description	**Assumptions/Risks**
Outcomes – Intended overall project aim		
Biodiversity Benefit	**<u>Increase of overall floral, avian and mammalian diversity.</u>** Increased patrols within the project area, through recruitment and training of rangers from the local community, will lead to a greater visible presence in the forests, which will act as a deterrent against illegal activities, such as ivory poaching. Wild is Life has implemented Earth ranger to ensure real-time monitoring and tracking wildlife movements, data collection and analysis and monitoring the efficiency of law enforcement initiatives. Use of acoustic devices and camera traps will act as a further deterrent against illegal activities that lead to a loss of biodiversity. The targeted restoration projects will improve the species composition and vegetation structure within communities. The focus on nitrogen fixing indigenous trees will improve soil fertility and increase the rate of	It is assumed that the expansion of mobile surveillance teams, as well as the establishment of acoustic recording stations and camera trapping stations at strategic locations will act as a powerful deterrent to reduce or stop illegal activities, such as deforestation and poaching. Information from such events can be shared with community leaders to build trust and transparency and ensure participation in the project. The main risk is that the incentives to poach remain sufficiently high, such as the price of ivory, that the proposed activities are not enough of a deterrent. This will be mitigated by community outreach and awareness as to the legislative framework and governance. The assumption is that the targeted restoration efforts

[17] Zvidzai, M., Zengeya, F. M., Masocha, M., Murwira, A., & Tagwireyi, P. (2024). Projected Climate Scenarios Reveal an Expanding Suitable Habitat for the Critically Endangered African White-Backed Vulture Gyps africanus. *Integrative Conservation*, *3*(4), 398-409.

	ecosystem recovery and agricultural productivity in the fields. The development and implementation of a fire management plan will reduce the frequency and intensity of dry season fires which ultimately results in the protection of forests and wildlife habitats. Fire is a conservation tool which has been used in savannah ecosystems to improve ecosystem health and vegetation productivity. Increased engagement and dialogue with local communities will increase the awareness of the boundaries and regulations governing the forests, as well as the importance of biodiversity and its benefits to people. This will create a broad based alliance of people who support the project and contribute to information sharing with the project. The participation of local communities will incentivize biodiversity and forest protection by giving the community a sense of resource ownership and stewardship. This creates empathy for biodiversity protection consequently leading to reduced illegal activities and positive biodiversity outcomes.	will improve soil condition the community and also provide resources which will substitute the need to acquire resources from protected forests. The major risk is climate change which may affect vegetation establishment and the rate of ecosystem recovery and establishment of planted trees. This will be mitigated by planting only indigenous trees which do not require much nurturing. It is assumed that the participation of the local community in fire management will result in reduced fires through increased education and awareness on the effects of fire on biodiversity. Secondly, the participation is assumed to transfer relevant skills in fire response and control which will significantly reduce fire frequency It is also assumed that biodiversity is best protected when local communities derive direct benefits from its conservation. The active involvement and participation of local communities is assumed to encourage community members to take responsibility for protecting local forests and biodiversity. It fosters a sense of ownership. Where there is active participation of the community, the community members themselves become the eyes and ears for illegal activities on the ground.

		The energy mix in the project areas is heavily dependent on the use of firewood which creates a risk of continued deforestation in the project area. However, this is mitigated through the development of sustainable means of wood harvesting, such as collection of deadwood and trees. Additionally, community developed projects, funded by the sale of Plan Vivo Biodiversity Certificates (PVBCs), will include income generation activities to reduce the need or incentive to participate in illegal activities that lead to biodiversity loss. There is also a risk of over expectation from the community, whereby the anticipated benefits exceed what the project can actually provide. This can be mitigated by establishing clear policies, procedures and accountability mechanisms to ensure transparency.
Socioeconomic Benefit	**Increase in opportunities, learning, nutrition and income to local communities.** The project will generate significant employment opportunities for local communities, in an area where formal employment opportunities are very limited. Examples are: bio-monitors - community members trained in the monitoring of biodiversity, rangers - community members trained in the protection of biodiversity. Which will result in improved standards of living This will also entail ongoing training and capacity building that empowers communities with new knowledge and skills	It is assumed that communities will be receptive and keen to participate in the design and implementation of the proposed benefits. It is assumed that the villages in Zimbabwe have got existing governance structures which play a crucial role in promoting participatory development and conservation. The governance structures include Village Development Committees (VIDCOs). The assumption is that by leveraging on these existing

	that enables them to access wider opportunities and provide for their families. **<u>Improvement in communal infrastructure such as schools, cattle dips and roads.</u>** Investment into communal infrastructure, funded by the sale of PVBCs, will relieve the current pressure that communities face due to insufficient and decaying community infrastructure. This will all be done through communities, in a way that the initiatives are designed, led, implemented and owned by the communities. Implementation of training and development will include local authorities such as rural district councils and traditional authorities. <u>Likely examples, based on recent community engagement, may include:</u> School infrastructure such as supplying water, renovating old classrooms, establishment of vegetable gardens, construction of teacher cottages. **<u>Mitigation of human-wildlife conflict</u>** Wild is Life has already invested in separation infrastructure (fences) in parts of the project area. However, these are costly to construct and costly to maintain. Strategic fencing may considered in collaboration with communities. Other methods to stop crop destructions (e.g. chilli, bees) will be investigated and trialled. In addition mitigation of stock losses through a *boma and predator alert system* will be instituted in conjunction with the respective Rural District Councils (RDCs). Actual predator control is the responsibility of the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) and will not be handled by this project. Renovation of cattle dip tanks, construction of loading ramps and handling races, provision of dipping chemicals that do not harm oxpeckers, veterinary services and	structures, the project will be able to facilitate voluntary community participation in decision making processes, ensuring that local needs and priorities are addressed. It is anticipated that these VIDCOs and WARDCPOs can facilitate coordination among various stakeholders including, Government Agencies, NGOs and community members to support the project. It is further assumed the existing community leadership structures will be able to accommodate people's views and actively engage with a wide audience to ensure that the proposed initiatives are inclusive, fair and benefit a broad group of people. The stakeholder consultation design process will aim to address this to ensure that a high standard of inclusivity and fairness is met. The risk with this process is that there is lack of consensus on the key priorities. It is proposed that a voting process on the decision making for this be established and communicated in the design phase so that there is a transparent method to ensure that any programs are reflective of the will of the majority. There is also a potential risk of elite capture and the unequitable distribution of project benefits such as employment (nepotism in most cases). This will be mitigated by the project's

	check-ups. Dipping chemicals used in Zimbabwe (anitraz and organophosphates) to control ticks and other parasites have a potential impact on oxpeckers (*Buphagus erythrorynchus & Buphagus africanus*), which are a group of birds that feed on these parasites. The use of alternative environmentally friendly organic or plant based acaricides will promote the symbiotic relationship between livestockand these important species. Renovation of old roads linking communities to health facilities, schools and market places.	approach which emphasises community participation at all phases of project development and implementation. Participation will ensure inclusive decision-making processes, including marginalised community groups. Priority of employment will be given to locally available skills. Of course, the project will not be able to employ everyone from the affected villages but the process will ensure equal representation from all the affected villages. It is further assumed that the government will be receptive to the biodiversity project and supportive of the goals and aims. There is a risk that some government departments may feel excluded from the project. Through a thorough stakeholder mapping exercise this will be mitigated from the inception. Forestry Commission will also play an important facilitator role here.
Environmental Benefit	**<u>Increased carbon sequestration across the forest area due to reduction of deforestation and uncontrolled fire.</u>** Improvement in ecosystem services such as water catchment and pollination. By protecting the forests, reducing deforestation and mitigating biodiversity loss, including that of endangered megafauna, the forests will maintain and increase their current environmental benefit. For example, though increased carbon sequestration, due to reduced deforestation will lead to	It is assumed that the intervention of reducing biodiversity loss and deforestation through the suite of interventions proposed, will be effective and long lasting. It is assumed that the species composition within the targeted forests only consists of indigenous or native species which are adapted to the project's environment and have built resilience to

	increased pollinator services, likely positive impact on local rainfall patterns. The protection of the forests will protect and maintain ecological connectivity, which will have a wider environmental impact such as reducing human wildlife conflict, maintaining genetically healthy flora and fauna, including invertebrates building ecological resilience. By protecting the forests through reducing deforestation and reducing rampant uncontrolled wildfires, this will reduce erosion and siltation in rivers in the project area and region. This will contribute to increased grazing for cattle and wildlife, and increased water availability for people, cattle and wildlife.	changes in climate over time. This characteristic of native vegetation will mitigate potential impacts of climate change on the forests. There is a potential risk due to climate change which is predicted to induce a drier and hotter climate in the longer-term. The drier and hotter conditions are predicted to affect forest health. However, project implementation on itself is a mitigation to the potential impacts of climate change. It is anticipated that by protecting the remaining cloud forest, the potential impacts of climate change will be mitigated. One risk is droughts may become more frequent and longer in duration and this may lead to a reduction in forest cover. However, teak forests and mopane woodlands are evolved to endure extreme droughts and have experienced severe droughts and survived them in 1992 and 1981, this hopefully will result in more adapted forests over time. A further risk is that the population off cattle increases dramatically, in part due to the project activities, leading to increase in erosion and siltation. This will be mitigated by engaging with communities and providing access to market opportunities to

		prevent over stocking and over grazing.
Outputs		
Output 1	Increase in floral, avian, mammalian diversity.	The increase in the price of ivory would lead to an increase in elephant poaching as seen from 2011-2014. Severe food insecurity in Zimbabwe will lead to an increase in pressure for wild meat. These can be managed accordingly by adjusting the area and scope of the law enforcement operations and continuously communicating with local communities.
Output 2	Reduced poaching and deforestation	The implementation of a technology based law-enforcement program will result in real-time, efficient detection of illegal activity which in-turn results in improved surveillance of the targeted forest areas. The participation and employment of scouts from the community will also add an additional layer to the law enforcement effort as the community itself becomes the eyes and ears on the ground for illegal activities. The major is risk is associated to inefficient monitoring due to technology failure in the field. There is also a risk of vandalism of the devices by individuals and or wildlife. This risk is managed by effective monitoring of devices and regular check-ups and maintenance. The cameras will be installed with efficient batteries which are

		replaced regularly when need arises.
Output 3	Reduced Fire frequency and intensity	It is assumed that a fire management plan will help reduce the intensity and frequency of fires in the dry season. Initiatives such as early and controlled burning will reduce the fuel load such that when the dry season comes, the fires will not be too severe on vegetation. Fireguards will also reduce the spreading of fires which in turn will reduce the total area burnt per season. The risk is that prescribed burning may also result in the unintended spread of fires. Fires can escape and spread beyond intended boundaries, potentially threatening wildlife and sensitive habitats. This will be mitigated by ensuring that the community will receive adequate training in prescribed burning techniques and ensuring that expertise to manage fires safely are available. Regular maintenance of firebreaks will also ensure that fires are contained.
Output 4	Erosion Control	It is assumed that rehabilitation efforts targeted tree planting will help with erosion control and the prevention of siltation of the major rivers within the project areas. The risks around this is the dry and hotter conditions coupled with unpredictable rainfall occurrence which are associated with climate

		change. Such conditions have the potential to influence mortality of seedlings and affect the establishment of vegetation after planting. This is mitigated by ensuring that vegetation planting will be done at the onset of the rainy season which helps reduce the maintenance and nurturing costs of the seedlings. Alternative sources of water will be established to ensure continuously supply of water on dry conditions.
Output 5	Improved soil fertility	It is assumed that the agroforestry component of the project which is targeted at the planting of native trees with a nitrogen fixing ability will improve soil fertility and reduce the need for community members to open new areas for agriculture purposes. The risk exists which is mainly related to population growth around the targeted areas which may affect the conservation gains from the project. This risk will be mitigated by supporting family planning programs and education initiatives that empower communities to make informed choices about reproductive health. The project will also provide alternative livelihood opportunities in ecotourism and non-timber forest products to reduce dependence on agriculture and alleviate pressure on protected areas.

Output 6	Improved standards of living for scouts involved in forest protection.	It is assumed that the improvement of infrastructure and packages for scouts will boost their morale and motivation and increase law enforcement efficiency and results. The need for results and rewards by the workforce may result in human-rights violations during law enforcement activities. However, this is mitigated by the fact that Wildlife has an effective environmental and social safeguarding system which ensures that community rights are protected. Secondly, the scouts will receive training which involves social safeguards. Lastly, the scouts will be recruited from the local community which gives them an understanding of the community dynamics of the areas in which they operate.
Output 7	Improvement of rural infrastructure	Funds from PVBCs remaining after the protection activities will be used to develop and implement schemes that will improve rural infrastructure, e.g. roads and health clinics. The main risk is that there will be insufficient funds remaining after the protection activities. This will be mitigated by ensuring the PVBCs are sold at a price and indexation that covers these costs and allocation of residual funds will be done in consultation with the communities, to reflect their perceived priority needs.
Output 8	Skills transfer and capacity building through the establishment of training and education	Education and training programs will be established

	programs for members of the local community -	to empower local community members to adopt sustainable income streams that do not rely on natural resource exploitation and/or are through sustainable harvesting of forest products. There is a risk that local communities will be resistant to diversifying their income streams. This will be mitigated by the participatory design of the project which will ensure that local stakeholders decide the income streams they would like to pursue, and what education and training they require.
Output 9	Increase in benefits to communities derived from the forests, such as direct income, training and capacity building opportunities, access to natural resources. Improvement of community infrastructure, leading to improved community welfare and expanded opportunities	Managing the expectations of this will be needed from the inception of the project. Wild-Is-Life will ensure community participation at all phases of the project to ensure that interventions and benefits that accrue to the community are reflective of the needs of the community to effectively manage any potential misunderstandings. Wild-Is-Life will also leverage on the existing governance structures which have VIDCOs and local leadership as a mechanism for addressing grievances and misunderstandings.

3.5 Proposed Biodiversity Monitoring

The two main (required) biodiversity groups will be

1. Birds
2. Non-canopy plants

The additional biodiversity groups will be

1. Mammals
2. Amphibians
3. Bats
4. Large Trees

Details of rationale and monitoring activities are outlined below (Table 6).

Table 6 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			
Acoustic Monitoring	Birds	Required under PV Nature methodology; fits data collecting requirements for tropics WIL has some experience in Acoustic Monitoring.	Several groups of migratory birds occur here therefore monitoring will need to occur in the wet season.
High Resolution Imagery	Plants (under 2m)	Required under PV Nature methodology; fits data collecting requirements for tropics FC has significant experience and data collecting and vegetation mapping.	Grasslands and forests are regularly burned in the dry season therefore monitoring will need to be done in the rainy season.

Additional Recommended Target Groups			
Tool 3 – Camera Trapping  ***Plate 16: Wildlife monitor setting up a camera trap for monitoring mammals in the project area.***	Mammals	Fits data collecting requirements for tropics WIL has significant experience in the use of Camera Trapping.	The project area is renowned for numerous mammal species that make up much of the higher food chain and essential for a healthy ecosystem.
Tool 4 – Acoustic Monitoring	Frogs	Fits PV/Pivotal data collecting requirements.	The project area is renowned for numerous frog species but only bloom after the rains, monitoring will be conducted during the rainy season (December - March).
Tool 5 - Acoustic Monitoring	Bats	Fits PV/Pivotal data collecting requirements.	Little is known about bats in this region and they are under studied due to their cryptic nature. Bats are important to the ecosystem and play a vital role in pollination of important tree species such as Baobab.
Tool 6 - High resolution drone imagery.	Big trees	Fits PV/Pivotal data collecting requirements.	Large trees are threatened in the area primarily by hot fires, as well as timber poaching. Many. Hardwood species exist in the project area and are very slow growing, and hence have a low replacement rate if lost.

3.6 Additionality[18]

Table 7 Initial Barrier Analysis

Project Intervention	Main Barriers	Activities to Overcome Barriers
Improving current surveillance strategies within the forest blocks by enhancing the capacity of the park-ranger teams.	Without funding generated from the sale of PVBCs the enhancement of patrolling networks cannot be established.	The project will provide the funding required to implement and train networks of park rangers. This will not only provide income for local communities in the form of direct employment but also protect important flora and fauna and ecosystem services that the project area provides.
Improved management: Funding, supporting, and enabling governance work around land use planning, capacity building	Without seed funding or funding generated from the sale of PVBCs, formalised governance frameworks Cannot be developed. Communities also do not typically have expertise or training in formal community Governance. Governance capability within the FC will also be addressed and many of these issues are directly related to funding shortfalls	Initially, project development funds will be used to develop formal governance systems. Once the project has generated revenue from the sale of PVBCs, these funds will be used to continually and Iteratively support governance in the project area.
Improved fire management: Funding, supporting and implementing a fire management program	Without sustainable funding or funding from the sale of PVBCs there are insufficient resources to protect the forests from rampant and frequent human induced fires.	Funds generated from the sale of PVBCs will be used to recruit and train community members in fire prevention and fire-fighting. This will also protect scarce and valuable grazing for community livestock, as well as the biodiversity in the project area.
Community development. Funding and implementing	There are very limited and insufficient alternatives for funding sources either from	Funds generated from the sale of PVBCs will be directed towards community driven

[18] See Baseline Scenario and Additionality Assessment Tool

community driven development initiatives.	NGO's or government. Especially for non-health related development initiatives.	development initiatives that will be identified through community engagement sessions. The aim is to improve the livelihoods of the local communities and also provide opportunities for income generating activities, thereby reducing pressure on natural resources.
Community empowerment. Funding and implementing community driven empowerment initiatives.	Without seed funding or funding from the sale of PVBCs this will not be possible. Vocational training and higher education is not free in Zimbabwe and the majority of people cannot afford to participate in empowerment type of activities.	Funds generated from these of PVBCs will be used to fund and implement activities that include training and capacity building, as well as market access. This will give local communities knowledge and exposure to participate in a wider range economic opportunities. This will reduce pressure on natural resources in the project area.

Table 8 Threat Analysis

Major threat to biodiversity	Main Barriers	Activities to mitigate threat
Poaching of wildlife	Resources to recruit, train, deploy and manage suitable team. Poaching takes different forms such as killing of animals for food and trophies, and removal of trees and plant materials. Illegal grazing is also considered to be a form of poaching. Therefore a highly specialised and diversified team is needed to effectively address this.	If the project is able to generate sufficient and stable income, a suitable strategy can be implemented to ensure. The preservation of biodiversity through the reduction of poaching.

Increased and uncontrolled fire	Insufficient resources to prevent and or manage fire in the project area.	If the project can generate sufficient resources this threat can be mitigated. This will benefit the biodiversity of the project area as well as protecting grazing for community livestock.
Climate Change	Persistent droughts can negatively impact the biodiversity, especially herbivores. Climate change can also alter ecosystems and increase the range and prevalence of disease vectors such as ticks and mosquitoes. The frequent occurrence of droughts and consequently poor feed quality is a risk factor for a high prevalence in diseases	Maintaining functional ecological connectivity and preventing loss of food and fodder through the fire protection program can reduce the negative impacts of climate change and build more resilience.
Land use change	Limited alternatives to subsistence agriculture. Poor soil fertility in the region leads to slash and burn agriculture.	Community empowerment programs aimed at improving agricultural practices and livestock husbandry can reduce the threat of lands change.
Exploitation for traditional medicine	Limited resources for ranger patrols and surveillance. The project area is vast and ranger numbers and activities are insufficient to protect the whole area currently.	Improved and expanded ranger patrol intervention in conjunction with Forestry Commission will mitigate this threat by reducing the incentive to illegally poach animals for traditional medicine. Cooperation with Zimbabwe Republic Police (ZRP) will contribute to mitigating this threat. Important to note that the traditional medicine threat is referring to illegal exploitation of endangered species. The parts are almost always for export to East Asia, or South Africa, including endangered

		species such as pangolin, ground hornbill and lion. Local traditional medicine is predominantly plant based and there is no indication that the current. Exploitation of medicinal plants and herbs is unsustainable.
Poor administrative governance	Limited resources constrain governance structures and this leads to poor governance, even if the will is there. Many institutions in rural areas are in survival mode and often unable even to meet basic salary obligations which saps morale. Tools to govern are also limited and this includes transportation.	Improved community governance structures will contribute to improving district level governance structures and reduce the financial burden in the project area leading to improved and proactive governance.
Economic or political instability	Zimbabwe has experienced perennial economic and political challenges for the past two decades. Currently the situation is stable, however people in the project region have limited economic opportunities which are mostly linked to tourism. The viability of tourism is linked to safety and stability and negative impacts on this will lead to increased financial pressure on local communities	The project coordinator is well versed in successfully navigating economic and political instability in Zimbabwe for the last 43 years and is well placed to mitigate this. The project will not be linked to tourism or people traveling to the project area, and hence the sale of PVBCs, which will generate the required funds for the project interventions, should be less vulnerable to this potential instability.
Emerging diseases	Diseases pose a threat to the biodiversity of the project area. These include; anthrax, rabies, canine distemper, pasturella multi coda. These are fatal diseases and can have a very negative impact on the biodiversity.	The project coordinator will grow existing relationships with the veterinary departments and a local laboratory to identify and mitigate these diseases. The project coordinator has experience in dealing with this in regards to anthrax and pasteurellosis.

		Through working with local communities and the veterinary department a pre-emptive vaccination program in dogs for rabies and canine distemper program will be implemented, mitigating this threat.

3.7 Exclusion List

See Annex 3.

3.8 Environmental and Social Screening

See Annex 4.

3.9 Stacking and Double Counting

Wild is Life has conducted a feasibility for a carbon project in this area. However, will not be pursuing carbon project development in this region.

Wild is Life would prefer to use PV Nature as the only PES type approach.

No other income is currently generated through PES projects or GHG emission reduction projects.

3.10 Relevant Legislation and Policies

Table 9 National Level Legislation, Policies and Instruments

	Yes/No/Unsure	**Details**
Does the country receive or plan to receive results-based biodiversity or climate finance through bilateral or multilateral programs?	Yes	Zimbabwe does not have any biodiversity based projects but does have one large carbon offset project (Kariba Project).
Are there any other relevant regulations, policies or instruments?	Yes	Zimbabwe gazetted a Carbon Policy in 2023 and Carbon Trading Regulations, 2025 (S.I 48 of 2025

4 Governance and Administration

4.1 Governance Structure

Currently there are 4 divisions (In Panda Masuie):

1. **Elephants**
2. **Rangers**
3. **Maintenance**
4. **Community**

In Kavira and Fuller is the same, without the Elephant division.

All divisions have a leader, who reports to an operations manager, who reports to a project manager, who reports to the Chairman, who reports to relevant government and donor partners. Figure 8 below shows the project coordination management structure.

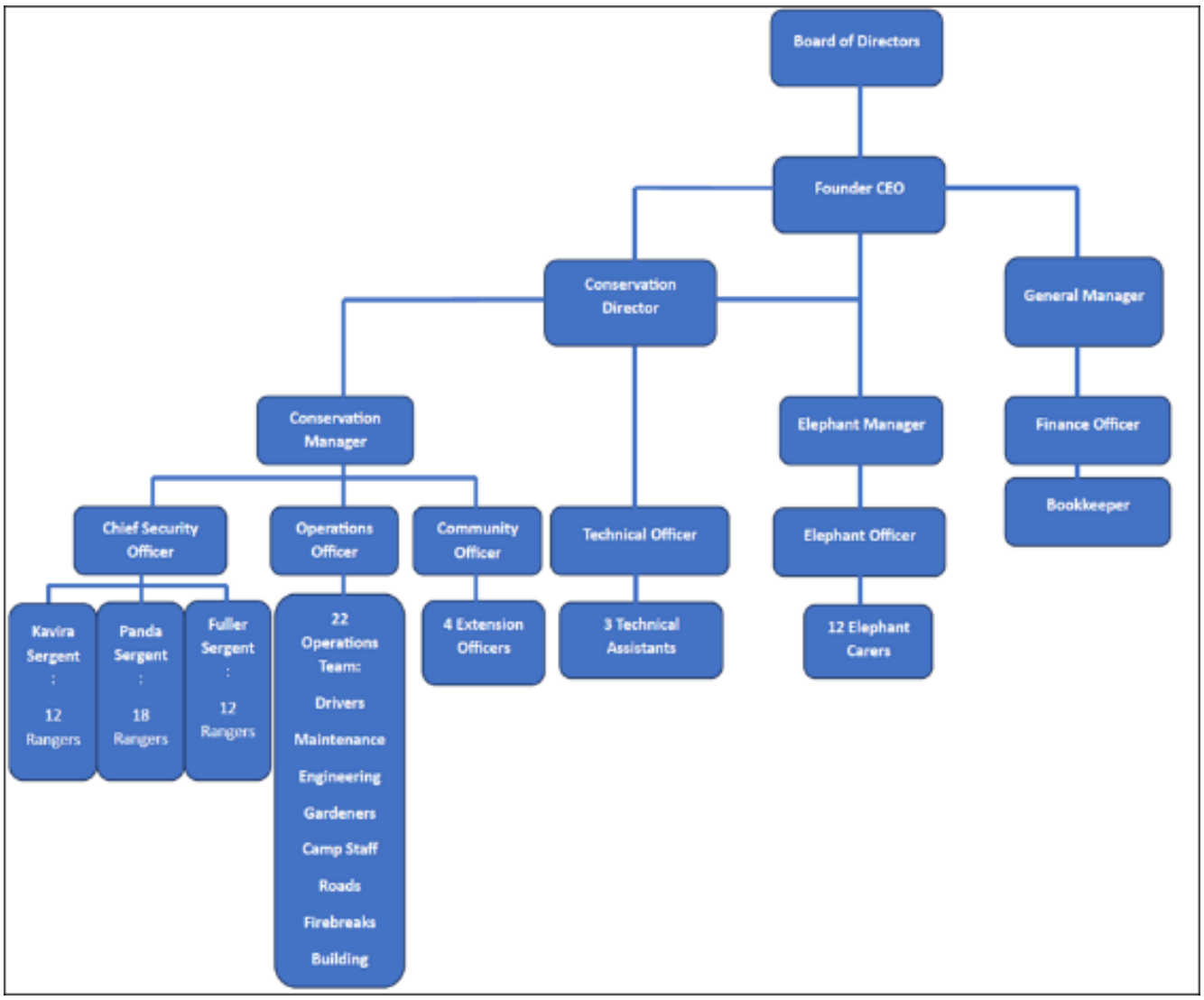

Figure 4-1: Organogram showing project coordination structure

Plate 17: Rescue and re-wilding of elephants is a unique activity of Wild Is Life that has earned the organization local and international acclaim.

Project implementation in based on the voluntary participation of the project participants. The project includes multiple villages from multiple wards and spans across two districts namely Binga and Hwange Districts. Districts in Zimbabwe have a structured governance system with the districts split into smaller units (wards), the wards are then split into even smaller units, the villages. Each ward has an elected councillor who is voted into power and represents community interest in the Rural District Council. Thus the project will benefit from incorporating this structure in its governance system. The individual households will elect a Village development committee, which will have six members consisting of all legal age groups and 50% represantation of women.

The Village development committe will be set-up in each village to represent the interests of project participants and facilitate participatory decision making processes ensuring that community members are involved in decision making. An elected steering community will be set-up and this steering committee will play a guiding and oversite role in the Wild Elephant Forest Project. The steering committee will comprise of representatives from the VIDCOs, Local chiefs, elected ward councillors, NGOs and stakeholders from government agenicies (Department of Women Affairs, Youth, Council, Lands and DDC). The tradional leadership will provide insight into community dynamics and traditional knowledge whilsts the private sector representatives contribute industry expertise and potential parterships. The representatives from government agencies provide guidance on policy and regulatory frameworks. Figure 4-2 shows the proposed governance structure which will be replicated in each of the two districts.

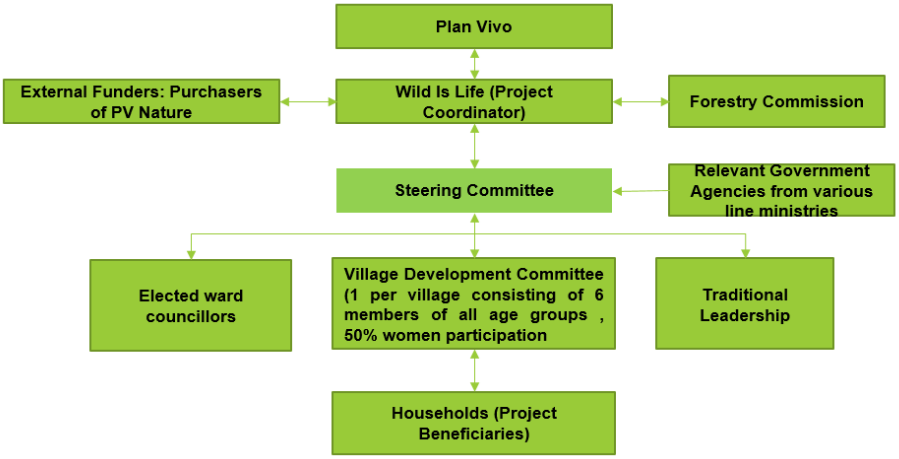

Figure 4-2: The Wild Elephant Forest Project governance structure.

4.2 Legal and Regulatory Compliance

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

Wild is Life holds 5 different agreements with the Government of Zimbabwe (GoZ).

Namely:
Lease for Panda Masuie Photographic Area (Forestry Commission) 25 year renewable lease, commenced January 2017 which covers 15000ha km2 (4.3%) of the Forest
Joint Venture for Panda Masuie Forest (Forestry Commission) 25 year renewable Joint Venture agreement, commenced August 2017, which is an agreement between us and Forestry Commission that gives Wild is Life exclusive co-management and commercial rights for the entire Panda Masuie Forest and ensures that there is no trophy hunting.

Co Management Agreement for Fuller Forest (Forestry Commission) 10 year Co- Management agreement for Fuller Forest, commenced January 2022

Lease Agreement for Kavira Forest (Forestry Commission) 30 year renewable lease. Agreement, commenced October 2019

Joint Venture on Tree Nursery Production (Forestry Commission) 25 year renewable Joint Venture Agreement, commenced August 2017.

Zimbabwe Elephant Nursery (Zimbabwe Parks and Wildlife Management Authority) 10 year agreement for the rescue, rehabilitation and redialling of elephants. Signed August 2018.

All are long running and none have ever had any dispute or breach.

Both authorities are well aware and in full support of Wild is Life's efforts to develop a Payment for Ecosystem Services approach to generate resources for sustainability in the respective areas.

4.3 Financial Plan

Wild is Life had a commitment from Standard Bank to develop a carbon project with finance up to US$2 million available. Collateral would be against future carbon credits. Standard bank is briefed on the development of a pilot for a biodiversity credit project and the engagement with Standard Bank will resume after the approval of the PIN document by Plan Vivo.

Given our long running relationship with the bank, we don't foresee any challenges if we decide to rather pursue the biodiversity approach.

Other funding opportunities are also being pursued such as the Nature Markets Accelerator (NMA) which is being developed by the Conservation International (CI) and the Conservation Finance Alliance (CFA), along with a range of partners including the Biodiversity Credit Alliance (BCA), International Advisory Panel on Biodiversity Credits (IAPB), International Environmental Guardianship (IEG) and United Nations Development Program (UNDP)

Wild Is Life will be responsible for the marketing and sale of PV Nature Certificates once they have been issued by Plan Vivo. The income to be generated from the sale of the certificates will be split 60/40 with the project participants receiving 60% of the total income and Wild Is Life, the project coordinator receiving 40%. The 40% received by Wild Is Life will be used to cover staff and operational costs of running the project. On the unlikely circumstance of project dissolution, the project asserts will also be

shared on a 60/40% basis. Lease fees (US$290,000/annum) and royalties (30%) will be deducted before the 60/40 split.

The 60% will be disbursed to the steering committee and will be distributed through the agreed benefit sharing mechanism by the project participants. An agreed percentage of the money will be disbursed equally to each household from the project participants and the remaining percentage will be used for ward development projects which would have agreed upon by the project participants. The project coordinator and the relevant committee will ensure the money is spent on the agreed project and the projects are implemented and completed as agreed. **See Annex 6 for a detailed breakdown of the costs and revenue sharing.**

5 Annexes

Annex 1 – Project Boundaries and Habitat Types

Shape files of the 3 Forests have been provided.
Maps of the project area, project region and of the individual forests are included in Part 1.
Data used for the maps include the following
Forestry Commission 2017 land cover assessment for Zimbabwe – Cultivation layer extracted
WASH borehole, water and sanitation project, Government of Zimbabwe
Open street map for roads and rivers
GPS data, 1:50,000 standard sheets, 1:250,000 map sheets are sources of supplementary data
Geological, soils, land cover and climate maps for Zimbabwe

Annex 2 – Registration Certificate

Receipt NO. DCD3/20856 OFFICE COPY

No. 2910/2015

USD20

№ 161442

ZIMBABWE

Certificate of Incorporation

WILD IS LIFE (PRIVATE) LIMITED

I hereby certify that.....

.....

.....

is this day incorporated under the Companies Act [Chapter 24:03] *and that the Company is Limited.*

Given under my Hand and Seal at HARARE

this 1ST *day of* APRIL, *20* 15

.....

Registrar of Companies

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.	Yes (use, but not procurement). Firearms are carried by the rangers while they are deployed in the forests. This is primarily to protect them from dangerous animals while on patrol. Also, so that they can defend themselves if they are

	attacked by armed poachers. Sufficient training will ensure a risk assessment is enforced.
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 application for which the radioactive source is insignificant and/or adequately shielded	No
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

Available on request

Annex 5 – Notification of Relevant Authorities

Available on request

Annex 6 – Project budget and costs breakdown

	Personnel/Units	Annual	Notes
Community			
Staff Wages	104	343440	Project Staff, including; rangers, maintenance, data collection, community extension, estate management - all from local communities in project region
Staff Food	104	132000	Food for project staff, as well as monthly food hampers - all from local communities in project region
Community Veterinary		10920	Veterinary support for livestock health
Training		40000	Various community training i.e. animal husbandry, agriculture, market access, etc.
Community Development		150000	Investment into community infrastructure depending on community needs
Fire Team	24	33600	Team to conduct fire management and control across whole project area - all from local communities in project region (only 5 months of the year)
Medical		7200	Medical support for project staff
Fuel		48000	Fuel for community operations including; meetings, data collection, FPIC, engagement, M&E etc.
Repairs and Maintenance		24000	Repairs and maintenance for vehicles and community assets
Communications		7200	Communication for project staff as well as Wi-Fi
Equipment		12000	Equipment for community work, including agricultural equipment, data collection etc.
Land Cruiser	1	58000	Land Cruiser for all operations regarding communities (1 unit every 2 years)
Tractor	1	24000	Tractor for all operations regarding conservation (1 unit every 2 years)
Total		**890,360**	

Coordination			
Management salaries	6	174000	Management salaries for all management across the project area (technical and operational)
Administration salaries	2	36000	Financial and legal administration
Elephants Veterinary		22800	Veterinary costs for elephant rehabilitation in Panda Masuie)
Elephant Handlers	12	57600	12 elephants handlers in Panda Masuie
Elephant Food and Milk		31200	Food and milk for elephants in Panda Masuie
Travel		12000	Travel costs for technical and operational team between Harare and Victoria Falls
Administration fees		24000	Bank fees and admin costs f
Equipment		48000	Conservation equipment, i.e. pumps, solar panels, tents, uniforms, technical equipment etc.
Land Cruiser	1	58000	Land Cruiser for all operations regarding communities (1 unit every 2 years)
Tractor	1	24000	Tractor for all operations regarding conservation (1 unit every 2 years)
Total		**487,600**	
TOTAL		**1,377,960**	**100%**
Community		**890,360**	**0.64**
Coordination		**487,600**	**0.36**

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