

Kasigau Corridor REDD+ Project
Impact Report

**Q1-Q2
2022**



**EVER
LAND**

**WILDLIFE
WORKS**



Kasigau Corridor

REDD+ Project

📍 Kenya

Developer: Wildlife Works

Key Partners: Local Landowners

Standards: VCS, CCB

Region: Tsavo National Parks

EVER
LAND

Wildlife sightings are on the rise across the corridor, including Elephants, Lions, Leopards, Cheetahs and Grevy's Zebras. The expanded use of a new monitoring app yields the opportunity for rangers to collect and share data in real time across the project zone using mobile phones in a secure cloud-based system. The greenhouses are full with thousands of indigenous trees for afforestation and teams are working to graft different fruit varieties to produce diverse multi-fruit trees. The ecocharcoal factory has produced >3450 briquettes for the community and is testing new processes for developing smaller, more energy efficient products.



A vital wildlife corridor between Tsavo East and West National Parks, the Kasigau Corridor REDD+ Project protects over 200,000 hectares of dryland forest, with over 11,000 wild elephants living in the ecosystem - of whom 2000+ of those elephants call Rukinga their permanent home. In an area where wildlife and human survival were at odds, the Kasigau Corridor REDD+ Project has transformed the paradigm of conflict between humans and nature through a market-driven solution to wildlife conservation. The world's pioneering REDD+ project addresses the threats of poaching, subsistence agriculture and illegal tree harvesting through a comprehensive, community-governed benefit sharing model that has directly touched the lives of 120,000 people living in the area through investments in health, education, water and other infrastructure, income-generating enterprise, and direct job creation.

18.3

MILLION

**tCO2e emissions
avoided to date**

*through the protection
of 200,000 ha of dryland
forest and savanna*

>11,000

IUCN REDLIST

**African Elephants roam free
within the project zone**

*in addition to other species:
Grevy's zebra, Cheetah, Lion,
African wild dog, Giraffe*

\$1.2

MILLION USD

awarded in student bursaries

*supporting the education
of over 26,000 students
in the project zone*

Highlight 1

Wildlife Encounters across the Kasigau Corridor

The continuous monitoring of wildlife populations across the Kasigau Corridor is a core element of the project's theory of change, and one of the requirements for reporting under the Climate, Community and Biodiversity (CCB) standard. The project is located between the Key Biodiversity Areas (KBAs) of Tsavo East and Tsavo West National Parks - representing an important wildlife corridor. It is home to a resident population of endangered Grevy's zebra (*Equus grevyi*), at least two packs of endangered African Wild Dogs (*Lycaon pictus*), several vulture species (e.g. the critically endangered White-backed vulture: *Gyps africanus*) and >11,000 endangered African Elephants (*Loxodonta africana*).

Wildlife Works has established various wildlife monitoring protocols, including: the quarterly KCRP road transects, the monthly aerial transects, the anecdotal daily logs and the Rukinga sanctuary camera traps. Recently, the KCRP has initiated the use of a new app - The Cluey App - developed by Sensing Clues in collaboration with a team of wildlife conservation organizations including Wildlife Works. This application enables rangers to easily register any field observations (including wildlife sightings, illegal activities, infrastructure and threats), share data and work both online and offline through areas of limited network coverage. This data is important for biodiversity monitoring, human-wildlife conflict management, security and mapping purposes. Information gathered from Cluey is currently being harmonized with other (paper-based) ranger records.



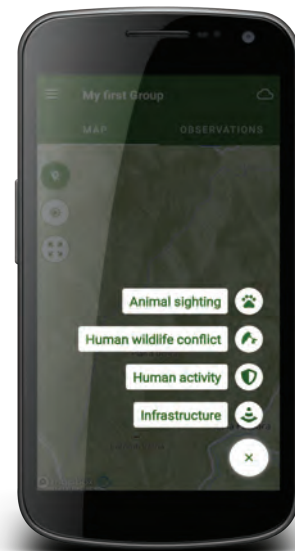
Grevy's zebra

EN

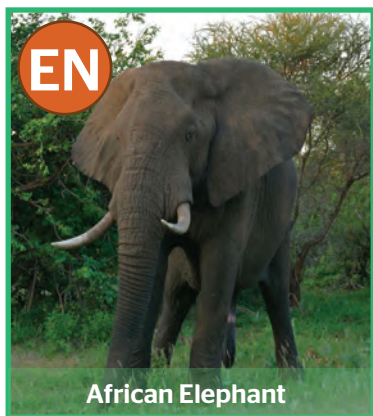


Wildlife Encounters across the Kasigau Corridor

The introduction of the Cluey app for use by rangers to record data in the field has produced both an opportunity and a challenge in data aggregation. Cluey presents an opportunity for rangers to collect data in real time using mobile phones, besides offering a platform for managing ranger teams across the corridor and storing information in a cloud-based system. However, harmonization of the cloud-based and traditional paper-based datasets has been challenging. Datasets from both Cluey and Ranger patrols are currently seen as complementary rather than substitutional.

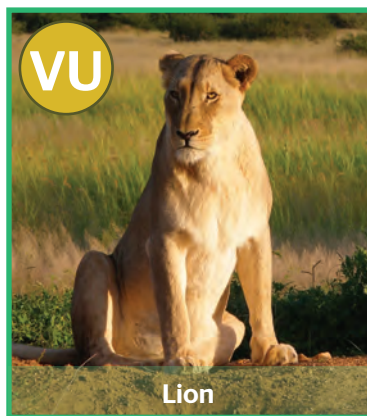


Within Q1-Q2 2022, a total of 5257 wildlife encounters were recorded from Road Transects (1964), Aerial Transects (1948), Rukinga camera traps (965) and Daily logs (380). High conservation value (HCVs) species continue to thrive in the corridor, with elephants having been encountered most frequently. Overall, there were 1057 encounters of HCV species as follows: Elephant (879), Lion (68), Leopard (1), Cheetah (4), Grevy's Zebra (17), Martial Eagle (5), Secretarybird (12), Bateleur (26) and White-backed vulture (54). While the biodiversity monitoring team has seen fluctuations in the number of wildlife encounters throughout the years, a general increase has been observed across the corridor in recent years.



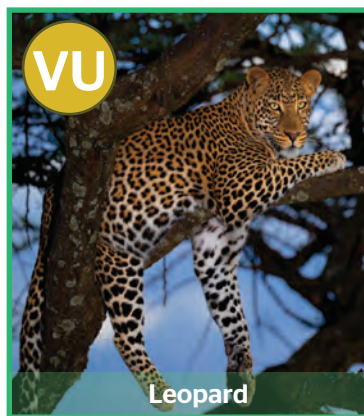
African Elephant

(Loxodonta africana)



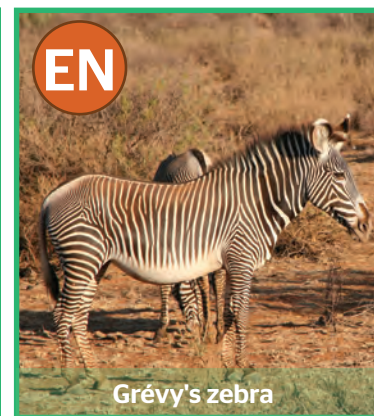
Lion

(Panthera leo)



Leopard

(Panthera pardus)



Grevy's zebra

(Equus grevyi)



Martial Eagle

(Polemaetus bellicosus)



Secretary Bird

(Sagittarius serpentarius)



Bateleur

(Terathopus ecaudatus)



White-backed Vulture

(Gyps africanus)

Highlight 2

Greenhouse initiative continues to thrive

The Wildlife Works Greenhouse initiative runs a seedling and tree nursery program as a means of increasing forest cover in sites of degradation within the project zone. Within the greenhouses, seeds are nurtured into juvenile trees, ready for planting by the project team and community members. These trees are also provided for free to any community members who would like to plant them on their property.

A total of 57,682 indigenous tree seedlings were purchased in Q1-Q2 2022, with a monthly average of 38,436 trees growing within the greenhouses at any given time. The most common indigenous tree species include: Bushveldt gardenia (*Gardenia volkensii*), Splendid thorn (*Acacia robusta*), Purplepod clusterleaf (*Terminalia prunoides*), Egyptian balsam (*Balanites aegyptiaca*), Long-tail cassia (*Cassia abbreviate*), Bird plum (*Berchemia discolor*), Marula (*Sclerocarya birrea*) and Thorny acacia (*Acacia nilotica*). The greenhouses are currently at capacity and cannot house any further trees, so the team is exploring other growing locations, including schools and other public areas.



Seed pods of the Thorny acacia
(*Acacia nilotica*)

Greenhouse initiative continues to thrive



Beyond nurturing trees, the Wildlife Works greenhouse currently holds a stock of >15,000 fruit seedlings, including those of: Mango (*Mangifera indica*), Avocado (*Persea americana*) and Pixie mandarin (*Citrus reticulata Blanco*). The majority of the fruit trees are drought tolerant, an important factor required to ensure food security for the community in years to come. The team is also working to graft (or fuse) high yield fruit varieties onto regular varieties, thus improving yields by enabling single trees to produce a variety of different fruits rather than a single type. Grafting provides additional benefits including pest and disease resistance, as well as the potential for enhanced tree growth and increased diversification within small plots.

Over the last two quarters, the WW greenhouse initiative continued to undertake its outreach activities by hosting 30 visiting groups, including community groups, NGOs, primary schools, secondary schools, tertiary institutions and women groups; totaling 455 participants in this period.

Greenhouse initiative continues to thrive

While the greenhouse initiative is thriving, one greenhouse has required additional logistical support over recent months to rebound following an elephant encounter. This greenhouse is located along an elephant migration route near the Tsavo East National Park gate. During a recent encounter, an elephant destroyed some of the infrastructure and shade trees; these trees are required to reduce heat, ensuring an optimal temperature for crop growth. Shade trees generally take 2-3 years of growth to be viable, so the greenhouse operators abandoned the area to find alternative income opportunities while their site slowly reestablished. Recently, they have increased their investment, reinforcing water tanks and repairing the fence in preparation for a new harvest. The team is optimistic that the greenhouse will be operational soon.



Opportunity

The ecocharcoal factory produces a new type of briquette



The growing demand for timber and charcoal - particularly in rural areas - has been a constant challenge for the KCRP. A large proportion of the population require these fuel sources for cooking, resulting in degradation of the landscape. In order to address this challenge, the ecocharcoal factory has continued to develop sustainable charcoal, undertaking regular trials to increase efficiency and sustainability of their products using indigenous tree trimmings as the primary feedstock.

Currently, 296 plots are being used for testing and production; 13 of which were earmarked for Q1-Q2 2022 production. Once collected, the trimmings are dried (for up to two weeks), and then burned within drum kilns for several hours. After cooling, the charcoal is banded together with cassava flour, pressed into briquettes, packaged and sold to local community members. The charcoal is sold at a reasonable price 10Ksh (\$0.08 USD) per briquette, outcompeting the price of traditional, unsustainable charcoal.

Approximately half of the collected trimmings (5758kg) have undergone full processing, while the remaining materials are still drying for future production cycles. Within the last two quarters, >3450 briquettes have been produced - 82% of which have already been sold to individuals, organizations and schools within the project zone.

The team is currently working to develop a new briquette making process that allows the factory to develop smaller briquettes with higher energy efficiency, and a more appropriate size for smaller stoves.

