

# Hwange Community Land use Pilot Project

Optimising land resources to facilitate conservation, rewilding, food security and income generation



# WHO WE ARE



- Imvelo Safari Lodges is a Zimbabwean owned photographic safari company with 4 lodges: 2 inside Hwange National Park, 1 on forestry commission land adjacent to Hwange National Park and 1 on communal land a few metres away from Hwange National Park
- In 2013, the Imvelo Safari Lodges' directors set up the Water4Wildlife Trust, a local Trust, to help fundraise for efforts to pump water for wildlife in southern Hwange
- Since then the Trust has shifted to encompass all of Imvelo's community and conservation projects, including the Community Rhino Conservation Initiative, and works predominantly along Hwange's southern boundary
- The main aim of the Trust is to incentivise community-based conservation through community development and wildlife conservation projects which benefit local people and the ecosystem as a whole

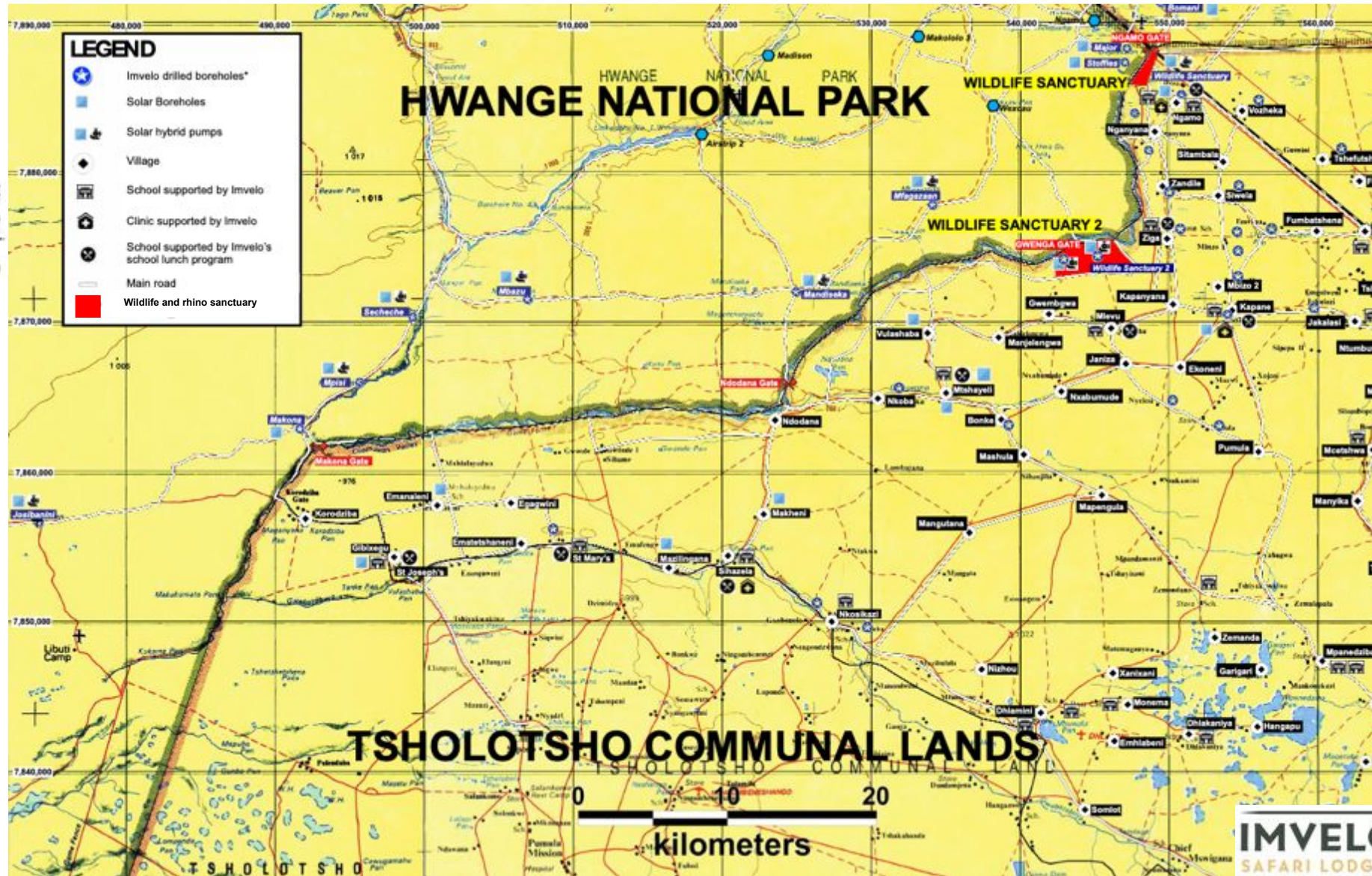
# WHO WE ARE



- U Can Grow has been focussed on small and medium farmers and their transformation to being part of an inclusive economy.
- **Packhouse:** is central to the UCanGrow module. On the one side it provides training, quality farming inputs, track & trace and aggregation of harvests. On the other side, the packhouse will grade, pack, and supply products to the off-take clients making sure that all product sourced is sold.
- **Food security:** Seed boxes and food security program is central to the PackShed as it not only finds the new farmers but also starts to ground food security in a village or town. The starter to this program is establishing a supply of seed boxes to commence community gardens and develop the skills for farming.
- **Developmental Curriculum to Accelerate Farming and Agripreneurs:** We have pioneered a curriculum designed to expedite the growth of farmers and agripreneurs, equipping them with practical skills and knowledge essential for success in modern agricultural practices and business ventures.



# WHERE WE ARE OPERATING





# IMPORTANCE TO KAZA

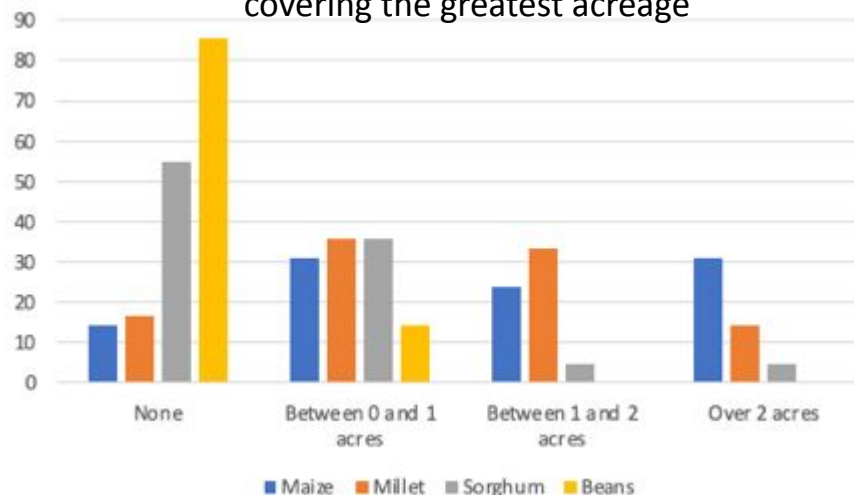
- Hwange National Park, and its southern boundary, are part of the Kavango-Zambezi transfrontier conservation area
- Hwange National Park has about 45,000 elephants, which represents almost 25% of all of KAZA's elephants
- There are fewer than 250 rhino in the whole of KAZA. White rhinos were common in southern Hwange until the early 2000s, when the last rhino in the area was poached
- The area in which we operate is perhaps KAZA's longest and most intense stretch of human wildlife conflict; these local communities are on the frontline of conservation and management of this area is crucial to KAZA's ecological equilibrium
- We want to trial a model and establish a pilot project in this area for possible replication and scaling across KAZA



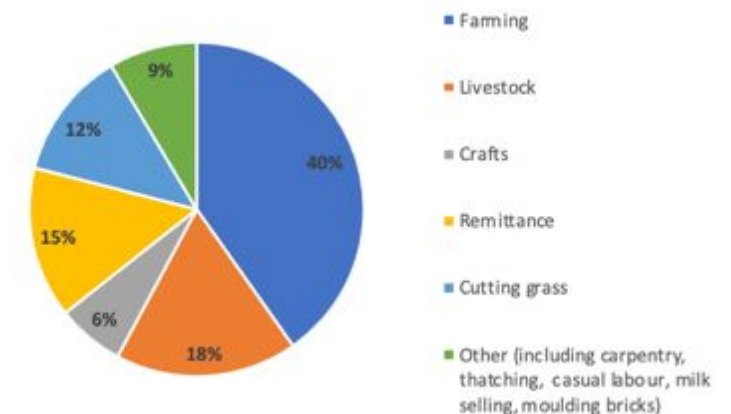
# THE PEOPLE IN THE AREA

- Homesteads on average have between 5-8 people each and 50% of over 18 year olds have some primary education (20% have secondary education and have 2% tertiary education)
- Unemployment is high – income comes predominantly from relatives in SA, work in tourism and conservation, casual work and sale of crafts
- Sanitation standards are low – over half of people use the bush for ablutions, some have dug pits
- On average, people are about 1-5km from clean water (borehole pumped)
- Livelihoods are based predominantly on farming and livestock
- Domestic livestock: most people have donkeys and goats; fewer have cattle and chickens.
- Fields: predominantly maize, millet, sorghum and beans
- This area is very tough for people: poor soil fertility, isolation from social services, erratic rainfall and wild animals overspill from the National Park destroy the fields of subsistence farmers living along this boundary and kill domestic livestock.

Most people have maize and millet fields, with maize fields covering the greatest acreage



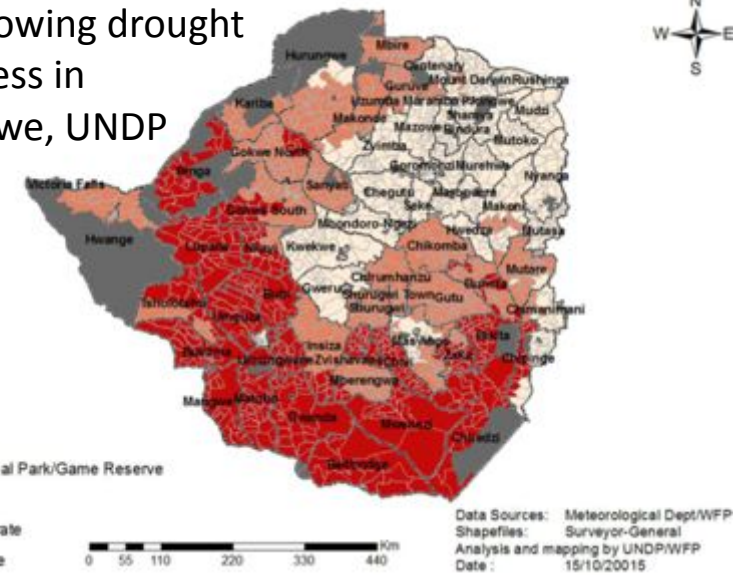
Most people rely on farming as their main source of livelihood



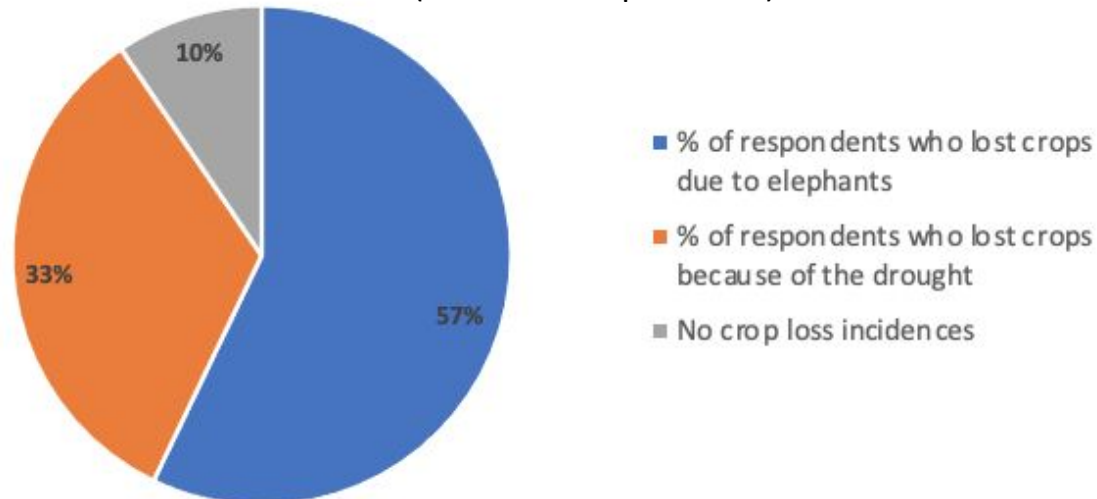
# THE CHALLENGES IN THE AREA

- **Water** - very limited natural surface water, people dependant on boreholes and the rainy season
- **Terrain and geology** – low soil fertility, kalahari sands, very few roads
- **Social isolation** – few and under resourced schools, few and under resourced clinics, few employment opportunities, limited public transport,
- **Wildlife** – animals from the National Park overspill into people’s fields, destroying crops and domestic livestock.

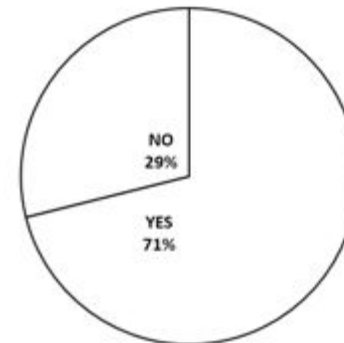
Map showing drought proneness in Zimbabwe, UNDP 2016.



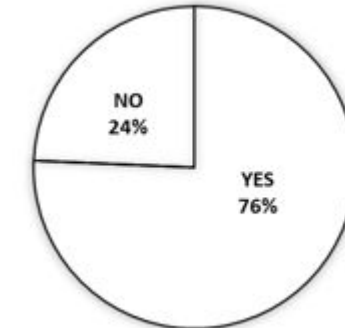
Incidences of crop loss in during 2018-2021 and cause suffered (& of total respondents)



Percentage of people who had their crops raided during the 2018/19 season by elephants



People who have had domestic livestock killed by predators between 2016-19



# THE ANIMALS IN THE AREA

- Hwange National Park has >45,000 elephants, lions, hyena, wild dogs, ... Its animals attract tourists from around the world
- The Hwange National Park southern boundary is demarcated by an old veterinary fence erected based on an agreement with the local people that they would get a set beef price for the following ten years
- Human wildlife conflicts are common, especially elephants destroying fields, and lions and hyena killing livestock
- Subsistence poaching is still a part of the culture in areas where people have no other livelihood opportunities
- Last white rhino was poached from Hwange in the early 2000s





# OUR SOLUTIONS TO SUPPORTING BOTH PEOPLE AND WILDLIFE AND BUILD SUSTAINABLE LANDSCAPES

Incentivise and facilitate community-based conservation by:

- Providing water for local communities
- Supporting food security in the area
- Implementing a specialised farming program to increase the economic sustainability of the gardens & farms
- Promoting education, including conservation and wildlife education
- Improving access to healthcare
- Implementing conservation projects, including pumping water for wildlife
- Putting white rhino on communal land to repopulate the area and benefit the people who have given up their grazing land for rhino

# A GLIMPSE INTO SOME OF OUR 2023 PROJECTS



## Habitat Protection



200 million

litres of water pumped for wildlife in 2023 across our 19 wildlife pumps



6,900

litres of water per hour pumped at Steve's pan at Jozi thanks to improvement works



10 km

of human wildlife conflict electric fencing delineating a second community rhino sanctuary



80 tonnes

of dead firewood and thatching grass cleared and delivered to elderly people in villages

## Wildlife Conservation



1,000 +

paying guests visiting community rhinos Thuza and Kusasa during 2023



2

trained Malinois dogs joined the Cobras Community Wildlife Protection Unit



850 +

school children and over 20 teachers visited the community rhino sanctuary



35,040

data records from monitoring rhino and their behaviour

## Food and Water



450,000 +

school meals provided to 11 schools, as well as over 75 teacher food packs



6

new boreholes drilled and equipped in remote areas



100 +

domestic boreholes maintained to supply water for rural villages



800 kg

of maize seed distributed to community members

## Education



163

school bursaries provided to children across 14 schools



2

boarding accommodation houses and 1 ablutions block built for Ngamo Secondary School



500

stationary packs, 56 school furniture sets, and over 1,700 textbooks distributed to schools



38

participants from 2 universities attended course on community wildlife management

## Healthcare and Wellbeing



42,000 +

patients during the annual Smile and See Programs since 2011, with over 5,200 patients treated in 2023



2,100 +

patients treated at Ngamo Clinic, maintained operational and seeing a second wing built thanks to the community rhino



1,500 +

children benefiting from coaching and infrastructure at the Ngamo Lions Soccer Academy, and + 400kg of soccer supplies donated



20

sewing machines and supplies for a local cooperative to make 140 + reusable sanitary pads and other items

# COMMUNITY RHINO CONSERVATION INITIATIVE



- Community Rhino Conservation Initiative (CRCI) is about reintroducing rhino to the southern Hwange area, on communal land, to benefit the local people through employment, education, engagement and direct revenue
- Protecting, conserving and re-introducing key species like rhinos facilitates area/landscape-scale conservation



## RHINO CONSERVATION

In 1985, Hwange National Park had 100 white rhino; by the 1990s, poaching was rampant. In the early 2000s, the last white rhino was seen and killed by foreign poachers near Ngamo in the southern part of the Park. CRCI has **re-introduced rhino to this part of Zimbabwe, but on communal lands, in a highly secure and sustainable way** to eventually accommodate a viable population of free roaming black and white rhino. CRCI is using communal land adjacent to the Park and allocated by communities to reintroduce rhino, thereby establishing a buffer zone between the Park and the communal lands and stopping wild animals being a burden to communities and destroying their crops and domestic livestock.



## INNOVATIVE SELF-SUSTAINING MODEL

Rhino gate entry fees from tourists visiting Imvelo Safari Lodges generate social and economic returns for local people, with 100% of total funds generated from the rhino going back to the communities and the project. They can themselves decide how best to use these funds, which they are currently using to keep the Ngamo Clinic operational and to drill boreholes. This is a novel way to **simultaneously generate funds for community development, and self-sustain/expand conservation efforts.**



## COMMUNITY DEVELOPMENT

Communities that do not benefit from conservation often harbour negative attitudes towards wildlife. The CRCI **places local communities at the heart of conservation efforts and engages them as rhino custodians**, including as community wildlife protection scouts, for them to reap directly from the Initiative's benefits. These communities have allocated and entrusted some of their communal grazing land specifically for rhino conservation, with the appreciation that this brings them many development opportunities.





# CRCI BENEFITS AND LONG-TERMISM

- CRCI employs over 60 people from the local villages, most as Cobras Community Wildlife Protection Scouts
- CRCI generates direct revenue from tourism that supports the operational costs of the local Ngamo Clinic; the value of wildlife for local people is tangible...it directly finances local healthcare! The Clinic has treated over 2,500 patients since it opened on 15 Sept 2022.
- Educating school children, as well as community members, to better understand and appreciate the potential for wildlife conservation to uplift them is a significant part of this Initiative.
- Following the demand of community members, CRCI has established another sanctuary further along Hwange's southern boundary, to engage and benefit more communities, welcome more rhino and continue to expand its conservation ambitions.
- As villagers have seen the success of the first community Rhino Sanctuary at Ngamo, they are now keen to engage with the Initiative and allocate some of their communal lands to wildlife, and particularly to rhinos... community-based conservation at its finest, defeating the odds in an area of intense human wildlife conflicts.
- At Sanctuary 2, a human wildlife fence has been erected, 2 boreholes (one for wildlife and for the scouts' base) have been drilled and scouts' base has been established (accommodation, operations room, ablutions). Sixteen recruits have undergone basic training and have become Cobras scouts. Sanctuary 2 is ready to welcome more rhino and the community awaits this impatiently.
- Several sanctuaries will eventually be joined to make up a larger community conservancy. The Initiative is evolving with community appetite and is expanding steadily to ensure the highest rhino protection standards are always maintained.

# CRCI RETURNS ON INVESTMENT



## FINANCIAL INVESTMENT SINCE 2018

US \$ 1.2 mil.

### Infrastructure:

- Camps
- Boreholes
- Solar power

### Scouts:

- Training
- Salaries and food
- Uniforms
- Living supplies and furniture

### Equipment:

- Weapons
- Cameras
- Radios
- GPS
- Vehicles

### Stakeholder management

### Communications

### Canine unit



## SOCIAL RETURNS SINCE 2018

### Financial revenue (\$60K):

- Ngamo Clinic
- Boreholes
- Whatever the communities decide

### Employment (\$750k)

- Over 60 local people
- Scouts and casual workers
- Skills development
- Training

### Education

- School visits
- Community member engagement

### Human wildlife conflict reduction

- Buffer zone
- Scouts on standby

### Tourism

- Enhanced experience
- Improved awareness



## ECOLOGICAL RETURNS SINCE 2018

### Rhino conservation

### Habitat conservation

### Rewilding

### Human wildlife conflict reduction

### Land productivity

Land to be allocated to rhino conservation and to serve as a human wildlife conflict buffer zone is currently used as unproductive subsistence farming or grazing land. We are exploring projects that further look at how to open up land for rhino conservation and rewilding, and therefore facilitate the above returns, as well as enhance food security and income generation.





# IRRIGATED AND FENCED COMMUNITY GARDENS

- Suggested pilot plan: 1 hectare bucket-irrigated communal vegetable garden around borehole with bush pump with simple fencing to stop domestic animals out

- Budget:
    - Drilled borehole (est. 80m) including survey and casing: US \$ 12,000
    - Bush pump and installation for basic irrigation: US \$ 3,500
    - HWC fence (including labour, 400m 1.2m high diamond mesh fence and pedestrian gate): US \$6,000
    - Small hub/container for storage and sales: US\$8,000
    - Misc (extra labour, transport, mileage etc) : US \$ 2,500
- Total: US \$ 32,000

- Subsistence/traditional crops, millet, teff
- Crop production for local food consumption, for sale of produce to tourism lodges or as local product to tourists, for sale to distillery & brewery at Vic Falls and in Maun, to contribute to more extensive supply chain



# PARTNERING WITH UCG

- **Provide people with water security, food security and with more opportunities to sustainably benefit from natural resources and wildlife through optimised land use, better resource management, localisation and commercialisation**

The investment in a drilled borehole with a bush pump for basic irrigation addresses the need for water security and supports sustainable land use by facilitating the establishment of a communal vegetable garden. This aligns with UCG's goal of providing communities with access to water and promoting sustainable agriculture.

- **Enable varied livelihoods**

The budget includes provisions for a small hub/container for storage and sales, indicating a focus on creating economic opportunities beyond agriculture. This aligns with UCG's objective of enabling diverse livelihoods by supporting local businesses and entrepreneurial ventures.

- **Build contracts with schools and communities**

The pilot plan for a communal vegetable garden suggests collaboration with communities, indicating a potential for building partnerships and contracts with local schools and communities. This aligns with UCG's strategy of fostering community engagement and partnership building to promote sustainable development.

- **Pilot project to scale throughout KAZA**

The proposed pilot project of a 1-hectare communal vegetable garden can serve as a model for similar initiatives across the Kavango-Zambezi Transfrontier Conservation Area (KAZA). The investment in infrastructure such as fencing and irrigation lays the groundwork for scaling up the project to benefit more communities in the region, aligning with UCG's vision of scaling impactful projects throughout the area.

- **Alignment with SDGs**

The investment in the communal vegetable garden and related infrastructure contributes to various Sustainable Development Goals (SDGs), including SDG 2 (Zero Hunger), SDG 6 (Clean Water and Sanitation), and SDG 8 (Decent Work and Economic Growth). By addressing these SDGs, the project aligns with UCG's mission to promote sustainable development and address global challenges through local action.

