

Living with wildlife: Better livelihoods in a transfrontier conservation area

Human-wildlife conflict in a conservation area compromises the livelihoods of those living within its boundaries and undermines conservation goals. Laying a path towards climate resilient livelihoods helps local communities benefit from tourism, while also preserving wildlife corridors within and between five neighbouring countries.

Peace between species

Formally established in 2011, the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) covers approximately 444,000 km² and crosses the borders of Angola, Botswana, Namibia, Zambia and Zimbabwe. Three million people live within the boundaries of the KAZA TFCA, where they depend on natural resources, subsistence farming and tourism-related activities – many of which are unsustainable – for their survival. Most of these residents live well below national poverty lines.

Human–wildlife conflict is a growing concern, perpetuated by the migration of people as well as animals, both of which go in pursuit of water and other resources during times of scarcity. At the same time, wildlife is the primary attraction when it comes

- CRIDF found the KAZA Secretariat to be an ideal partner that is endorsed by all five countries in the conservation area, is advanced in terms of engagement activities, and has the mandate and mechanisms to deliver infrastructure.
- Starting in 2013, CRIDF conducted 'water for livelihoods' project preparation studies within parts of KAZA, developing community water infrastructure in Namibia and reaching the feasibility stage in Zambia and Zimbabwe.
- Taking a more strategic angle to ensure that livelihood projects are sustainable, in 2015 CRIDF drew together data from new and existing sources to develop a series of datasets on cross-border trade, agricultural production, tourism consumption, the carbon footprint of agricultural products, and water usage in the conservation area.
- The KAZA Secretariat and CRIDF used the datasets to show that diverting a proportion of the millions spent on imported agricultural produce for the KAZA TFCA tourism industry towards local agricultural enterprises would stimulate inclusive, resilient green growth across tourism clusters in the region.
- Together, the KAZA Secretariat and CRIDF identified value chain partnerships and permanent water infrastructure that would enable local communities to develop these agricultural enterprises in clusters across the conservation area.

to tourism – a highly lucrative industry that currently brings limited direct benefits to local communities in the region.

It is difficult to solve problems like these in any fragile environment – let alone a conservation area that is divided between five different countries. Recognising the critical role of water in sustaining Kavango

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Zambezi's (KAZA's) iconic natural resource base and local livelihoods, the KAZA Secretariat enlisted the support of the Climate Resilient Infrastructure Development Facility (CRIDF) to support communities in sustainably deriving benefits from wildlife tourism.



Kavango Zambezi Transfrontier Conservation Area (shaded, centre)

Finding pathways

Balancing the needs of people and wildlife is always a complex and multi-faceted task, and climate change only exacerbates the difficulties as resources become more limited. In KAZA, water is both a key part of livelihoods and a key cause of conflicts. Here, CRIDF began by working with communities which required water supplies close to their homes and away from the rivers used by wildlife. Under the umbrella term 'water for livelihoods', CRIDF conducted feasibility studies for water supply provision in Namibia, Zimbabwe and Zambia, and subsequently constructed boreholes for communities in Namibia.

However, these experiences led CRIDF to realise that projects may not be sustainable unless remote communities could find economically rewarding uses for water supplies. This led to more strategic thinking about potential in the tourism sector. An information-gathering exercise and subsequent

analysis conducted by CRIDF, in collaboration with the KAZA Secretariat, highlighted six agricultural products – beef, eggs, milk, oranges, potatoes and tomatoes – that were in high demand from hotels, restaurants and other businesses in the area. Many businesses import these products from other countries, even though they are suitable for production by smallholders within KAZA, given a reliable and sustainable water supply. This analysis was pivotal because it provided evidence of the economic benefits of developing local agricultural enterprises around better water infrastructure; it essentially identified clear pathways to climate resilient livelihoods.

The right tools

Proven technical expertise

CRIDF already had experience of working with KAZA's five member states as a technical advisor in shared water management and climate resilient water infrastructure. As such, CRIDF's reputation for providing technical assistance and building capacity facilitated a collaborative, strategic relationship with the KAZA Secretariat.

Community consultation

Local communities were central to the project. In order to understand community structures, roles and responsibilities and what support was needed to ensure long-term sustainability, CRIDF went directly to stakeholders in local communities.

Evidence base

The analysis that CRIDF conducted, using the datasets compiled during data-gathering exercises and direct engagement with the tourism sector, identified agricultural products that were best suited for incorporation into the tourism value chain. This constituted the evidence base that decision makers needed to identify and support specific livelihood options that would be less climate vulnerable, spark fewer conflicts and foster localised growth. The KAZA Secretariat, as well as local and national authorities, have found ongoing uses for this evidence base in the years since.

Infrastructure managed by communities

As part of 'water for livelihoods', CRIDF and the KAZA Secretariat built climate resilient water infrastructure, such as water points for potable uses and livestock watering. These water points also include solar-powered pumps, storage tanks, and garden irrigation systems. The infrastructure is located within communal conservancies, where local communities have taken on the ownership and management of their natural resources in the long term.

"An important aspect to the success of this project is that local communities must benefit from living with wildlife. They must be active participants rather than passive. Wildlife corridors that enable the animals to move around within the boundaries of the conservation area will only work if the local communities are active participants in reducing the conflict between humans and wildlife. CRIDF's approach of consulting directly with these communities was pivotal to securing their buy-in."

Morris Zororai Mtsambiwa

Former Executive Director, KAZA Secretariat

Routes to alternative livelihoods

It is no surprise that a large and wildlife-rich conservation area like the KAZA TFCA is the focus of an active tourism industry. The analysis undertaken by CRIDF did, however, reveal something surprising: tourism sector operators were importing vast quantities of products into the conservation area, and some of the most in-demand products were food items that could easily be grown within the area itself, without putting significant demand on available water supplies. This revelation led to the definition of multiple routes to alternative livelihoods for local communities that would be sustainable, climate resilient and secure. These livelihoods would also support sustainable growth in the conservation area, benefiting the biodiversity that visiting tourists come to experience.

CRIDF developed databases on: the product needs of tourism facilities; cross-border trade volumes;

current agricultural production; the water needs of crops and livestock, including the 'virtual water' consumed in both producing and transporting a given product; and the carbon footprint of each product. Through these databases and interviews with tourism operators and suppliers, KAZA's leadership and CRIDF then identified agricultural products that are imported on a large scale for the tourism industry, but that are suitable for local production if there is investment in better infrastructure such as boreholes, irrigation systems and shade tunnels.

CRIDF's analysis informed the identification of specific value chain partnerships in key tourism clusters in the TFCA. Using this work as a basis, the KAZA Secretariat and its development partners can support the development of enterprise investment proposals. Meanwhile, they can work with partner governments to change the regulatory environment in ways that will be more supportive of transboundary trade. This easing of trade in products from local producers will connect all corners of the conservation area together to share in the sustainable improvement of livelihoods.

Transformational change

CRIDF initially engaged with the KAZA Secretariat to collaborate on delivering climate resilient water infrastructure to communities living within the conservation area who were experiencing conflict with wildlife. Yet as the larger picture came into focus, the collaboration evolved. CRIDF brought new analysis to the table that defined possibilities for alternative livelihoods – those that would make the most of climate resilient water infrastructure, while also achieving conservation goals. This has shifted the KAZA Secretariat's thinking towards a livelihoods approach. As a result, improving the livelihoods of resident communities became an objective of the KAZA TFCA for the first time in its Master Integrated Development Plan 2015 – 2020.

CRIDF is now working with other international cooperating partners to pilot the approach in Maun,

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Botswana. In this, the primary role of CRIDF is to support pro-poor outcomes by ensuring that local communities and smallholder farmer collectives are included along with more advanced farmers. This pilot will demonstrate how local producers can participate in tourism-driven value chains without placing strain on the natural resources of conservation areas.

Lessons learned in the Kavango Zambezi Transfrontier Conservation Area

- Human-wildlife conflict is a complex issue, and the communities involved need to be consulted about their livelihood needs. This is the only way to get communities actively involved in positive transformation and to find viable, sustainable livelihood possibilities.
- When combined with a climate resilient water infrastructure approach, developing local value chains for products demanded by the tourism sector – such as beef, eggs, milk, oranges, potatoes and tomatoes – does not have to come at the expense of water resources.
- Building an evidence base on potential alternative livelihoods is the first step towards

- minimising conflicts between people and wildlife in a conservation area. The second step is piloting alternatives, connected with local demand for products that communities can meet.
- Local value chains for the tourism sector need support, such as regulatory allowances for crossborder trade and sustainable infrastructure. The governing body of a transfrontier conservation area is in a prime position to champion the overall effort towards this support.

"Here you have five countries that have a transboundary conservation area, the biggest in the world, and yet there is so much poverty in this area. Goods are being imported from somewhere else, which means jobs are being exported.

The whole concept of KAZA really depends on the idea that wildlife and tourism are going to create a local economy that is going to grow and uplift everyone. It won't just uplift the few people involved in tourism at the expense of others."

Pauline Lindeque
Team Leader, CRIDF

ABOUT CRIDE

The Climate Resilient Infrastructure Development Facility (CRIDF) is a DFID (UK Aid) supported programme working to provide long-term solutions to water issues that affect the lives of the poor in Southern Africa. Our focus is to work together with organisations to show them how they can better build and manage their own water infrastructure to improve people's lives. Because rivers, lakes and river basins cross borders, CRIDF is working with 12 different countries in Southern Africa that share water resources. In so doing, CRIDF aims to improve the lives of over 200 million people, many of them extremely poor.



