

# HERDING FOR HEALTH

Integrating livestock management into the wildlife economy in South Africa through an innovative pilot that protects the environment and generates income for local cattle farmers.

## Context

The Kruger to Canyon Biosphere Reserve (K2C) located on the western border of Kruger National Park, South Africa, consists of 2,6 million hectares of both protected areas and agricultural lands. This region is world famous for its abundance

of wildlife and natural beauty. The third largest Biosphere Reserve in the world, the K2C is a critical component of the Greater Limpopo Transfrontier Conservation Area and contains the richest distribution of large mammal species in the world including elephant, rhino, buffalo, lion and leopard.

The K2C falls within the Kruger National Park's (KNP) buffer zone in which the KNP through collaborative partnerships drive the integrated land use strategy of SANParks to enable responsible community based natural resource use and wildlife management that is aligned to KNP socio-economic development plans.

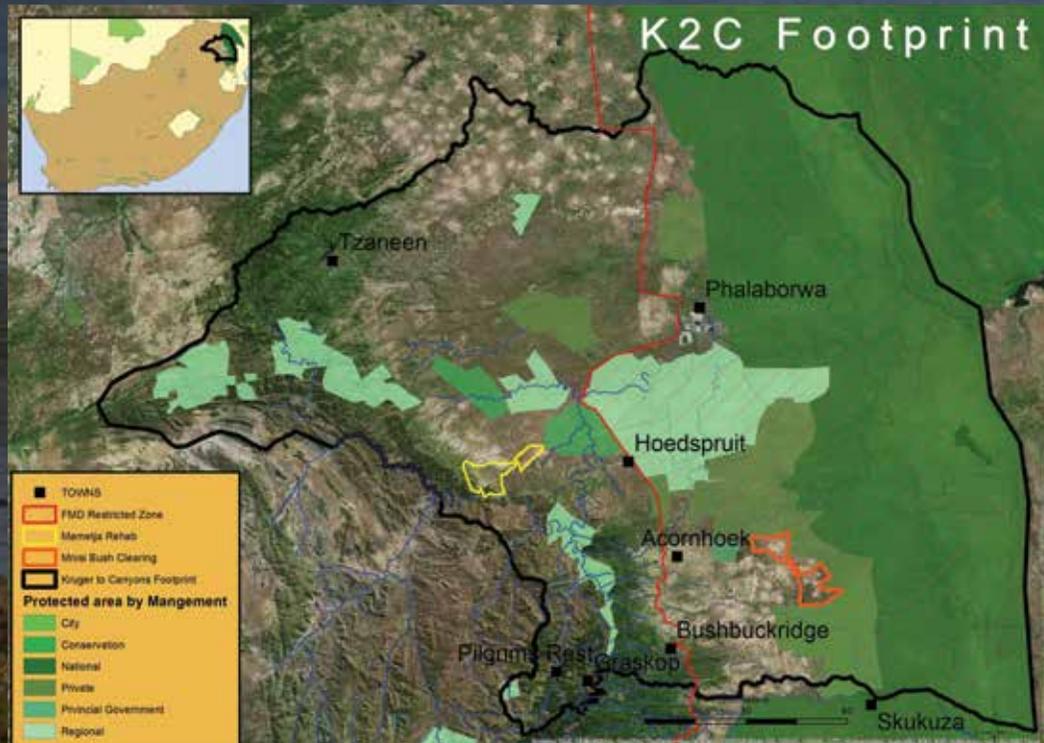


PHOTO: JACQUES VAN ROOYEN

## Challenges

Within this natural wonderland, pastoralist communities bear the burden of living close to wildlife. They suffer from loss of livestock to predation from escaped large predators or smaller mammals like caracal and baboon that cross the park fence boundary. Additionally, these communities and their livestock are at higher disease risk of multihost pathogens and infectious transboundary animal diseases, such as foot-and-mouth disease (FMD) which is spread from buffalo to cattle. This viral disease is of no risk to food safety or public health, but it can spread quickly between cloven hooved livestock and is therefore difficult to control. Because of this, areas where FMD is endemic in wildlife or the risk of spread to livestock is high are demarcated 'FMD infected/ protection zones' (areas not free from FMD), and livestock movement are restricted within and especially across these zones. Over and above

movement control of all susceptible animals FMD is further controlled by restricting contact between buffalo and livestock by keeping wildlife in game proof fenced areas within protected areas such as the Greater Kruger National Park. The restricted movement of cattle and most beef products negatively impacts market access for local cattle farmers and their ability to make money from their cattle. For the farmers living in the FMD protection zone of the K2C their inability to readily sell cattle or move cattle from the area further results in rangeland degradation and significant losses of livestock during periods of drought.

With climate change, droughts and wildlife borne diseases are predicted to increase. Without innovative support interventions for livestock farmers living within the K2C, tensions between protected areas and local communities will increase and many local households will be left destitute whilst conservation struggles to increase benefits for communities.

**“We’ll start caring about your rhino, when you start caring about our cattle”—Traditional leader, Mnisi Community.**

## Collaborative Approach

The Herding for Health project was initiated by the University of Pretoria, Faculty of Veterinary Science to respond to the pressing conservation challenges and to alleviate poverty within the local communities living within the FMD protection zone. Over the last five years, the University has engaged a range of other partners who now work under the banner of the Herding for Health programme. Together, this collaboration aims to empower local cattle farmers to restore their grazing lands and improve their livestock production and health through planned grazing and provision of all recommended veterinary services.

Herd monitors (with knowledge of primary animal health) and ecorangers (herders with training in environmental and livestock management) work together with scientists, local government departments, such as veterinary services, and local communities to improve livestock production whilst

restoring degrading rangelands.

In addition to the rangeland restoration, the Herding for Health partners support local farming cooperatives to take advantage of economic opportunities to improve their livelihoods linked to sustainable red meat production such as game meat harvesting, grazing / grass harvesting rights, seed harvesting for rangeland improvement and trade in livestock and wildlife derived products.

## The Mnisi Pilot

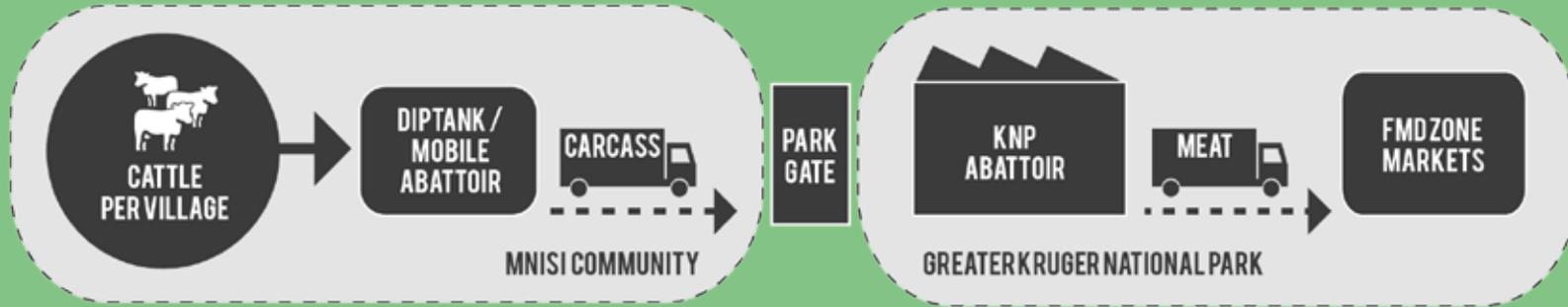
The communities in the Mnisi area (Bushbuckridge Municipality Mpumalanga) are surrounded by wildlife areas on three sides of their grazing lands. This region was selected to pilot opportunities to provide livestock sale opportunities to communities within a FMD Protection Zone due to the long positive history of community engagement by the University of Pretoria as well as conservation and

development partners. The pilot involves testing a new design of mobile abattoir technology to slaughter cattle in villages to facilitate safe and low-impact red meat supply from livestock living in a FMD infected area. The pilot includes, 4 villages and 4 communal dip tanks to avoid cattle contracting FMD or other diseases, 7500 hectares of rangeland; 4000 cattle and 330 cattle owners. The pilot area is within reach of the Skukuza abattoir, the only designated abattoir in the FMD infected zone of South Africa from where meat can be transported even outside of the control area should all veterinary requirements be met.

If successful, the mobile abattoir technology together with the successful integration of commodity-based trade standards for the trade of beef from FMD infected areas will enable the sale of red meat products outside the controlled areas and provide a vital cash injection into local households that rely on livestock farming for their subsistence.



# PROCESS



## Partners

The Herding for Health pilot is being led by the HHWRP (Hans Hoheisen Wildlife Research Platform) of the Faculty of Veterinary Science, University of Pretoria, which is supported by the Peace Parks Foundation and the Hans Hoheisen Charitable Trust. The HHWRP has formed a partnership with Conservation South Africa to collaborate on implementing the pilot, the objective of CSA through this pilot is the promotion of sustainable agricultural practices through the

development of value chains that will promote rangeland and biodiversity stewardship within landscapes of biodiversity importance. The aim is for CSA to assist in scaling up the Herding for Health programme if the Mnisi pilot is successful. The mobile abattoir was developed by Mobile Abattoirs Pty and is operated in collaboration with Meat Naturally Pty. Finally, the pilot is also aligned to the rangeland improvement activities coordinated by the Kruger to Canyons Biosphere Reserve on behalf of SANParks within the pilot sites. The Herding for Health programme feeds

into the integrated land use plan of the KNP in the K2C of which the KNP serve as enabler through collaborative and implementing partnerships. All aspects of the Herding for Health program require close collaboration with various government departments, such as the Mpumalanga Veterinary Services, and the Department of Rural Affairs and Land Reform. These Departments will form part of the development team, especially where new policy and implementation models are being tested.

