The Sustainable Wildlife Economies Project (SWEP)

LANDHOLDER FEEDBACK REPORT

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SANBI Biodiversity for Life
South African National Biodiversity Institute

Biodiversity Economy

AFD Agence Française de Développement

The Sustainable Wildlife Economies Project (SWEP)

The project implementing team for SWEP was put together to integrate the science-policy-practitioner spheres.

The South African National Biodiversity Institute (SANBI) is the primary project coordinator for SWEP. The United Nations Development Programme (UNDP) provided the in-field experience and knowledge of sustainable land management and agro-ecological systems thinking. Rhodes and Stellenbosch Universities provided the research and analytical power and has led the development of scientific products and tools from SWEP outcomes. Nelson Mandela University supported long-term capacity development and field work. SWEP was kindly supported by industry partners who helped to mobilise support for the survey and to connect the research teams with the landholders. SWEP was supported by several provincial stakeholder structures who raised awareness about the project. Provincial governmental agencies provided support and facilitated the surveys of state protected areas.

For more information on the SWEP industry and institutional partners, please visit our website at www.wildeconomy.org/about-the-project/partners-contributors.

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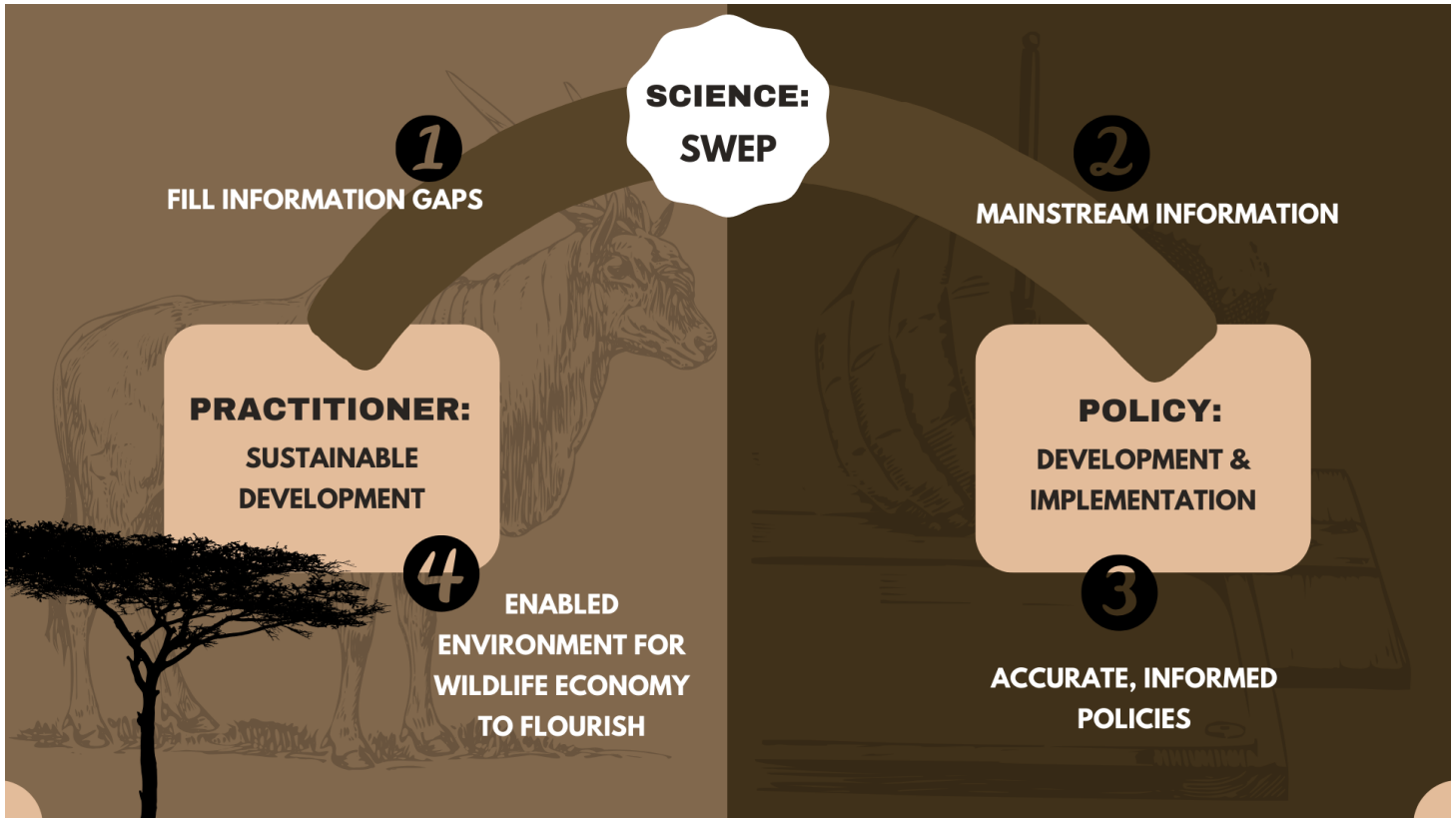
SWEP Rationale



The main objective driving SWEP is to establish and showcase the potential of the private wildlife ranching sector as viable contributors to South Africa's biodiversity economy. SWEP seeks to view wildlife ranching enterprises holistically and show how they contribute to sustainable development. To address the lack of science-practitioner-policy partnerships, SWEP also acts as a bridging agent/partner whereby the information gathered on the ground can be linked into ongoing policy development and implementation. Together with informing on policies, this information can act as tools for the design of market-based incentives to assist the industry in terms of marketing, public awareness etc. With better informed policies, there can be better informed investment in infrastructure and capacity and skills development programmes to ultimately help expand the industry.

SWEP survey format

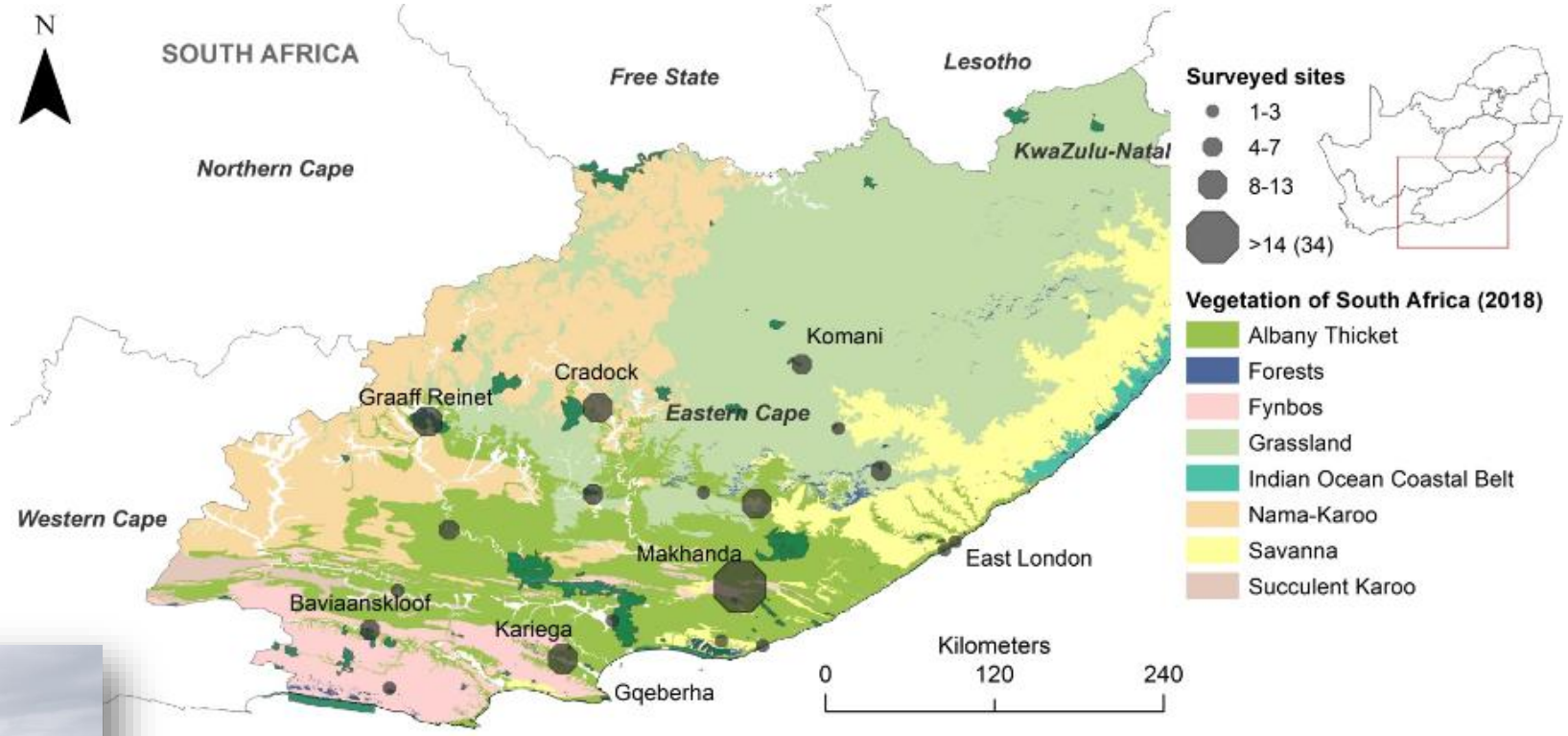
(Co-designed with industry)

Property information:
- Land use
- Land use challenges
- Sustainable land management

Population management:
- Animal health
- Block systems
- Animal species

Socio-economics:
- Revenue generating activities
- Employment
- Networks
- Adaptation & mitigation strategies

Eastern Cape survey coverage (2021)



137

Surveys conducted

936 K*

Hectares assessed.
*553K on established ranches

37

Young people employed

Limpopo survey coverage (2022)

155

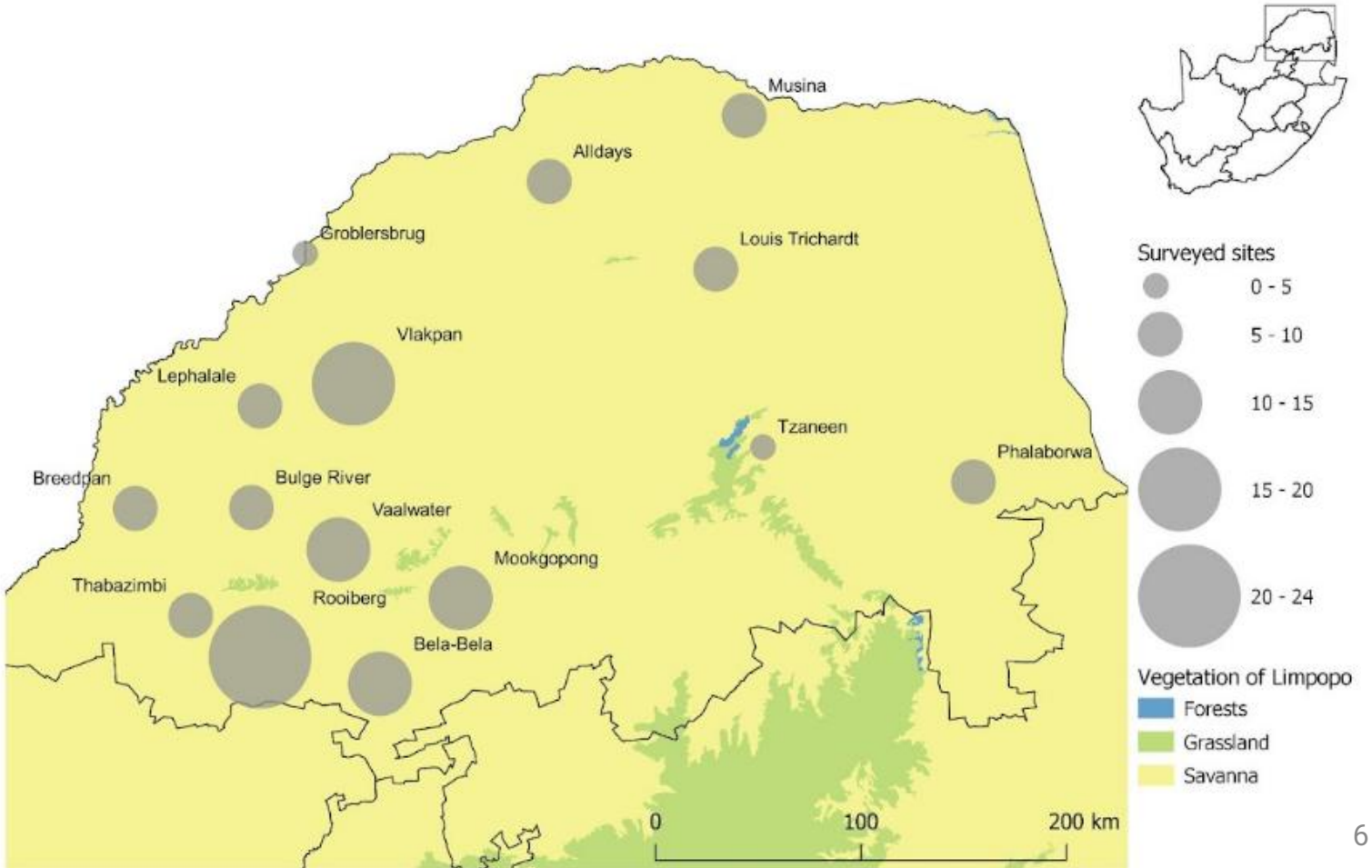
Surveys conducted

714 K*

Hectares assessed.
*627K on established ranches

63

Young people employed

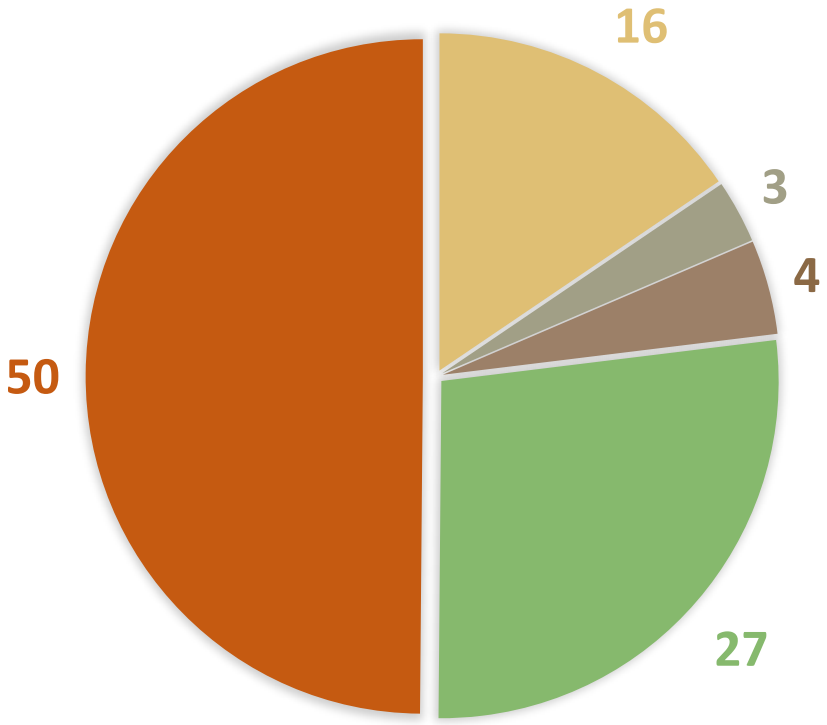


Land categories for surveyed properties

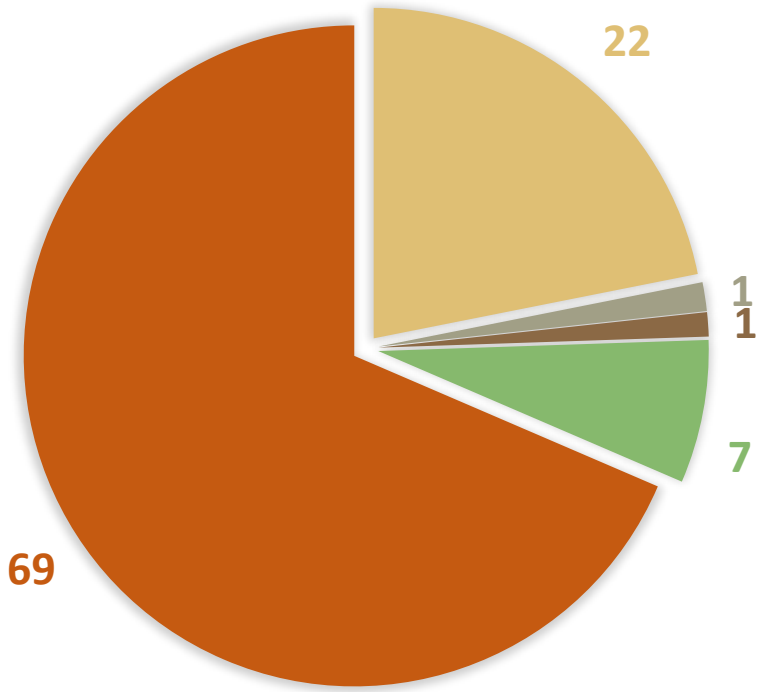
Land category	Eastern Cape total properties (ha)	Limpopo total properties (ha)
Wildlife ranch	552 544	625 544
State protected area	300 017	64 000
New market entrant ranch	50 092.89	10 800
Livestock farm	33 431	12 870
Conservancy	172 000	200 000

Proportions (%) of surveyed property categories

EASTERN CAPE



LIMPOPO



- Wildlife ranch
- State protected area
- New market entrant ranch
- Livestock farm
- Conservancy

Survey results

Below are the summarised survey results captured from wildlife enterprises. On all occasions where the results of the project have been reported, they have been done so in aggregate, for both the Eastern Cape and Limpopo ranches. It is not possible for anyone to identify your property from these results.

Property information:

- Land use
- Land use challenges
- Sustainable land management

Wildlife ranchers are using marginal agricultural land productively

Land use	Average INITIAL proportion (%) of properties	Average CURRENT proportion (%) of properties
Cultivated lands	**3,4**	**0,9**
Old fields	**3,8**	**6,2**
Planted pastures	1,7	1,9
Natural rangelands	88	90
Wetlands	0,7	1,0

Key messages:

Wildlife ranches transformed cultivated lands to more natural habitats.

Sometimes pastures are planted to increase fodder production.

Old fields are a management tool to sustain herds and mitigate overutilisation of natural veld.

Old Fields

Reason for value	% of properties
Fodder	56
Potential to support ecological & habitat health	14
Game viewing	10
Lambing camps	6
Supports hunting	3
Sense of place, beauty	3
Supports game capture	1

Key messages:

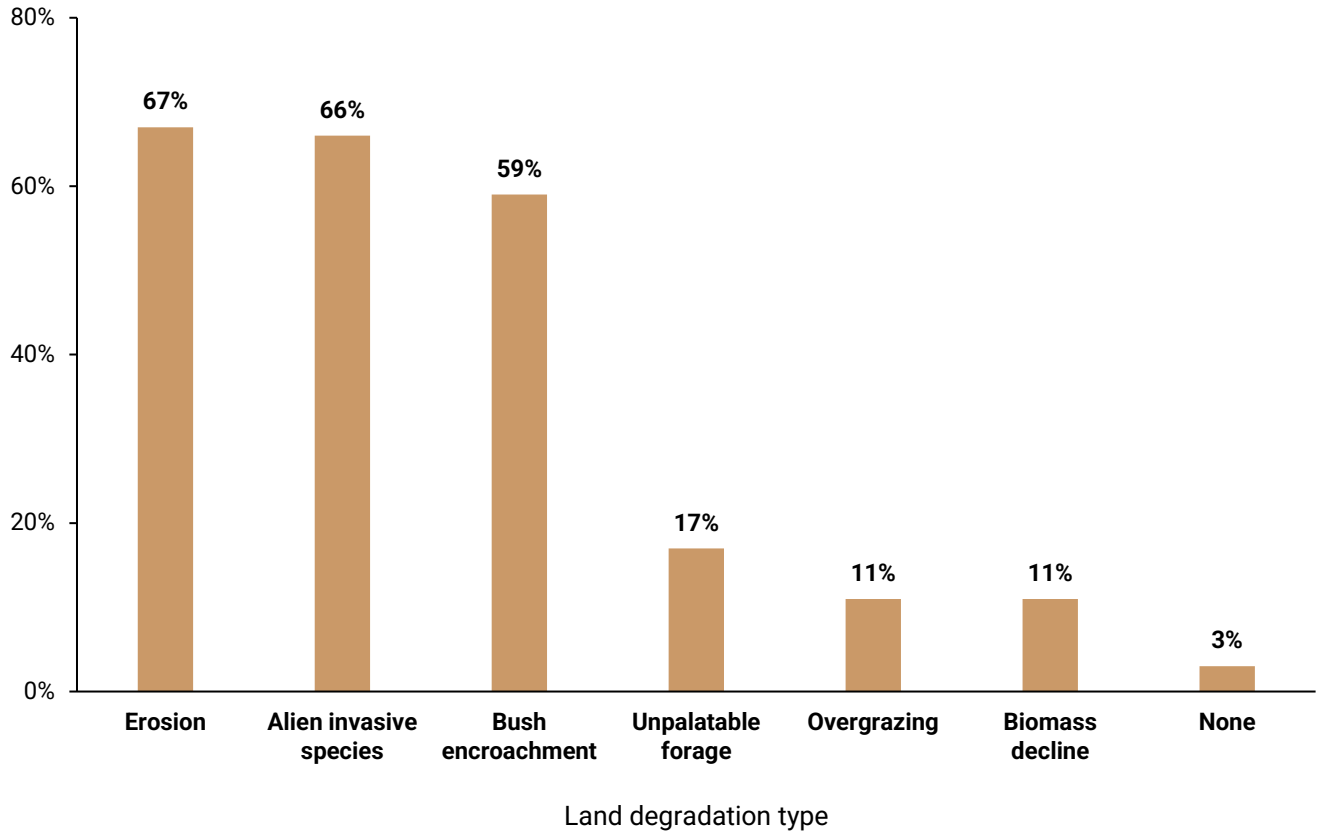
Wildlife ranchers value old fields and apply land improvement measures to previously degraded land.

88% of ranchers expressed that they valued their old fields. Most valued it for fodder production (56%), followed by ecological & habitat health (14%).

Ranchers that did not value old fields cited unproductive land uses (6%), too small to be suitable habitat (4%) and poor aesthetics (1%).

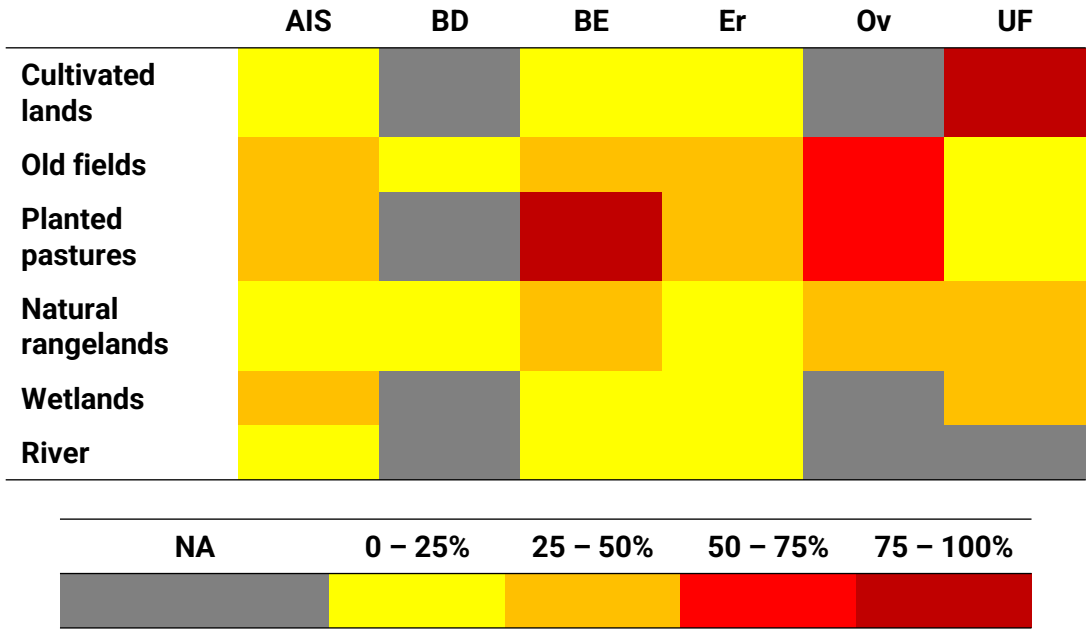
Old fields are productive land-uses for the wildlife economy and a key regulatory link between NEMBA and CARA. In a study on a subset of Eastern Cape ranches, ranchers performed an average of 4.4 economic activities on old fields.

Wildlife ranchers are addressing key challenges, such as erosion, alien invasive species and bush encroachment



Percentage of surveyed wildlife properties (225) that reported the presence of different land management challenges.

Average percentage of property extent of different land use types covered by different land management challenges (**AIS** = Alien Invasive Species, **BD** = Biomass Decline, **BE** = Bush Encroachment, **Er** = Erosion, **Ov** = Overgrazing, **UF** = Unpalatable Forage). Degree of challenge indicated.



Wildlife ranchers invest extensively in sustainable land management measures

Land Improvement Activities

AIS & Bush encroachment Management

Chemical, mechanical and manual removal, biocontrol, use of fire and herbivores (e.g. elephants and Prickly Pear)

Brush packing and packing of other materials, dams and weirs, gabions, micro-ponding, fencing, walling, silt traps & contouring

Structural Erosion Control

Vegetative & Agronomic Measures

Soil treatment to improve fertility, transplanting (e.g. Spekboom, in the Eastern Cape), reseeding & planting of native grasses, ripping and ploughing

Stock density management, grazing management, water management, controlled burning, supplementary feeding, kraaling

Veld & Fire Management

Wildlife ranchers invest extensively in sustainable land management measures

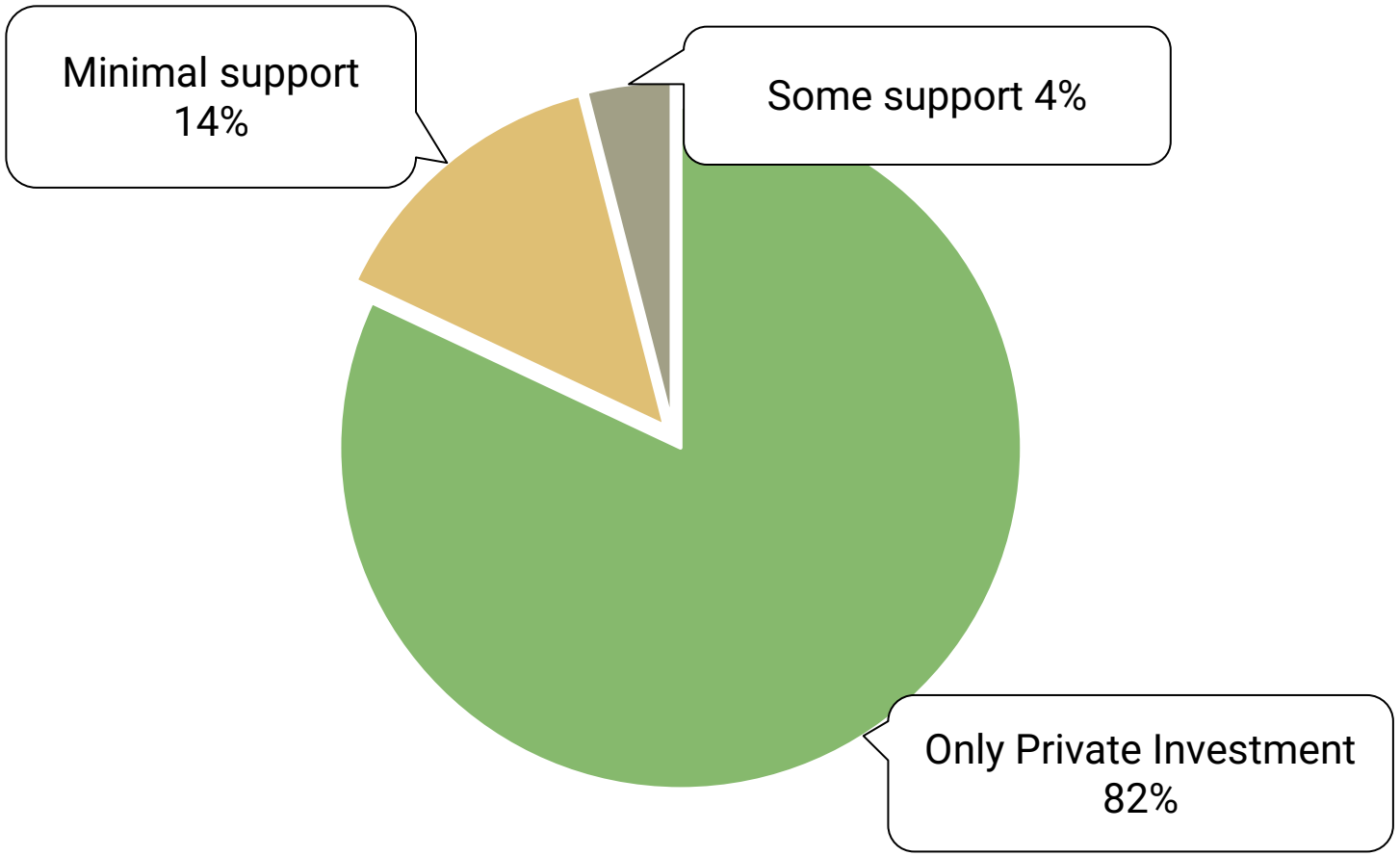
97%	Properties that invest in land improvement measures
87%	Properties that invest in addressing AIS and Bush Encroachment
48%	Properties that invest in Structural Erosion Control
69%	Properties that invest in more than one land improvement activity

Key messages:

97% of wildlife ranchers invest in Sustainable Land Management (SLM) improvements, typically on over a third of their property extent.

Ranchers invest in clearing alien species and woody encroachers (87%). Most ranchers invest in multiple SLM activities.

Wildlife ranchers invest continually in sustainable land management activities

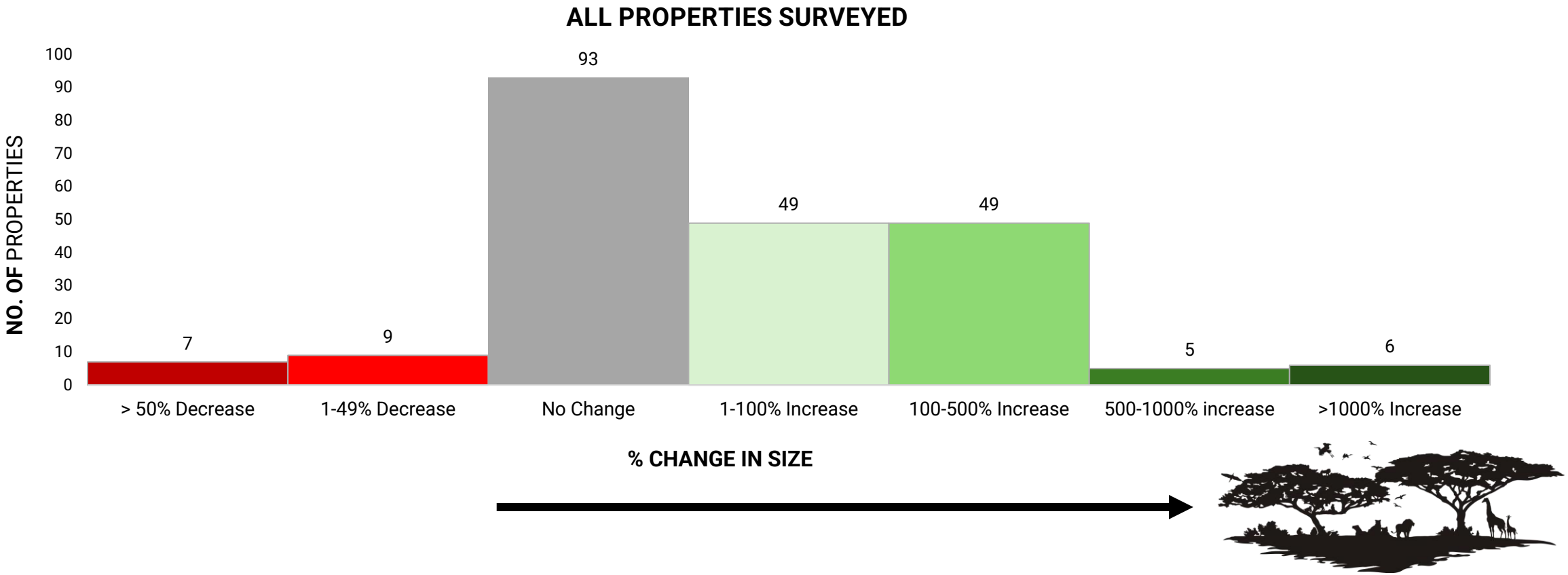


Percentage of properties that receive some, minimal (once-off support, >5 years back) or no support for sustainable land management activities.

Key message:

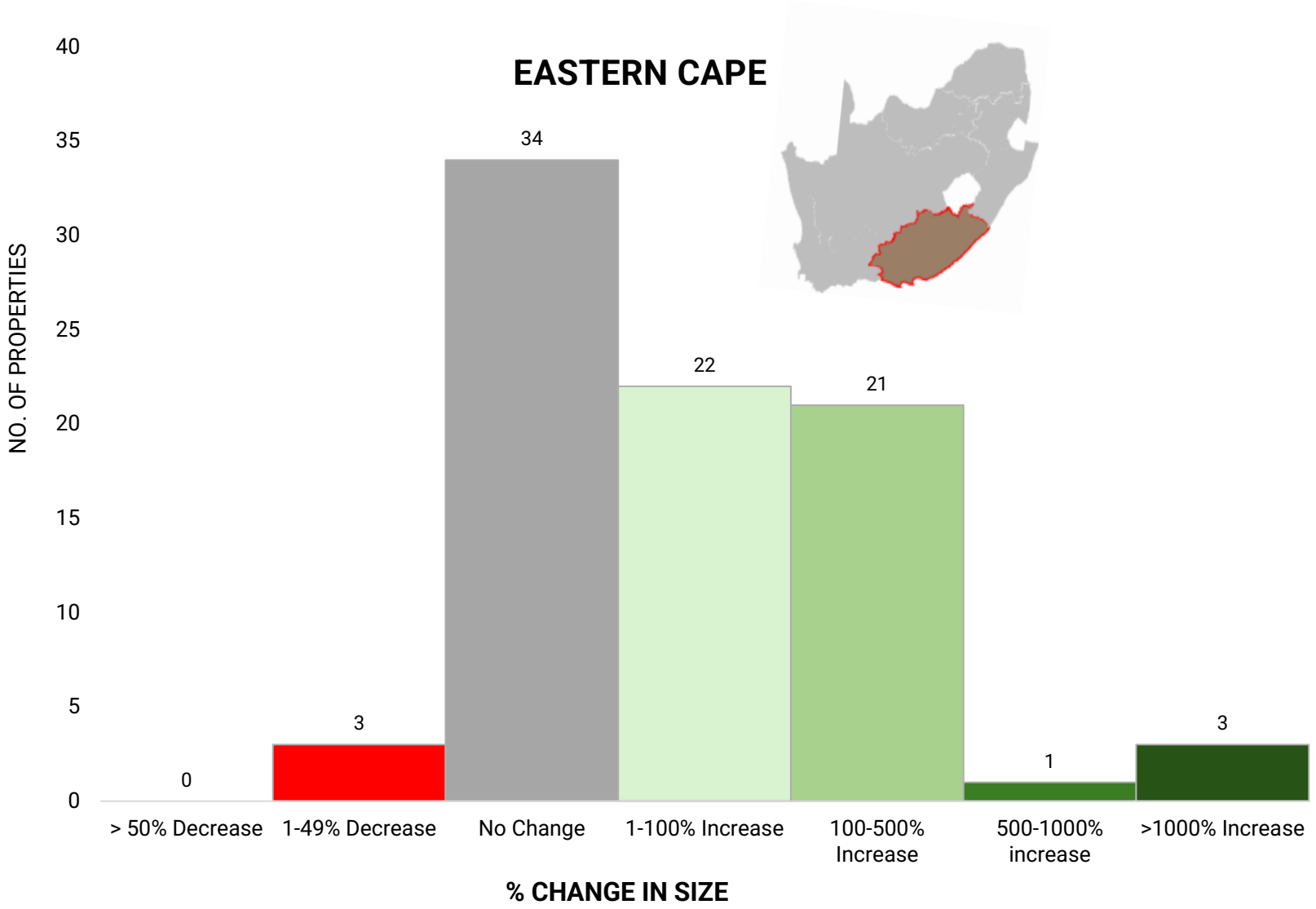
Most ranchers receive either no (82%) or very minimal (14%) external support for implementing sustainable land management. This represents a significant private investment into public goods (ecosystem services).

Wildlife ranching industry increases extent of natural habitat



With an increase in property size, the extent of natural habitat also increases. Overall, 47% properties increased in size since establishment whereas 46% had no change and 7% decreased in size.

Wildlife ranching industry increases extent of natural habitat

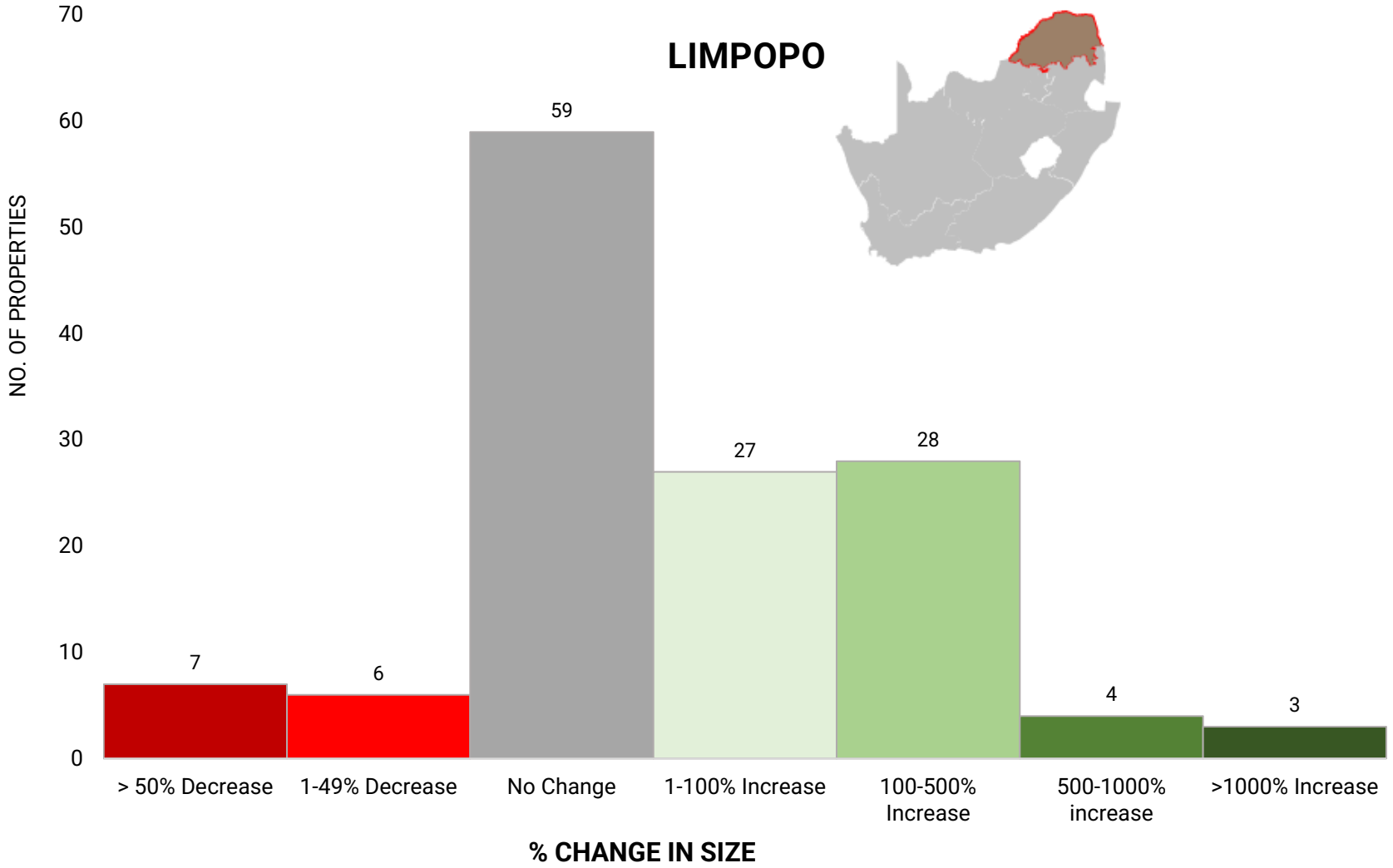


Key messages:

The average wildlife property size surveyed in the Eastern Cape was 6256,90 ha, with a typical size of 2847 ha. The largest property surveyed was 50 000 ha, and the smallest property was 90 ha.

In the Eastern Cape, 56% of properties increased in size, 40% did not change, and 4% decreased in size.

Wildlife ranching industry increases extent of natural habitat

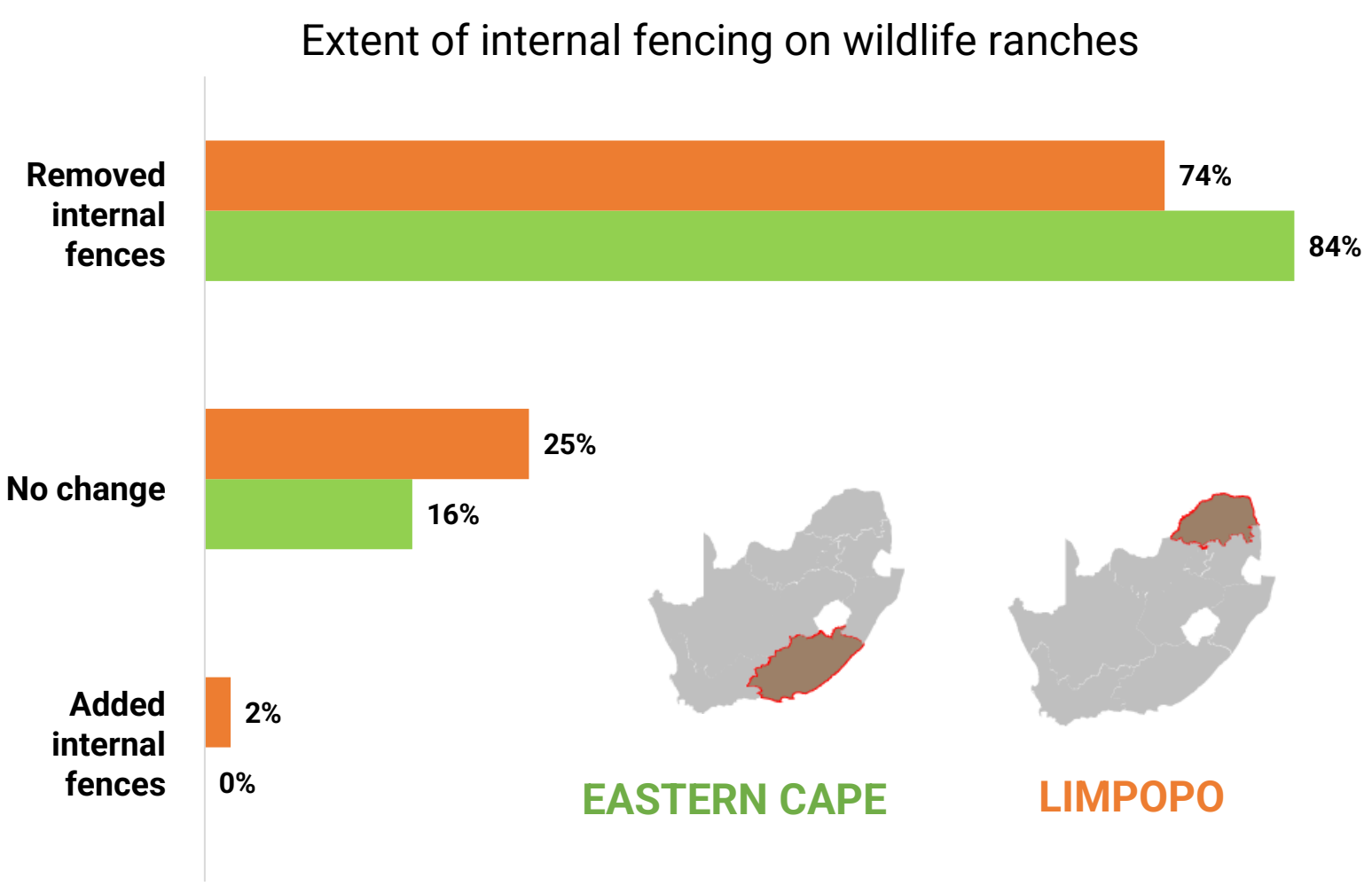


Key messages:

The average wildlife property size surveyed in Limpopo was 4267,20 ha, with a typical size of 2000 ha. The largest property surveyed was 48 000 ha, and the smallest property was 21 ha.

In Limpopo, 46% of properties increased in size, 44% did not change, and 10% decreased in size.

Wildlife ranching industry increases extent of natural habitat



Key messages:

76% of wildlife ranches surveyed removed internal fences since conversion to wildlife.

200 properties, comprising 1 042 014 ha, removed a total of 15 727 km of internal fences.

Typically, properties removed 15 km (half within a range of 2.2-75 m) of internal fences, or 7.6 m (1-20 m) per ha.

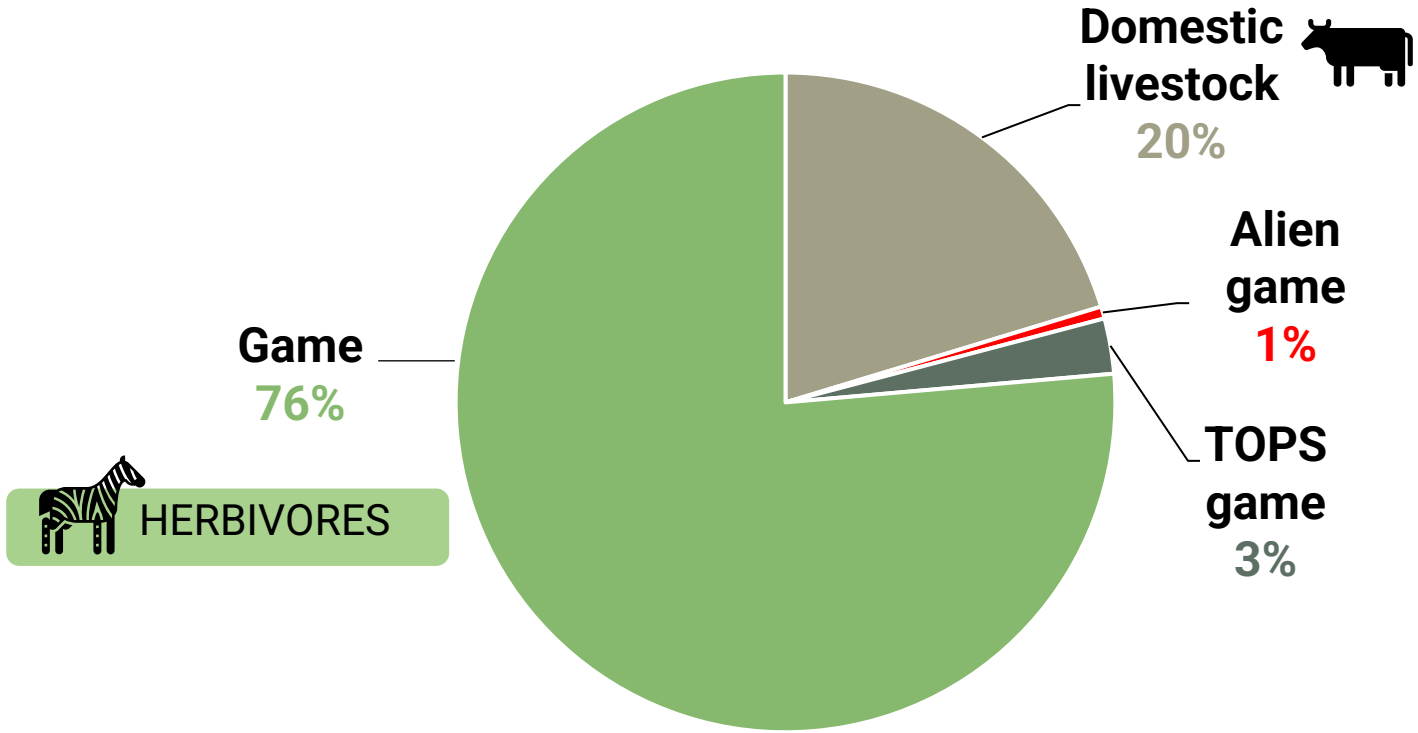
The removal of internal fences contributes to the restoration of previously fragmented landscapes.

Survey results

Population management:

- Animal species
- Block systems

Wildlife ranches support abundant and diverse wildlife species



Average proportional abundance (%) of species within surveyed wildlife properties (275).
Most common species: impala, kudu, nyala, waterbuck, zebra, eland, giraffe

PREDATORS

62% of properties have large predators (lion most common, followed by spotted hyaena and leopard)

MEGAHERBIVORES

21% of properties have megaherbivores (hippo most common, followed by white rhino, elephant and black rhino)

Key messages:

Compared to state protected areas, wildlife ranches support higher species richness and more threatened species per unit area.

ToPS listed and alien species make up a small percentage of overall wildlife abundance on wildlife ranches.

Wildlife ranches conserve significant numbers of wildlife species, including predators and mega-herbivores.

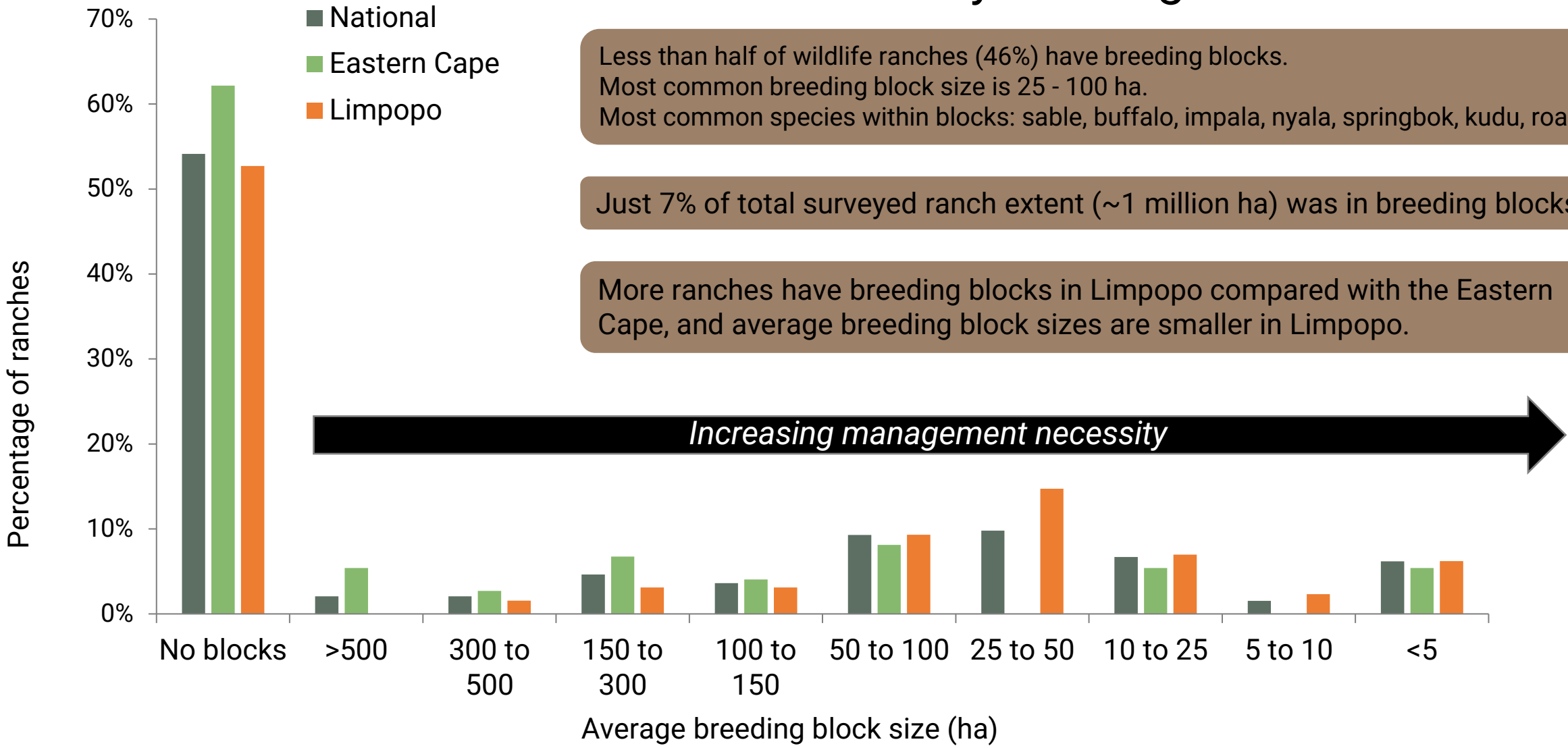
Most wildlife ranches are managed extensively

Key messages:

Less than half of wildlife ranches (46%) have breeding blocks.
Most common breeding block size is 25 - 100 ha.
Most common species within blocks: sable, buffalo, impala, nyala, springbok, kudu, roan.

Just 7% of total surveyed ranch extent (~1 million ha) was in breeding blocks.

More ranches have breeding blocks in Limpopo compared with the Eastern Cape, and average breeding block sizes are smaller in Limpopo.

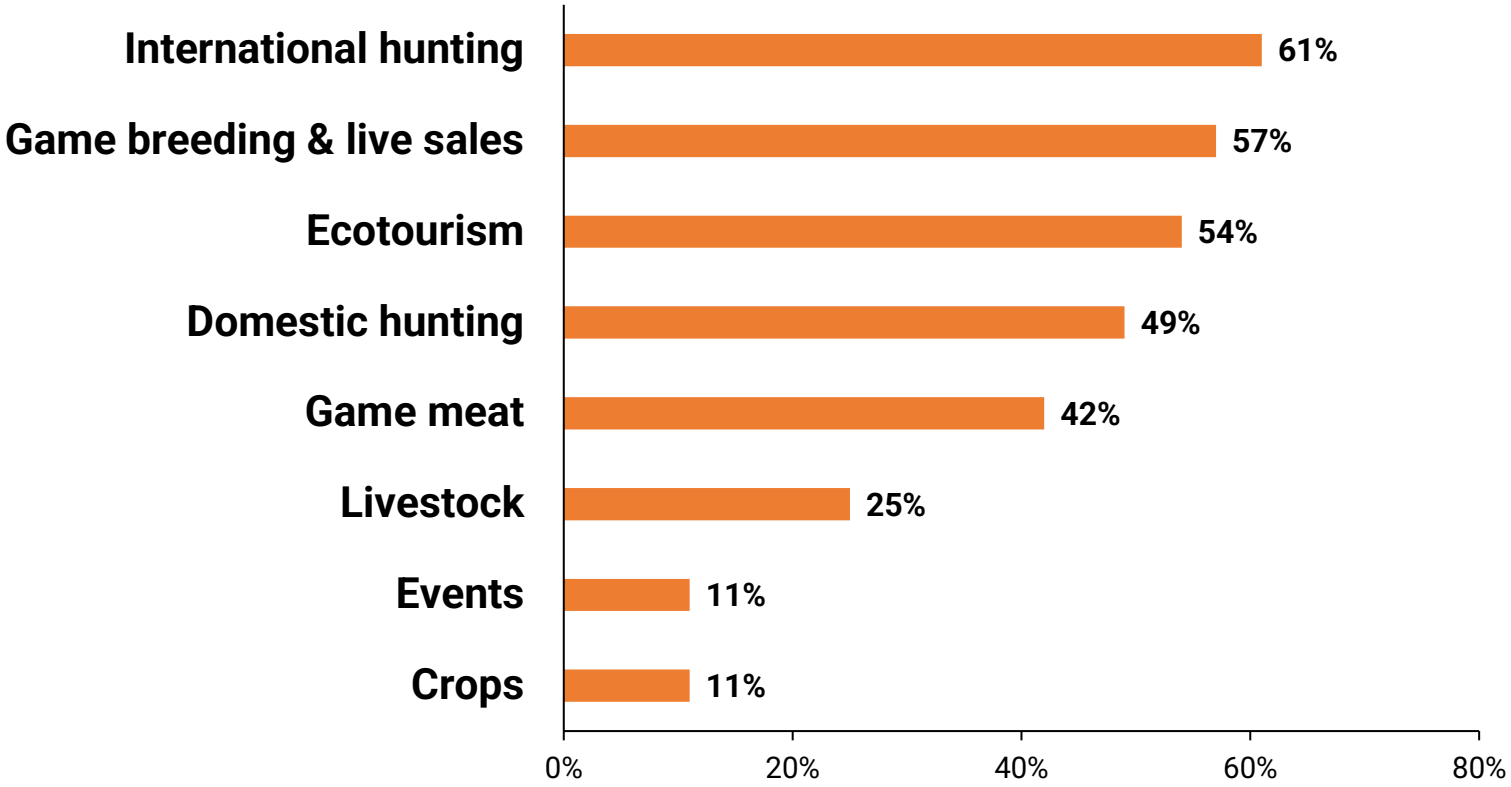


Survey results

Socio-economics:

- Revenue generating activities
- Employment
- Socio-economic benefits

International hunting and wildlife-based tourism are key economic drivers



Percentage of surveyed wildlife properties surveyed (192) conducting different economic activities.

'**International hunting**' includes standard and outfitter. '**Ecotourism**' includes both day and overnight visitors to surveyed (private) ranches. '**Livestock**' includes cattle, sheep and goats. '**Crops**' comprise of both rainfed and irrigated cash crops, as well as fodder production and nursery.

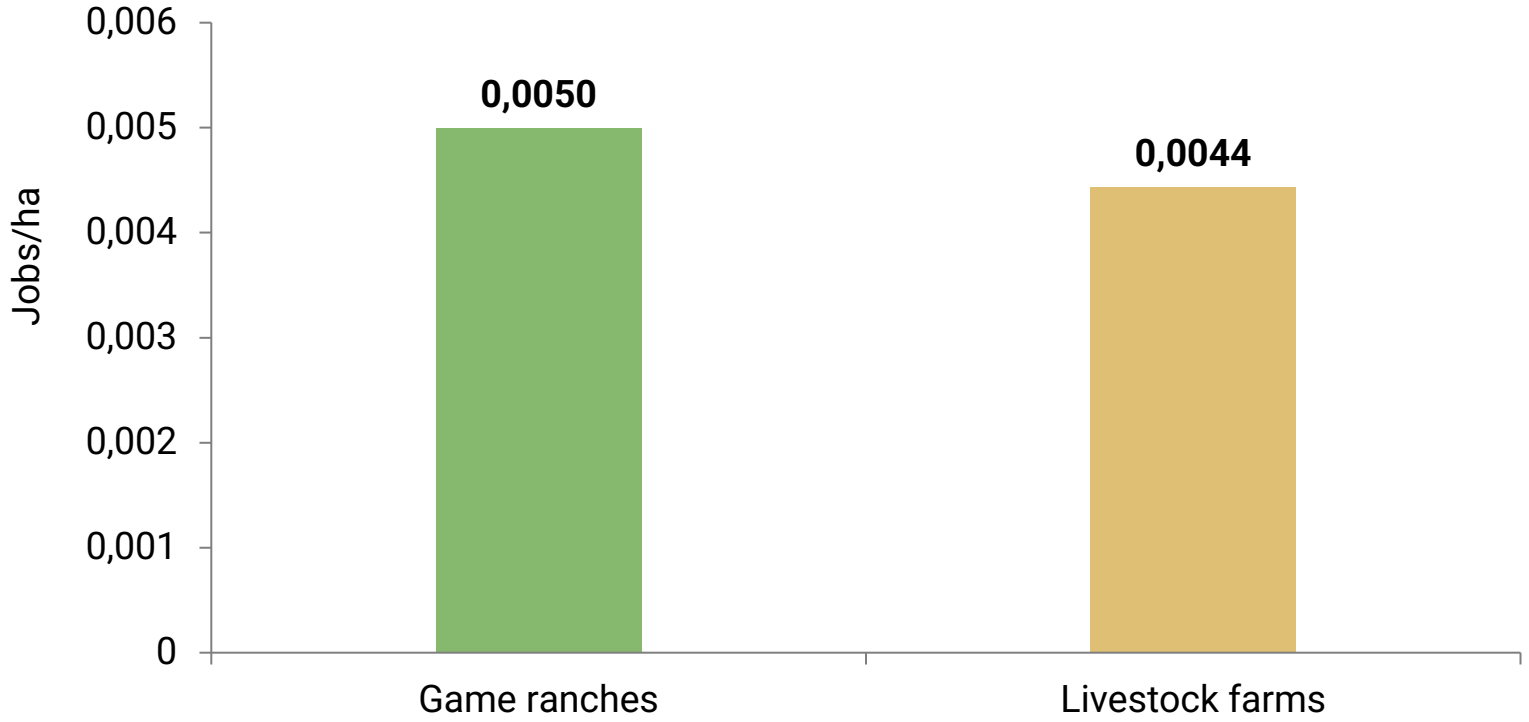
Key messages:

International hunting is the largest contributor to revenue and thus very important for making the wildlife economy (and habitat conservation) viable.

There is potential for domestic hunting and game meat production to be significantly upscaled with the right infrastructure and marketing investment.

International hunting is the main revenue across 380 000 ha of surveyed land, while ecotourism is the main revenue across 220 000 ha and breeding is the main revenue over 120 000 ha.

Wildlife ranching creates significant employment



	Game ranches	Livestock farms
Permanent jobs: (as % of total jobs)	79%	61%
Female jobs: (as % of permanent jobs)	41%	34%

(Game ranch data from SWEP survey. Livestock data from StatsSA 2017)

Key messages:

Wildlife ranches provide more job opportunities per hectare than livestock farms. Ecotourism ranches provide the most jobs (0.011/ha), while other ranches are more comparable with livestock farms.

Wildlife ranches employ a high proportion of permanent workers and a high proportion of female employees, which contributes to various targets under the Sustainable Development Goals.

Wildlife ranching contributes additional socio-economic benefits

Non-salary benefit	Description	% of properties
Housing	Free on-site or off-site accommodation	83
Food	Game meat rations, groceries, meals, farm produce	75
Rates	Water and electricity	41
Transport	Transport between farm and town, fuel for personal vehicles	35
Uniforms	Uniforms, other clothing	23
Other	Wood, Wi-Fi, cell phones/airtime, TV, appliances, laundry service	15
Financial insurance	Pension, provident fund, funeral benefits, medical benefits, Unemployment Insurance Fund (UIF) contributions	13
Gratuities	Gratuities/tips	9
Upskilling	Training, education of employees or their children	9

Key message:

Wildlife ranches commonly provide many additional benefits to their employees. Most ranches provide housing and contribute to food security.

SWEP outputs

Knowledge products:

- Published journal articles
- Popular news articles
- Social media presence

SWEP outputs

JOURNAL ARTICLES

[Lessons from COVID-19 for wildlife ranching in a changing world](). ***Nature Sustainability***

[The diverse socioeconomic contributions of wildlife ranching]() ***Conservation, Science and Practice***

NEWS ARTICLES

[South Africa's wildlife ranches can offer solutions to Africa's growing conservation challenges](). ***The Conversation***

[South Africa's conservation model: why expanding the use of biodiversity to generate money is a good idea](). ***The Conversation***

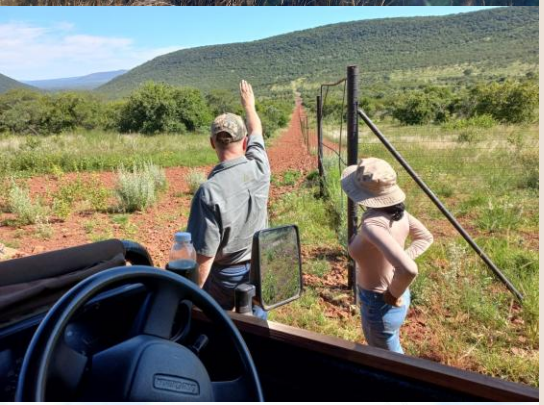
MEDIA

WILD ECONOMY

[WEBSITE]()

[SOCIAL MEDIA]()

We want to thank each landholder who participated in the SWEP survey. Your invaluable contribution plays a pivotal role in making the case for the wildlife economy.



SWEP continues to generate knowledge that will help design sustainable, innovative and inclusive wildlife economies in South Africa.