Sustainable Use as a Function of Biodiversity and Agricultural Development: Exploring the Impacts of Dysfunctional Conservation Jurisprudence



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9th International Wildlife Ranching Symposium

The Conservation Reality



IUCN Definitions and Ideology

- Conservation is... the management of human use of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of future generations.
- Thus conservation is positive, embracing preservation, maintenance, sustainable utilization, restoration, and enhancement of the natural environment.

Preservation Ideology

• Keeping, for emotional reasons, a snapshot of the world as it is/was at some time - defined by whom?

The Global Reality

- The 74 largest terrestrial herbivore species (body mass <100kg) are facing drastic population declines with >60% threatened with extinction¹
- Kenya lost almost 80% of its wild animals since hunting was banned
 - Key species: 20 000 rhinos declined
 - to 1000
 - 150 000 elephants declined to 200020 000 lions declined to 2000
- 6th mass extinction started refer current climate change³

Domesticating the Planet

Consider that 90% of total mammalian biomass is made up of humans and domesticated animals ...

> ... up from 0.1% 10,000 years ago.

VACLAV SMIL, THE EARTH'S BIOSPHERE: EVOLUTION, DYNAMICS, AND CHANGE. MIT PRESS (2002)

References

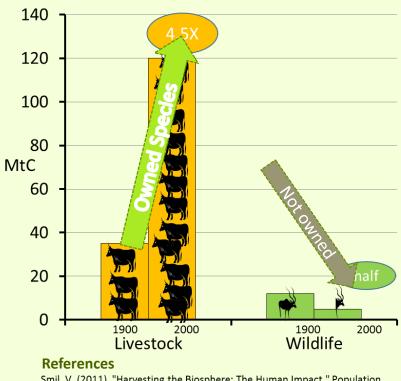
1. Ripple, W.J., et al (2015) Collapse of the World's Largest Herbivores. Sci.Adv. 1, e1400103

2. Red list Data Book, 2015

3. Discussions on RSG morning actuality programme. 2016-04-11

The Global Reality (continued)

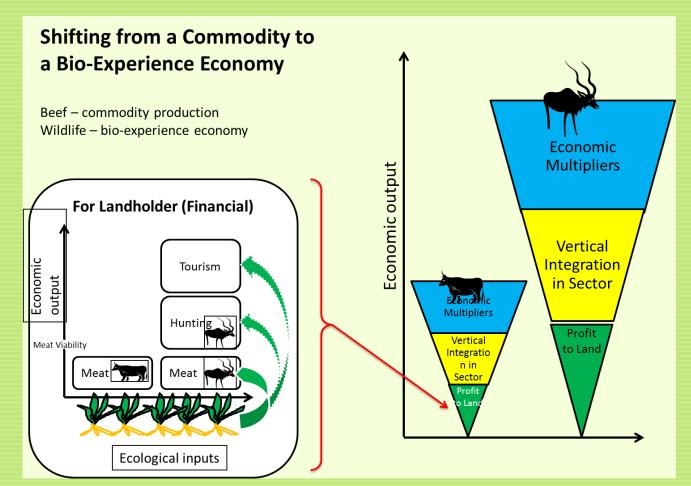
Loss of wildlife in the past century



Smil, V. (2011). "Harvesting the Biosphere: The Human Impact." <u>Population</u> and Development Review **37**(4): 613-636. Species that are owned, replace species that are not owned (*wild*), REGARDLESS of their underlying values



The Global Reality (continued)



References

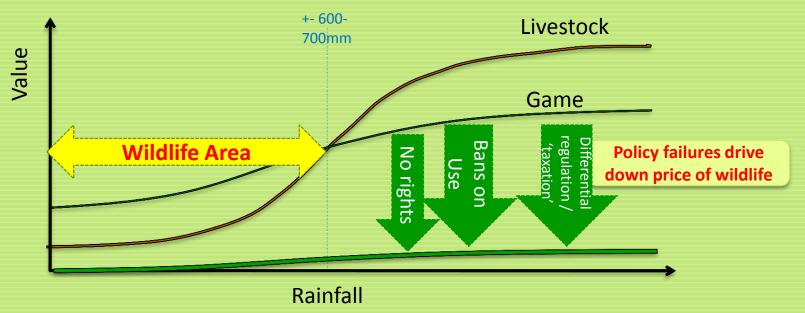
Child, B.A., et al. 2012. The economics and institutional economics on private land in Africa. Child, B.A., 2016. WRSA Workshop: A vision for a coherent African Wildlife Industry

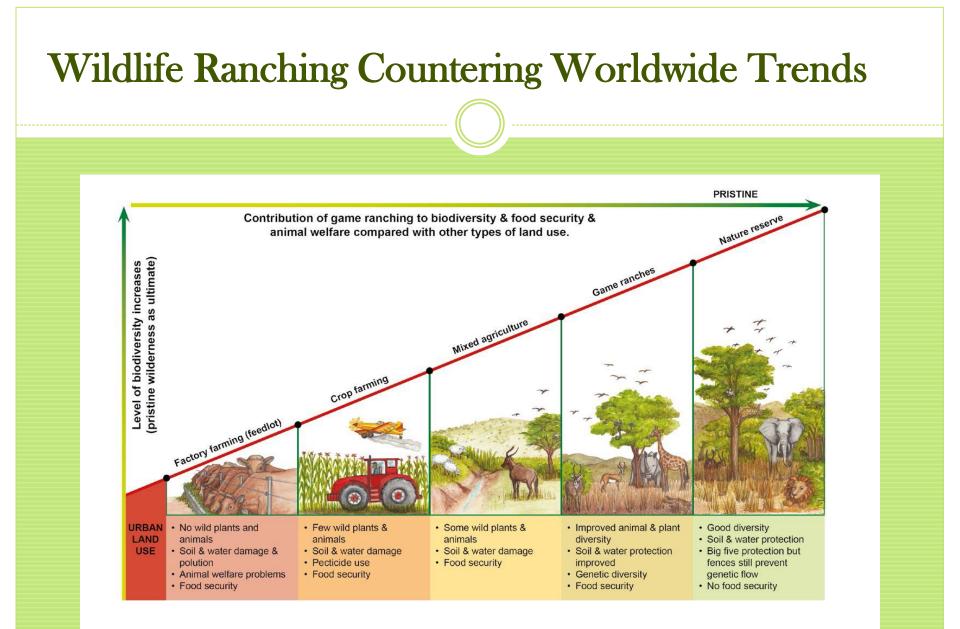
The Africa Reality:

London Convention [1900,1933]

Threat: market hunting at the frontier of European expansion **Response**:

- 1. Protected Areas
- 2. Ban commercial uses of wildlife (CITES)
- 3. Centralize control of wildlife in the state





References

1. Oberem, P.T. and P., 2015. The Case for Game Ranching, WRSA

Institutional economics of African wildlife: new jurisprudence required for a crowded planet

	North American Model	Southern African Sustainable Use Approach
Nature of the state	Free market, democratic	Centrally planned
Nature of wildlife sector	Socialist / centrally planned Centrally owned Centrally funded	Free market (local ownership) Devolved to landholders Funded locally and through use
Conservation Policy	London Convention 1900, 1933, USA/Roosevelt 1900	Sustainable Use Approach
A. Protected Areas	Conserve Fauna & Flora	Conservation, Commercial funding model Appropriate public goods (jobs, Economic growth)
B. Wildlife Ownership	Centralise in the state	1. PROPRIETORSHIP: Devolve to landholders / communities
References		

References

1. Child, B.A., 2016. WRSA Workshop: A vision for a coherent African Wildlife Industry

Institutional economics of African wildlife: new jurisprudence required for a crowded planet (continued)

	North American Model	Southern African Sustainable Use Approach
Baseline conditions	• Rich	• Poor
	• Urbanized	• Rural
	• Highly functional bureaucracy	• Underfunded bureaucracy
	 Strong property rights 	• Property rights still evolving
	• Citizens value outdoor recreation, hunting, fishing	• Citizens concerned about food, shelter, security
When does the model work?	When the state/public provides a whole lot of money	When wild resources is valuable (or valued locally)

International Jurisprudence: Does not Recognise Farmed Game Animals on Semi-Extensive / Extensive Game Ranches

- CoP 17, CITES, IUCN & Red Listing Definitions do not count any farmed game on private game ranches, given their definitions of "wild animals" in "the wild".
- Farmed game on semi-extensive / extensive agricultural land in a number of Southern Africa states do not reside under international intent or governance.



References

1. 2014. Revising the Red List of Mammals of South Africa, Swaziland and Lesotho.

2. CoP17 Conf. 9.24. Criteria for amendment of Appendices I & II

3. Dry, G.C., 2016, International and National Jurisprudence irrational or dysfunctional for private game ranching.

Specific definitions and protocols for what data will be measured
 Only wild and free roaming subpopulations inside the natural range
 No hybrids or exotic subspecies

Subpopulations dependent on direct intervention are not considered 'wild', if they would go extinct within 10 years without 'intensive' management such as:
O Providing most of the food needs
O Captive-bred subpopulations or those inside camps

- Breeding manipulations, such as selective breeding
- Providing ongoing intensive veterinary care



References 1. 2014. IUCN Definition 2. Red Listing Report



Hippotragus niger niger

National Red List Status (2014):		Vulnerable	
	National Red List Status (2004):	Vulnerable	

- 477 mature individuals (<1000)
- No subpopulation larger than 250
- Most subpopulations are declining
- Note: on private game ranches in South Africa: 15000 (97%)

References

1. 2014. Revising the Red List of Mammals of South Africa, Swaziland and Lesotho.

Hippotragus equinis

National Red List Status (2014):	Endangered
National Red List Status (2004):	Vulnerable

- 245 mature individuals (<250)
- No subpopulation larger than 250
- Half subpopulations are continuing to decline
- Note: on private game ranches in South Africa: 4500 (92%)



References

1. 2014. Revising the Red List of Mammals of South Africa, Swaziland and Lesotho.

Resolution Conf. 9.24 (Rev. CoP16)-2

- "... populations in the wild"
- "species of which all specimens in trade have been used in captivity or artificially propagated should not be included in the Appendices... of **wild origin**"

Annexure 1: Biological criteria for Appendix 1

- "The wild population..."
- "The wild population has a restricted..."
- "A marked decline in the **population size in the wild**..."

Annexure 2a: Criteria for the inclusion of species in Appendix II... Convention.

• "... trends of the wild **population**(s)..."

Annexure 5: Definitions explanations and guidelines affected by trade

- "... that may be **detrimental to its survival in the wild**" Wild populations
- "Wild populations refer to the total number of free-living individuals of the species within its area of distribution, as defined in this Annexure"

Population size

• "... effective size (i.e. individuals capable of reproduction, excluding individuals that are environmentally, behaviourally or otherwise reproductively suppressed in the wild)..."

USA DEPARTMENT OF INTERIOR LETTER TO SA (22 Jan 2016)

Fish and Wildlife Services

- Under ESA listing, stricter measures to import hunted lion trophy, **regardless whether wild or captive-bred**
- Evidence of "enhancement of survival in the wild"
- Evidence of "enhancement of survival in the wild" also for Bontebok

CITES ¹

- International Trade Conventions should not prescribe the national sustainable use policies for African states; Ethiopia, Gabon, Kenya, Niger, Senegal, etc.
- CITES is a compliance jurisprudence; influencing independent governments to make "control of international trade" easier.
- Insufficient weight given to biodiversity economy and sustainable use
- Dr M Tolba, previous executive director of UN Environmental Programme, warned CITES in 1992: "There are loud complaints from a number of developing countries that the rich countries are only interested in making Third World countries into a natural history museum. They are not giving food to their people."

International Jurisprudence (continued): South African Legislation

LEGAL OPINION: NEMA AND NEMBA²

• "It is our view that the species listed in the notice refer to threatened species **in the wild** as per section 56 (1)(a), (b) and (c) of NEMBA and not on private farms unless the action on private land will impact on the **species in the wild**."

NEMBA: Norms & Standards²

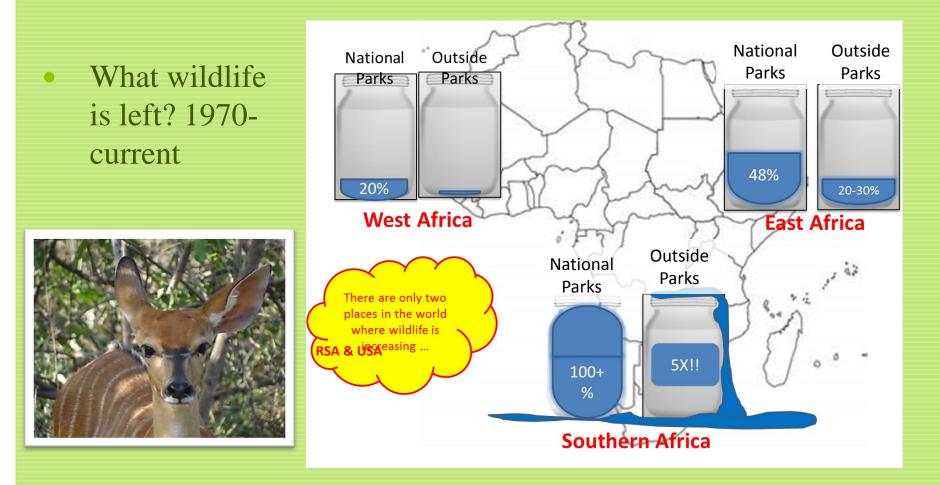
- TOPS classify an Alien Species as: "A species that is not an indigenous species; or an indigenous species translocated or intended to be translocated to a place outside its natural distribution range in nature.
- "NEMBA has no enabling provisions for facilitating sustainable use²

References

1. Advocate J.J. Wessels SC, Advocate J.C. Uys, Chambers, SANDTON. 24 May 2016

2. DEA Interpretation

European & USA Jurisprudence: Effects on African Wildlife



References

Craigie, I. D., J. E. M. Baillie, A. Balmford, C. Carbone, B. Collen, R. E. Green and J. M. Hutton (2010). "Large mammal population declines in Africa's protected areas." Biological Conservation 143: 2221-2228

Conclusion

- The Architect of the Universe stopped making land; not humanity
- Land will be shared by growing populations, agriculture and conservation
- Key to wildlife recovery in Africa: not technical or ecological, but carefully crafted legal and performance measures to address "market failures"^{1,2}
- International bad jurisprudence lead to declining conservation and community development in Africa and they are **not** selfcorrecting



References

1. Child, B.A., 2016. WRSA Workshop: A vision for a coherent African Wildlife Industry

2. Vorhies, F., 2016, VCA Standard, Earthmind, IUCN Conservation Centre, Switzerland

Conclusion (continued)

- International Conservation Agencies and state sponsored "Conservation/Preservation" not sustainable in Africa
- Current International "Conservation" Jurisprudence dysfunctional for game ranching
- Optimise the conservation, social, economic and agricultural land-use benefits in the interest of all African people
- Monitor and evaluate farmed game performance as an asset class of the biodiversity economy and sustainable use and not as an extension of the international and state's conservation mandate



References

- Cousins, J. et al, 2008. Exploring the role of Private Wildlife Ranching as a Conservation Tool In South Africa: Stakeholder Perspectives. Ecology and Society 13 (2): 43.
- Child, B., 2012. The sustainable use approach could save South Africa's rhinos. S Afr J Sci.; 108(7/8), Art. #1338, 4 pages.
- Child, B.A., et al. 2012. The economics and institutional economics on private land in Africa.
- Child, B.A., et al. 2012. Pastoralsim: Research, Policy and Practice, Parent & Graham FT Child, http://www.pastoralismjournal.com/content/2/1/18.
- Child, B.A., 2016. WRSA Workshop: A vision for a coherent African Wildlife IndustryRipple, W.J. et al. (2015). Collapse of the world's largest herbivores. Sci. Adv. 1, e1400103.
- Cloete, P.C. et al, (2015). Game Ranch Profitability in South Africa (2nd ed.). ABSA.
- CoP17 Conf. 9.24. Criteria for amendment of Appendices I & II
- Craigie, I. D., J. E. M. Baillie, A. Balmford, C. Carbone, B. Collen, R. E. Green and J. M. Hutton (2010). "Large mammal population declines in Africa's protected areas." Biological Conservation 143: 2221-2228
- Dry, G.C., 2015, Personal communications
- Dry, G.C., 2016, International and National Jurisprudence irrational or dysfunctional for private game ranching
- Hutton, J., 2010. CITES: Authority Without Accountability a Responsibility. Html file: 15-02-2010.
- Oberem, P.T., 2015. Personal communications
- Oberem, P.T., 2015, The case for Game Ranching, Presentation 2nd Biodiversity, Indaba 5 Nov. 2015
- Oberem, P.T. and P., 2015. The Case for Game Ranching, WRSA
- Pim, S.L. et al, 2014. The biodiversity of species and their rates of extinction, distribution and protection. Science 344 issue 6187, p. 987.
- Red list Data Book, 2015
- Ripple, W.J., et al (2015) Collapse of the World's Largest Herbivores. Sci.Adv. 1, e1400103
- Vorhies, F., 2015, VCA Standard, Earthmind, IUCN Conservation Centre, Gland, Switzerland
- Wessels J.J. and Uys J.C., Chambers, SANDTON. 24 May 2016
- 2014. IUCN Definition
- 2014. Revising the Red List of Mammals of South Africa, Swaziland and Lesotho