Colloquium Abstracts

Day 1 – Monday 04 November – 12:00-18:30

Session 1 Enabling laws & policies for the wildlife economy
The Global Biodiversity Framework calls for governments to ensure that the harvesting, use, and trade of wild species is sustainable and legal. This session explores various ways in which governments can support the wildlife economy.

Session 2 Standards & certification for sustainable wildlife use
How can we ensure that the use of wildlife is sustainable and equitable? And how can we assure consumers, investors, regulators, and other stakeholders that this is the case?

Session 3 Special panel on liberalising intra-African wildlife trade
The African Continental Free Trade Area aims to reduce tariff and non-tariff barriers to intra-continental trade? What are opportunities increasing the trade in wildlife products across the continent?

Reception

Day 2 – Tuesday 05 November – 08:00-19:00

Session 4 Towards a sustainable wild meat sector
The Parties to the Convention on Biological Diversity have called for "creating the enabling conditions for legal, sustainable management of terrestrial wild meat in tropical and subtropical habitats." How is the wild meat sector developing in Africa?

Session 5 Fostering equitable wildlife economies
A wildlife enterprise may be sustainable in environmental and economic terms, but still issues of social equity and security. How do we address complex issues relating to motivations, values, stability, and fairness?

Session 6 Special panel on the ethics of hunting
In many countries, hunting is legal. Nevertheless, some oppose it on ethical grounds. A case can be made that hunting supports conservation and communities. However, such utilitarian arguments for hunting do not seem to sway those who dislike it.

Session 7 Wild health for people & ecosystems
There is an increasing interest in 'one health''— described by the WHO as "an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems." What are the implications for the wildlife economy?

Session 8 Governance in wildlife economies
Wildlife economies are complex and thus the governance of these economies – formally, informally, by governments, and by market processes – is also complex. What are the challenges and how to ensure good governance?

Game meat braai hosted by Jamma Conservation & Communities

Day 3 – Wednesday 06 November – 08:00-13:30

Session 9 Landscape approaches to wildlife enterprise
Though wildlife enterprises focus on the sustainable and legal use of wild species, the wildness of these species is linked to the landscapes in which they live and how we manage both landscapes and wild species. A landscape perspective is needed.

Session 10 Financing the wildlife economy
The wildlife economy offers the opportunity to generate revenues from the sale of wildlife products in open markets. However, financing is needed for capacity building, startups, scaling up, and diversification. What are the promising financing options?

Session 11 Special panel on mobilising action towards resilient wildlife economies
A famous political pamphlet by Lenin was title "What Is to Be Done?"" Reflecting on the excellent presentations and discussions in our Colloquium, indeed, what is to be done? What's next for the wildlife economy and for impactful research and engagement?

Day 1 – Monday 4 November

Session 1: Enabling laws and policies for the wildlife economy

Date: 4 November 2024 Time: 1300-15:00

Facilitator: Francis Vorhies, AWEI (USA)

The effect of conservation policies and regulations on the sustainable use of wildlife on private game ranches in South Africa

Karlin Muller, South African National Biodiversity Institute (South Africa)

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It is increasingly recognised that the private wildlife ranching industry in South Africa is disincentivised to manage rare and endangered game species. Permitting systems of conservation policies such as the IUCN, CITES and South African ToPS regulations have the potential to cause financial and administrative burdens to wildlife managers. As part of a Master's proposed project, the effect on the sustainable use of threatened species, bontebok (*Damaliscus pybargus pybargus*) and Cape Mountain zebra (*Equus zebra zebra*), on private wildlife ranches in South Africa is investigated. The live sales and trophy hunting market between 2016 and 2023 provide an opportunity to investigate the dynamics of market prices in the wildlife economy. Preliminary results indicated a decrease of over 90% of median auction market value of bontebok and Cape Mountain zebra (CMZ). Average trophy hunting value of bontebok increased with 70%, while CMZ trophy hunting value decreased by over 90%. A declining trend in the number of bontebok and CMZ trophy exports from South Africa into the USA is observed. Fewer documented bontebok and CMZ trophy hunts during this period may allude to a decline in their trade. Moreover, a declining frequency of bontebok trophy exports from South Africa to the USA may also support the premise of a reduction in trade. The decrease in bontebok and CMZ median auction price suggests supply increased from landowners selling off their stock due to increased financial and administrative burdens relating to trade permits. The increase in bontebok trophy hunting prices may represent the increase in demand in the market, created from the perceived reduction in trade, whereas a decrease value in CMZ may highlight the restrictions to trade from permitting requirements. Conservation policies and regulations may play a driving factor in wildlife market prices, which have conservation implications.

When the land swallows elephants: An analysis of the use of financial incentives to support wildlife conservation as an economically viable land use in Kenya

Elizabeth Gitari-Mitaru, Center for Legal Research and Innovation, Riara University (Kenya)

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The main objective of the research is to evaluate the effectiveness of Kenya's fiscal incentives in supporting a sustainable wildlife economy. Conservation initiatives in the United States, Australia, and most of Europe increasingly emphasize more direct incentives: land purchases, leases, and easements, as well as financial incentives such as performance payments and tax relief. Ogutu (2016) argues that governments need to encourage and support investment initiatives that enhance socio-economic development and wildlife revenue generation. The Kenyan government identifies land use change as a key threat to wildlife conservation primarily due to the lower economic returns that wildlife conservation offers as compared to other land uses such as agriculture. Although wildlife conservation is recognized by policy and law as a legitimate form of land use that can compete with other forms of land use such as agriculture, the degradation of wildlife habitat continues to be a major challenge in Kenya. This situation is likely to worsen in the next 50 years, especially if rural populations continue to increase and the economy stagnates. Under such scenarios, the government may be tempted to consider the removal of some parks and reserves to create lands for settlements and food production to support the increasing human population. It has been argued that the policy and legislative framework translates to reduced incentives and compensation for opportunity costs incurred to private landowners managing wildlife. Despite a robust policy and legislative framework underpinning wildlife conservation in Kenya, there is no framework for the use of fiscal incentives to support sustainable and longer- term wildlife conservation as a profitable form of land use. Furthermore, the contribution of the wildlife economy in Kenya to the national economy is not fully captured due to a lack of data. Therefore, Kenya needs to offer greater fiscal incentives to support voluntary and market-driven uptake of wildlife conservation as an economic activity outside of "passion"-driven motivations.

Impact of policy decisions in the conservation sector on the wildlife economy in Kenya

Tuqa Jirmo, The Nature Conservancy (Kenya)

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Kenya's diverse biological assets, significant ecological zones, and habitats hold great potential to realize a sustainable national wildlife economy. Such an economy can contribute to multiple environment and development goals including poverty alleviation, creation of decent and green jobs, income generation and alternative livelihoods for local communities, enhanced conservation of biodiversity, and protection for important wildlife spaces. We have initiated a study on the wildlife economy in Kenya. Here we analysed various policies and their impact on the wildlife economy for the last three decades. Kenya has over 14 policy instruments that had significantly influenced decisions in the conservation sector on the wildlife economy in Kenya. These government policy decisions and their implementation had significant negative impact on Wildlife economy growth by suppressing wildlife economy growth in the country, which can be summed up as policy failures. Policy failures in the wildlife sector in Kenya can have far-reaching negative impacts on the wildlife economy, affecting conservation efforts,

tourism, community livelihoods, increased human-wildlife conflicts, and the overall sustainability of wildlife resources. In addition, these policies have failed to ensure fair distribution of tourism revenues, and other conservation benefits can create resentment among local communities These have led to a significant decline in key wildlife species, habitat fragmentation and loss, declining wildlife populations and reduced biodiversity, and negative attitudes towards wildlife conservation, making it harder to implement future policies and eroding community support. The study recommends that several ongoing efforts in policy implementation need to reverse the current down trend in tourism, loss of biodiversity, increased human-wildlife conflict, and economic hardship for local communities. Finally, active community involvement through the establishment of community conservancies and support from international cooperation in building sustainable financing mechanisms are all crucial for the long-term sustainability of Kenya's wildlife economy.

The integration of the wildlife economy into the mainstream economy of Zimbabwe

Tariro Kamuti, AWEI (Zimbabwe)

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More info: Sommerville, M., Khumalo, L., Kamuti, T. and S. Brooks. 2021. *Game On! Understanding the Emerging Game Meat Value Chain in South Africa.* Boston, Massachusetts: Tiny Beam Fund. DOI: 10.15868/socialsector.38715 https://tinybeamfund.org/post/Game-On!-Understanding-the-Emerging-Game-Meat-Value-Chain-in-South-Africa

Zimbabwe recently released a blueprint for tapping into its wildlife economy. The country is a signatory to various wildlife economy-related agreements, which complement and strengthen its wildlife resource regulations given its long and rich biodiversity conservation and natural resources management history. This paper aims to unravel the policy processes and governance contexts involved in the integration of the wildlife economy into the country's mainstream economy for the benefit of the majority. Stakeholder or institutional mapping and analysis and observations coupled with analysis of documentary evidence will be used to generate data. The paper draws upon the idea of institutional bricolage as a guiding theoretical framework to analyse the governance of the wildlife economy's integration into the mainstream economy through various institutional arrangements. Institutional bricolage is a process by which people consciously and unconsciously draw on existing social and cultural arrangements to shape institutions in response to changing situations. Institutions are created through improvising out of daily practices, where people assemble institutional mechanisms to attend to emergent challenges and changes in their immediate environments. The paper shows that integration of the wildlife economy into the mainstream economy in Zimbabwe is a long-drawn process mediating relations, processes and practices among stakeholders. So, strengthening of institutions dealing with the integration of the wildlife economy into broad economic policy and practice will happen through modification of existing institutions in a way that is building on outcomes of institutional bricolage as an outcome of a protracted process.

Does the law understand insects?
Biandri Joubert, University of Witwatersrand & AWEI (Zimbabwe)

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The law is an essential part of ensuring the safe farming and trade of insects- whether internally, regionally and internationally. However, it often falls short in capturing the complexities and nuances of this growing industry. This potentially leads to either barriers to trade or unsafe trade in a sanitary and phytosanitary sense. The legal challenges are less surprising considering how insects are defined in law and essentially how the law understands insects and their purpose or role in a food, agriculture and trade context.

One of the key challenges lies in the law's limited capacity to regulate in ways that don't impose additional barriers on a sector already facing unnecessary (or unjustified) prohibitions, restrictions, and trade barriers. A second is the law's current inability or limited ability to distinguish between the various uses and categories of insects. This makes it challenging for the insect industry to operate efficiently while complying with the law and it also makes containing real risks involved in the trading of insects. In my view it is essential to legally understand what an insect is before taking a more critical view of the law as a tool to both protect and facilitate activity in an industry.

In research conducted during the course of 2024, I have taken a step back and considered what the law understands as the definition, purpose and role of insects. I look at this from a sanitary and phytosanitary perspective. In this presentation, I will share insights from my research, offering a deeper understanding of how the law currently interprets and regulates insects, and what this means for the future of the industry. In this presentation, I focus in particular on the consequences of the law's understanding of insects for the wildlife economy as far as insects sourced wholly or partially from wild sources are concerned.

Does CITES truly provide an international system that enables the legal and sustainable trade in wild animals?
Smaragda Louw, Director: Ban Animal Trading (South Africa) (recorded)

Bio

The South African export trade in wildlife may on paper appear to be highly regulated; however, research and investigations show that the regulation is beset by inefficiencies, fraud and illegality, making it difficult to distinguish between legal and illegal trade. The integrity of the CITES system is wholly dependent on the efficiency of in-country regulators: in South Africa the provinces and national government regulate the export industry through permit systems. Ban Animal Trading (BAT), an animal rights organisation, became concerned that the wildlife trade export system was flawed, and it decided to check whether the system worked. BAT investigates the legality of the ostensible legal export trade by two means. The first is by physically visiting some of the recorded export destinations in China (including Hong Kong), Laos, Vietnam, Pakistan and Bangladesh. Most of the places given on the

export documentation as end destinations have been found not to exist or are not what they are said to be and, where they exist, are clearly staging posts for the infiltration of the export animals into unregulated markets. The second methodology involves BAT and the EMS Foundation analysing large numbers of export permits, which are obtained through official sources (PAIA applications). These show audacious frauds (e.g., the illegal re-use of export documentation) which are either not detected by the authorities or are not responded to by the provincial and national regulators. It is fair to conclude that the regulatory authorities do not effectively police the industry. The fraud, corruption and inefficiencies of government in the wildlife export industry ought to be of supreme concern for those who support and promote the wildlife economy. 'Enhanced sustainability' and 'environmental benefits for people' – described as targets by the African Wildlife Economy Institute – can never be attained in a failing system which claims to be an international leader in the legal trade. The wildlife economy will never thrive under these circumstances. Those who support it will soon realize that the basis of their industry is in jeopardy. BAT is against the commercial exploitation of all animals. The failure of the regulatory system means that wild animals are bred for illegal exportation, that large numbers of our wild animals are caught for exportation and, because of the failed system of regulation, that large numbers of these animals are infiltrated into the illegal market where they are often kept in extremely cruel conditions. The so-called legal market often does not offer the animals anything better. BAT advocates for the rights of these animals and urges those who make money out of animals to consider the morality of their vocation.

Wildlife trade policy: The causes and consequences of conflicting stances
Michael 't Sas-Rolfes, Oxford Martin School & AWEI (South Africa)

LinkedIn profile

More info:
https://besjournals.onlinelibrary.wiley.com/doi/10.1002/pan3.10705
https://onlinelibrary.wiley.com/doi/10.1002/eet.2123
https://www.sciencedirect.com/science/article/pii/S092180092400020X

Africa's unique wildlife heritage is a valuable economic asset. However, the ability of African countries to reap the full benefits of this asset is constrained through the trade restrictions and prohibitions imposed by foreign nations and interest groups, either through the Convention on International Trade in Endangered Species (CITES) or through stricter domestic measures in importing countries. Such restrictions limit the ability of African countries to trade valuable renewable commodities such as elephant ivory and rhino horn, and increasingly affect the safari hunting industry by thwarting the movement of hunting trophies. My research aimed to establish the causes and consequences of these restrictions. Drawing on insights from institutional theories in political science and economics to develop analytical frameworks, I examined African elephants, rhinos, and lions as case study species, tracking the evolution of policy debates and processes over a five-year period (2016-2020). I first examined the ideational influences underlying conflicting stances toward wildlife trade, noting the extent to which cognitive (cause-and-effect)

arguments and normative (values-based) arguments were employed. I then identified three distinct and somewhat conflicting relevant policy narratives and termed these Global Control, Decentralized Conservation, and Animal Protection. Next, I examined how interest groups pursued their objectives within the CITES framework. Finally, I drew on a comprehensive data set of African rhino conservation performance to evaluate the consequences of different policy stances. The results of this research shed significant light on why people disagree about wildlife trade policy and the likely future outcomes of varying conflict resolution scenarios.

Session 2: Standards & certification for wildlife use

Time: 15:30–16:45
Facilitator: Hayley Clements, AWEI (South Africa)

Certification for conservation

Deborah Vorhies, FairWild Foundation & AWEI (South Africa)

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Private standards, together with third-party verification systems, have the potential to make substantial contributions to the wildlife economies. They can do this by providing assurance of elements of sustainability to stakeholders across supply chains. Key factors in the success of such certification programmes lie in the rigour of the standards that underly them and the adequacy of their scope across sustainability elements including the environmental, social and economic factors within a business context. A further success factor is the ability of such programmes to apply across global supply chains, effectively reaching from harvesters on the ground all the way through to consumers across the globe and effectively connecting those players in a common and communal commitment within a context of business reality. African contributions to significant global businesses include frankincense, argan, shea and baobab.

Achieving agricultural and conservation goals: The role of voluntary certification schemes

Nokutula Mhene, UNDP BIOFIN (Zimbabwe)

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South Africa is recognised as one of the world's most biodiverse countries, characterized by high levels of endemism. However, the nation faces significant biodiversity loss, which poses threats to ecosystems, human well-being, and economic stability. The wildlife economy, contributing approximately ZAR 3 billion annually to the GDP, heavily relies on the health of these ecosystems. Approximately 17% of the country's land is managed by wildlife ranchers, who are integral to a rapidly growing agricultural sector. In response to the challenges of balancing agricultural development with biodiversity conservation, the Government of South Africa, through the United Nations Development Programme's Biodiversity Finance Initiative (BIOFIN), is establishing an independent wildlife certification scheme. This voluntary

certification initiative aims to incentivize sustainable wildlife management practices while promoting economic growth in rural communities dependent on biodiversity. By aligning economic incentives with conservation goals, this scheme seeks to mitigate conflicts between agricultural expansion and biodiversity preservation. This presentation at the African Wildlife Economy Colloquium will examine the progress, challenges, and future directions of the certification initiative, highlighting its potential to transform South Africa's wildlife economy and contribute to global biodiversity objectives.

Sustainable wildlife economy standard and wildlife certificate scheme

Tseleng Mabunda, Department of Forestry, Fisheries and the Environment (South Africa) & Lindi Hendriks, Wildbloom Eco-label (South Africa)

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The Sustainable Wildlife Economy Standards (SWES) and Wildlife Certification Scheme (SWEC) originates from the National Biodiversity Economy Strategy and its implementation plan developed in 2016 by the Department of Forestry, Fisheries and the Environment and stakeholders within the wildlife sector. The development of SWES and SWEC is funded by the Biodiversity Finance Initiative, a programme implemented by the United Nations Development Programme (UNDP). The Scheme includes sustainability standards organized into three pillars: General, Land, and Products, encompassing 42 criteria and sub-criteria. The General pillar focuses on the sustainability of wildlife-related business models and socio-economic development. The Land pillar addresses land resource management and infrastructure maintenance, while the Product pillar covers specific activities and products in the wildlife economy. Additionally, three Continuous Improvement Levels (CI)—Aware, Progressive, and Integrative—were established to recognize commitment to the Standard, measure progress, and support integrated sustainability goals. These levels facilitate advancement and increased complexity over time.

Five-dimensional sustainability assessment

Dilys Roe, IUCN Sustainable Use and Livelihoods Specialist Group (UK)

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Sustainability science is complex and sustainability is technically challenging to assess. Nevertheless, an approach is needed that cuts through the complexity, is accessible to conservation practitioners and policy makers and increases confidence that alignment with the Global Biodiversity Framework Targets 5 and 9 is being achieved, especially since Parties to the CBD will need to report against these Targets. It is equally important that Indigenous peoples and local communities and private sector actors are enabled to demonstrate that the use of wild species and products is sustainable and, where it is not, to identify the necessary improvements that need to be made.

Recognising the challenge of assessing sustainability in a comprehensive, but accessible, way, IIED, TRAFFIC, IUCN SULi, Endangered Wildlife Trust and EPIC Biodiversity — supported through the UK Government Darwin Initiative and under the guidance of a multidisciplinary expert advisory group — have

developed a 5-dimensional sustainability assessment framework. The framework adds the dimensions of animal welfare and human health to the more conventional social, ecological and economic dimensions of sustainability. For each of these 5 dimensions it articulates 7 key principles. In addition, 7 cross-cutting principles are relevant to all dimensions.

Session 3: Special panel on liberalising intra-African wildlife trade

Time: 16:45-17:30
Facilitator: Wiseman Ndlovu, AWEI (Zimbabwe)

Biandri Joubert, University of Witwatersrand & AWEI (Zimbabwe)

Joseph E. Mbaiwa, Okavango Research Institute, University of Botswana & AWEI (Botswana)

Mike Musgrave, School of Wildlife Conservation, African Leadership University & AWEI (South Africa)

David Newton, Traffic Southern Africa (South Africa)

Day 2 – Tuesday 5 November

Session 4: Towards a sustainable wild meat sector

Date: 5 Nov 2024 Time: 08:00–10:30
Facilitator: Wiseman Ndlovu, AWEI (Zimbabwe)

Game meat strategy for South Africa
Khorommbi Matibe, Department of Forestry, Fisheries and the Environment (South Africa)

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The Department of Forestry, Fisheries and the Environment (DFFE) developed the Game Meat Strategy for South Africa which was approved by Cabinet for implementation on 27 September 2023 and published on 08 November 2023. The vision of the Strategy is "A formalised and transformed game meat industry in South Africa that supports thriving rural economies and nature, contributes to food security and inclusive socio-economic growth, conservation and sustainable use of biodiversity, while reducing environmental risks". To achieve this vision, 9 goals and 10 + 2 cross-cutting strategic objectives and 42 initiatives have been identified for implementation by the three spheres of government, entities, communities, the private sector, the wildlife industry stakeholders, NGOs and academia.

Assessing the sustainability of bushmeat hunting in the indigenous forests of the Eastern Cape

Vusumzi Martins, Rhodes University (South Africa)

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Assessing the sustainability of bushmeat hunting has been perplexing for many researchers. Traditional sustainability analyses do not account for the connections between hunting and livelihoods. The use of traditional biological sustainability indices have proved inadequate for measuring the impact of bushmeat hunting because sustainability is treated as a static, binary question, thus ignoring stochastic processes, the inherent variability of natural systems, and the complexity of hunting systems. Here I use a combination of social and ecological methods to gain insights on how the offtake of forest mammal species affected species density in the communal forests of the Eastern Cape and also how this influenced hunting practices and behaviour. The density estimates of the hunted mammal fauna in the communal forests was significantly lesser (50%) than in the protected forests in the region. Also, the density estimates for the five most hunted mammal species in the communal forests were significantly lower (15%) than the density estimates found in the literature. Additionally, participatory hunter interviews revealed a decline in catch per unit effort and harvest rates over the past 10 years. This decline resulted in changes in the hunting strategies and patterns of many hunters. I suggest that bushmeat hunting systems should be regarded as social-ecological systems in which the animal populations are not the only focus. Instead, understanding the complex and dynamic relationships between the hunting ground, its resources, the stakeholders, and the different exogenous drivers of change that affect these components yields a better interpretation of sustainability.

Wild meat & food motivations for participation in the hunting industry within the African wildlife economy

Presenter: Francine Barchett, Center for Conservation Social Sciences, Cornell University & AWEI (USA)

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This presentation highlights pathways toward evolution in the African hunting industry by looking specifically at wild meat's current and prospective roles in the hunting consumer experience. American and European outdoor media increasingly showcases wild meat as growing "foodie" and culinary movements have inspired an uptick in wild game cookbooks, TV shows, and social media influencers, with a disproportionate amount of women playing key roles. The wild meat conversation in the African hunting space is also strategic from a public relations perspective; approval ratings of "trophy" and sport hunting hover under 50-percent, though when these hunts incorporate the use of wild meats, they are generally viewed favourably.

Contributing to the spaces of social acceptance of hunting and consumer preferences for hunting in the African wildlife economy, this work considers

opportunities for the African hunting industry to diversify its products and services to accommodate three components: 1) food ethics, 2) nutritional and health concerns, and 3) culinary quality and adventurous eating. Reflecting on ongoing surveys of the world's largest hunting organizations, observations from hunting operations across the SADC, and interviews with leaders in the wild meats space, this work shows how understanding hunting motivations can influence a more diversified hunting product, fostering a more resilient hunting industry within the African wildlife economy.

Wild animal species ranching in dwindling resources in developing countries

Bernadette Nwandu Ejidike & G O Amoo, Federal University of Technology (Nigeria)

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Ranching wild animal species in developing countries with dwindling resources is a complex issue which demands adequate attention. Wild animal ranching offers conservation benefits which includes: protecting species from poaching activities, precenting habitat destruction, and providing economic incentives for local communities to support conservation efforts.

Game ranching offers conservation benefits, which includes protecting species from poaching and habitat destruction, and providing economic incentives for local communities to support conservation efforts. Wildlife ranching is a land-use method that is also ecologically appropriate, environmentally sustainable and economically sensitive. However, game ranching also has its negative conservation impacts as well. The main risk encountered in wildlife hunting is overharvesting. How then do we promote wildlife ranching with these declining resources without destroying our habitats and biodiversity?

Wildlife cell ranching

Paul Bartels, WildBio Co (South Africa)

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WildBio has developed the world's largest African species biobank for accelerating the development of the biomedical, foodtech and biotech industries. Massive advances in science (CRISPR, Gene Editing) and data (AI, Machine Learning) have transformed biotech into an engineering and big data problem. Without wild African species included, we're missing a critical dataset in the global search for innovative biotech solutions. Now it's time to commercialise this data for the benefit of all.

A one health framework analysis for sustainable game meat production and supply
Lydia Bhebe, AWEI, Stellenbosch University (Zimbabwe)

LinkedIn profile

The game meat industry has the potential to contribute significantly to food security, biodiversity conservation, and economic development within the broader wildlife economy in South Africa. However, its growth is challenged by concerns related to public health risks, environmental sustainability, and inconsistencies in the implementation of regulatory frameworks. This study employs a systematic literature review to address four key objectives: (1) assessing wildlife health conditions and infectious disease risks in game production areas, where zoonotic diseases pose significant threats; (2) evaluating the health and safety practices, food safety systems, and regulatory frameworks, which currently exhibit gaps in surveillance and inconsistent application across different regions; (3) examining the environmental sustainability implications of different game ranching models, specifically comparing venison-oriented approaches to integrated wildlife utilisation, to understand their respective impacts on land use, habitat conservation, and ecosystem health; and (4) investigating how perceived health risks, sustainability practices, and socioeconomic factors influence consumer behaviour towards game meat.

Preliminary insights suggest that while game meat production can support sustainable land use and generate socio-economic benefits, it also faces challenges like inadequate disease management, the absence of a standardised surveillance system, and varying consumer awareness about health risks and sustainability. Integrating the One Health approach could provide a pathway to overcoming these barriers, offering more sustainable strategies for balancing public health, environmental conservation, and wildlife health. Based on these identified gaps, this study aims to address each area through primary research in South Africa, focusing on the Limpopo and Eastern Cape provinces. The study's findings aim to inform stakeholders and policymakers across Africa's wildlife economy, driving more resilient and integrated approaches to industry development.

Reducing zoonotic disease and sustainability risks in Tanzania game meat industry: Developing a one health approach to value chain management
Qudra Kagemba, TRAFFIC (Tanzania)

Bio

Report: https://www.traffic.org/publications/reports/from-bush-to-butchery/

The sustainability of the game meat value chain is threatened by the lack of an integrated sustainable management plan, including a traceability system specific to the game meat industry to enable monitoring of hunting offtakes relative to the wild population status of target species. Establishing a traceability system will help to clarify which species and game meat are

sourced by whom. Meanwhile, the setting and observance of hunting quotas is necessary to manage the ongoing viability of wild animal populations, ensuring that overharvesting is not occurring, and thus setting sustainability thresholds for the game meat industry. Strict monitoring and enforcement of hunting activities at the sourcing stage is required to ensure sustainable offtake levels.

The assessment highlighted that the overall risk of transmission of pathogens of zoonotic origin at vulnerable nodes of the game meat value chain is high—especially those pathogens causing the most prevalent zoonotic diseases in Tanzania (i.e. Anthrax, Rabies, Brucellosis, Bovine tuberculosis, Rift Valley Fever, Taeniasis, and Leptospirosis). On the other hand, the risks for other foodborne diseases were high due to challenges in ensuring food safety measures are practised at all nodes in the game meat value chain, from sourcing and processing to distribution, retail, and end-consumer handling. Nevertheless, lack of capacity to monitor compliance and enforce regulations remains a challenge. The research team learned that even if the meat inspection regulations for game meat had been in place, the ability to conduct proper ante- and post-mortem inspection, which would have been required by the meat inspection regulations, during sourcing (e.g., during hunting) would still be limited due to the challenging environment in which hunting animals takes place.

Session 5: Fostering equitable wildlife economies

Time: 11:00–12:30
Facilitator: Keith G. Tidball, Cornell University (USA)

Militarisation and the wildlife economy

Catherine Semcer, WildCRU, University of Oxford & AWEI (USA)

LinkedIn profile

What is militarisation? It is the integration of strategies, tactics, and equipment traditionally reserved for warfighting into conservation programs.

What is the economic value of providing security for wildlife assets including the economic impact on local, national, and regional economies? Economic benefits from wildlife should be sufficient to deter threats to that wildlife from local communities. Local communities should share in the security benefits provided by public and private conservation concerns.

Mitigating human-wildlife conflict in Mozambique

Gelito Inácio Franco Sululu, Commonwealth Youth Climate Change Network (Mozambique) *(recorded)*

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Our activities are in Niassa Province, Mozambique in the Niassa Special Reserve, located in the District of Mecula, and in the Partial Reserve of Lake

Niassa, located in the District of Lake. We focus on awareness-raising/lectures on combating uncontrolled burning, sensitizing communities to combat the irrational exploitation of forest resources and poaching and explaining the importance of biodiversity. We are also working to raise community awareness of the need to remove wild animals from crossing zones to appropriate and safe areas.

We have created and formalized 17 natural resources management committees for the communities in the Niassa Special Reserve and 8 in the Niassa Lake Partial Reserve. Our main objective in creating natural resources management committees is to demand 20% of natural resource exploitations or purchases are paid to local communities. Each committee has a bank account that we help set up with Mozambique's legal consent. The so-called 20% of the value of the exploitation of natural resources or the purchase of wild species is given to the committee of that region. Then the committee convenes an assembly, and through that assembly they decide where the funds will be channelled; that is, they decide in which sector it will benefit. Above all, funds go toward the construction of public infrastructure, including the construction of schools, sanitary units, and fountains.

The diverse socio-economic contributions of wildlife ranching

Candice Denner, UCT and Ecocert (South Africa)

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Paper:
https://www.researchgate.net/publication/381994112_The_diverse_socioeconomic_contributions_of_wildlife_ranching

Wildlife ranching has been broadly linked to conservation benefits, job creation, and economic contributions. However, a more nuanced understanding of the socioeconomic contributions of wildlife ranching accounting for the enterprise diversity in the sector remains a major limitation to assessing its potential to contribute to sustainable development. We assessed several important socioeconomic contributions of diverse wildlife-based business models, defined by their main revenue-generating activities, within the South African wildlife ranching industry, and the financial viability of these models. Owners and managers of privately-owned wildlife ranches and conventional agricultural farms were interviewed in the Eastern Cape (112 ranches; 24 farms) and Limpopo provinces (152 ranches; 4 farms). Using a hierarchical clustering analysis, we delineated six wildlife ranching business models. These included three specialized models: ecotourism, trophy hunting, and wildlife breeding; and three mixed models: mixed hunting (i.e., both meat and trophy hunting), mixed wildlife-agriculture, and trophy hunting-game meat. In general, ecotourism-focused ranches employed more people in total and per hectare and a higher proportion of women and skilled employees than the other ranching models and conventional agriculture. Trophy hunting-focused ranches employed the second highest number of people per hectare, although on average a third of these jobs were seasonal. Trophy hunting ranches tended to be more profitable than ecotourism, wildlife breeding and mixed hunting ranches, though ecotourism ranches showed high variability.

These findings advance our understanding of the distinct socioeconomic contributions of wildlife ranches, which benefits policy discourse and implementation surrounding the industry, promoting improved industry sustainability and inclusive growth.

Rural communities: The driving force behind the wildlife economy in northwest and northeast Namibia

Basilia Andoroone Shivute, Integrated Rural Development and Nature Conservation (Namibia) (recorded)

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Rural communities constitute a significant portion of the population in Africa. In Sub-Saharan Africa, for instance, around 59% of the population lives in rural areas. In Namibia, this figure stands at approximately 49%. Communal conservancies in rural Namibia account for 20.2% of the country's total land. In the Kunene and Zambezi regions, these conservancies play a crucial role in managing vast wildlife populations, including key populations of elephants, lions and rhinos. The wildlife economy in these regions has become a cornerstone of sustainable development and community conservation. With the support of grassroots organizations like Integrated Rural Development and Nature Conservation, local communities are leading efforts to integrate wildlife conservation with economic development. Around 100,000 rural residents are protecting over 5.3 million hectares of land, generating approximately NAD 54.8 million (USD 3.05 million) from wildlife-related activities. Despite the challenges of protecting high-value species like black rhinos, elephants, and lions across vast, unfenced, and formally unprotected landscapes, local communities are investing in wildlife monitoring efforts to enhance tourism opportunities, increase income, and reduce poaching. This case study provides a snapshot of a desktop review and field analysis of how rural communities engage with the benefits of the wildlife economy in Namibia.

Challenges/opportunities of setting up a multi-stakeholder wildlife economy project

Faranani Lalumbe, WWF South Africa (South Africa)

More info: https://www.wwf.org.za/our_work/initiatives/khetha

In the Greater Kruger National Park, government, community, private and NGO conservation stakeholders search for ways to realise the yet untapped potential of the wildlife economy. Following five years of implementation, lessons have crystalised about the opportunities and pitfalls involved in establishing a game-meat value chain and rangeland restoration project around the boundaries of Kruger National Park. We share our on-the-ground experience with cross-cutting themes that influence the viability of wildlife economy projects, such as traditional governance systems, benefit-sharing arrangements, land reform, protected area expansion, biodiversity stewardship, human wildlife conflict and wildlife crime. We highlight the importance of social processes, such as trust-building, communication and conflict resolution, and the impact of diverse stakeholder perceptions, needs and interests. We offer a sensemaking framework to help other implementers

of wildlife economy projects understand the multiple dynamics in play that dramatically affect if, and how, such projects are rolled out in practice.

Unlocking opportunities for meaningful participation of land reform beneficiaries in the wildlife economy
Hayley Clements, AWEI (South Africa)

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South Africa has the largest wildlife economy on the continent but has struggled to bring emerging black farmers and communities into this economy. The revised Biodiversity Economy Strategy has a strong focus on growing an inclusive wildlife economy. Here I will share on lessons learned from a highly collaborative Sustainable Wildlife Economies Project, where we worked across academia, government and wildlife ranch associations to understand the barriers and opportunities for supporting emerging ranchers to enter and thrive in the wildlife economy.

Session 6: Special panel on the ethics of hunting

Time: 12:30- 13:15
Facilitator: Thabang Rainett Teffo, Southern African Wildlife College & AWEI (South Africa)

Adam Cruise, Endangered Wildlife Investigations (South Africa)

Adri Kitshoff-Botha, Custodians of Professional Hunting and Conservation (South Africa)

Dilys Roe, IUCN Sustainable Use and Livelihoods Specialist Group (UK)

Deborah Vorhies, FairWild Foundation & AWEI (South Africa)

Session 7: Wild health for people & ecosystems

Time: 14:30- 16:00
Facilitator: Lydia Daring Bhebe, AWEI (Zimbabwe)

Nutrition information and wild meat - Lessons learned from North America
Presenter: Keith G. Tidball, Cornell University (USA)

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Despite many claims regarding the healthfulness of consuming wild game meat, little information exists on the actual nutritional qualities of game species eligible to be hunted in the United States. A team of researchers at Cornell University have been working to address this deficiency and have had mixed results in terms of successfully conducting nutritional analysis of game meat.

There are many lessons learned in this experience that are applicable to the wild meat component of the African Wildlife Economy. This paper will apply lessons learned from these efforts directly to the African Wildlife Economy context, with specific case studies and recommendations.

How about rangeland economy? Creating an enabling environment for the wildlife-based economy

Thabang Rainett Teffo, Southern African Wildlife College & AWEI (South Africa)

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By integrating traditional knowledge such as herding with modern grazing techniques, communities can effectively manage their resources and sustain their livelihoods while restoring natural ecosystems and ultimately enabling the creation of a wildlife-based economy in landscapes. For this reason, wildlife, especially game, could thrive and benefit significantly from these community-led efforts. Herding as a community-led initiative to improve livelihoods may mitigate against several conservation issues, such as human-wildlife conflicts and climate change, and enable tourism between protected areas and rural communities' fringes. Improved land management practices lead to healthier ecosystems, attracting more wildlife and, consequently, more incentives through influx tourism and related activities. Integrating socio-ecological and economic practices into the wildlife-based economy through combined community-led herding presents a holistic and/or inclusive approach to conservation and the improvement of livelihoods. These efforts not only restore ecosystems but also empower communities, foster economic resilience, and promote sustainable livelihoods.

Hunting management of the Defassa Cobe population in the classified and game forests of Nazinga, Burkina Faso

Sidiki Roland Konate, Animal Biology and Ecology (Burkina Faso) (recorded)

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As part of its ecological monitoring activities, the Nazinga Game Ranch carries out measurements of the trophies of animals killed during sport hunting and the inventory using linear transects of variable widths of the fauna. The measurements taken from 2009 to 2018 on slaughtered defassa waterbuck individuals were analysed with the aim of assessing the quality of the trophies and the effect of this quality on the population dynamics of the species. We collected measurement data from the slaughterhouse and those from direct inventories. The beaten defassa waterbucks presented honourable trophies; it was the old males which were taken, despite a continuous reduction in the size of the horns over the years. This rejuvenation of the population creates a narrowing of the age pyramid. The cause of successful sport hunting associated with other factors could therefore reduce the number of successful males to ensure the rut. This leads to a decline in the number of the population.

Integrating public health, economic empowerment, and ecological conservation: The role of indigenous herbal teas on Senegal's sustainable development

Mame Diarra Sarr, RAYS (Senegal) (recorded)

LinkedIn profile

Wildlife conservation presents challenges in the Thies region of Senegal. Senegal's transition to an emerging African economy has led to profound behavioural, economic, and ecological changes. This research investigates the intersection of public health, economic empowerment, and wildlife conservation by examining the impact of indigenous herbal teas, particularly Combretum micranthum (Kinkeliba), on lifestyle-related diseases. Additionally, it assesses the environmental and socio-economic impact of large-scale infrastructure projects on rural communities. Through a multidisciplinary approach, the research aims to provide comprehensive insights into sustainable development practices. The research project offers valuable insights into developing a sustainable and inclusive wildlife economy in Africa. By integrating health initiatives with conservation efforts, the research highlights the potential for natural remedies derived from local flora to align human health benefits with conservation.

Genetic analyses of mopane worms support concerns over the sustainability of the species

Barbara van Asch, Stellenbosch University (South Africa)

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Mopane worms are intensively harvested for human consumption in southern Africa. Concerns over the sustainability of the species have been raised for the last two decades due to increasing demand, habitat erosion, and climate change. Despite its cultural, economic, and nutritional significance, genetic data was largely unavailable. We assessed the genetic diversity, phylogeographical structure and demographic history of mopane worms in Namibia and the Limpopo River Basin (South Africa and Botswana). The species showed strong phylogeographical structure at the broad scale separating Namibia and Limpopo River Basin populations. Within the Limpopo River Basin, populations are separated by the Limpopo River, with haplotype sharing only at the border between South Africa and Botswana. All sampling areas show low genetic diversity, alarmingly small effective population size, and signs of recent bottlenecks. This is the first baseline data for the genetic monitoring of mopane worms, and we conclude that concerns over the sustainability of the species are presently justified in Botswana and South Africa.

Session 8: Governance in wildlife economies

TIME: 16:30-18:00
Facilitator: Thabang Rainett Teffo, Southern African Wildlife College & AWEI (South Africa)

Inclusive participatory governance, key to the grand profit-sharing scheme? Reconfiguring community-based natural resources management frameworks for a dynamic wildlife economy in Africa

Eddington Maseya, History Department, Stellenbosch University (Zimbabwe)

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This paper explores various ways to transform rural communities' livelihoods through grassroots-generated participatory governance frameworks in Africa`s wildlife economies. Grounded in Elinor Ostrom's theory of common property management, it illustrates how Community Based Natural Resource Management (CBNRM) frameworks fail to achieve equitable development due to their predominantly top-down management approach. It uses experiences from Zambia's Luangwa Integrated Resource Development Project (1986-1990), Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE-1990-2000), and Tanzania's recent Selous Ecosystem Conservation and Development Program. Therein, political elites compromise the efficacy of CBNRM programs by crafting superficial impact-legitimizing initiatives covering the plight of neglected households within these rural communities. The paper argues that to empower rural households, wildlife economies should incorporate precolonial proprietorship rights over natural resources wherein local chiefs were the sole custodians and regulators of wildlife utilization. This would enable rural communities to develop pathways into wildlife utilization suited to their unique political and economic landscapes. Otherwise, bad actors take advantage of loopholes inherent in CBNRM frameworks to undermine the wholesome development of Africa`s wildlife economy. In all, the paper underscores the need for a shift towards more localized and community-driven management systems that ensure equitable development and sustainable governance in Africa`s wildlife economy.

The curse of commercialising nature: Problems and pitfalls of the biodiversity economy

Adam Cruise, Endangered Wildlife Investigations (South Africa)

LinkedIn profile

Paper:
https://www.academia.edu/42762688/THE_VALUE_OF_BEING_WILD_A_PHENOMENOLOGICAL_APPROACH_TO_WILDLIFE_CONSERVATION

The current trend of commercialising biodiversity is gaining traction. The South African government has recently launched its National Biodiversity Economy Strategy (NBES), which aims to "optimise biodiversity-based business

potentials across the terrestrial, freshwater, estuarine, marine and coastal systems, and to contribute to economic growth with local beneficiation, job creation, poverty alleviation, and food security". However, there are concerns that this has less to do with securing biodiversity and the economic benefit for the poor, and more about exploiting the natural environment for commercial gain that will benefit a select few. One of the central pillars is that the process must be equitable. That the government strategy aims to address that problem is commendable. But therein lies the challenge. Promising biodiversity utilisation as a means for economic upliftment for millions of impoverished rural South Africans when biodiversity is under siege is, for the most part, unrealistic, and opens the door to rampant exploitation and corruption. It is also unclear how an economic-centred approach will actually preserve the ecological well-being of natural spaces. This paper intends to address these issues.

Residents' perceptions towards elephants (*Loxodonta africana*) and the sustainable use of elephants and elephant products in Botswana

Joseph E. Mbaiwa, Okavango Research Institute, University of Botswana & AWEI (Botswana)

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Botswana is home to one of the largest populations of the African elephant (Loxodonta Africana) in the world. The objective of this paper, therefore, is to use socio- ecological theory to analyse residents' perceptions towards elephants and the sustainable uses of elephants and elephant products in Botswana. Ethnographic and longitudinal research approaches were adopted in the study, including consultations with communities living in wildlife areas, interviews with stakeholders and the use of secondary sources. Results indicate that the elephant population in Botswana has expanded rapidly in the last 40 years. For example, in 1984, Botswana had an estimated population of 40,000 to 60,000 elephants. This population escalated to 130,000 elephants in 2012 and to 132 182 in 2022. In addition, there is an estimated 15,000 elephants found outside the KAZA area, hence a total of over 150,000 elephants are estimated to be in Botswana. Results indicate that residents are ambivalent in perceptions towards elephants because of the tourism value. Conversely, they want elephants removed from human settlements areas due to their destructive nature. Elephants cause damage to crop and livestock watering infrastructure, human injuries and at times death. Botswana should, therefore, adopt a total elephant economy approach where elephants and elephant products are used to achieve sustainability in trophy hunting and photographic tourism. In addition, elephant products such as dung, milk, meat, fat and bone marrow, hide, trophy and ivory can also be developed into by-products and sold to the local and outside markets, especially the Asian Market.

Effects of environment and governance on financial sustainability of communal conservancies in Namibia

Joseph Goergen, AWEI (USA)

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Ecosystem services from tourism and governance of communal institutions are critical to financial sustainability of community-based natural resource management. We evaluated effects of large mammal occurrence and landscape attributes on incomes from hunting and photographic tourism earned by communal conservancies in Namibia during 1998–2022. We also evaluated effects of local management and governance on total income earned by Namibia's conservancies during 2011–2022. We compiled annual incomes and occurrence of 'Big 5' species (elephant [*Loxodonta africana*], buffalo [*Syncerus caffer*], black rhino [*Diceros bicornis*], lion [*Panthera leo*], and leopard [*P. pardus*]) using conservancy accounting and wildlife monitoring data. We compiled annual conservancy performance scores for natural resource management and institutional governance using 'event book' monitoring data. Hunting occurred in 70 of 86 conservancies and generated income almost twice as rapidly as photographic tourism. Hunting income increased with conservancy area and number of Big 5 species present but decreased with years since establishment and increasing mean elevation, topographic diversity, and distances to national parks. Photographic tourism occurred in 39 conservancies and generated 447% greater median annual income than hunting for conservancies earning >$0. Photographic income increased with years since establishment and higher annual precipitation but decreased with higher mean elevation. Large mammals are an important driver of income to Namibia's conservancies and hunting and photographic tourism can provide complementary benefits. Conservancies earning >$0 income generated a median annual of $60,518 since 2011. Income during 2011–2022 increased with years since establishment, higher management performance, presence of nongovernmental organization (NGO) support within conservancies, and annual general meeting (AGM) occurrence. Income during 2019–2022 also increased with higher governance performance. Median management and governance performances across conservancies were only about 50% of their maximum scores, indicating higher income potential with improved performance. Conservancies remained financially dependent on NGO support and AGMs were important functions for generating income. We recommend Namibia's conservancies, particularly those established more recently and with smaller area or without NGO presence, consider inter-conservancy wildlife co-management, collaborating with tourism industries, and prioritizing improved local management and governance to develop more sustainable community-based natural resource economies.

Prospects of conservation PPPs in the management of Ethiopia's protected areas.
Simeneh Admasu Namaga, Ethiopian Wildlife Conservation Authority (Ethiopia)

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Ethiopia's abundant cultural and natural resources are exemplified through its 13 UNESCO World Heritage Sites, consisting of nine tangible and four intangible sites. This surpasses the number found in any other African country. Most of these sites are of cultural significance, except the Simien and Bale Mountains National Parks, which showcase Ethiopia's natural beauty. As of 2024, 14% of Ethiopia's surface is protected, 10% with wildlife PAs, and 4% with forest priority areas. Ethiopia has three broad governance-based categories of wildlife PAs i.e., federal, regional PAs, and Biosphere Reserves. Setting up PAs requires political, financial, and technical dedication to meet the prime conservation objectives for which PAs are designated. Ethiopia's government expenditure for the conservation of wildlife and PAs is close to 0.1% of the national GDP, which is amongst the continent's lowest financing of PAs, resulting in an increasing decline in biodiversity conservation – even in the country's most iconic parks. Although the initial motivation for the creation of PAs in Ethiopia was to attract tourists, they can provide immense returns on investment and strong net positive economic benefits at the national level, and the potential value of the possible ecosystem services they provide exceeds the costs of effective protection. Benefits in terms of increased ecosystem services values would then increase gradually from approximately US$350 million/yr to an enhanced value of US$540 million/yr over 20 years. The EWCA envisages outsourcing the management of a limited selection of the PAs it manages to counter the degradation of PAs. EWCA will remain responsible for the parks and will oversee the PPPs, to ensure that the private partner follows reigning proclamations, rules, and regulations and fulfills its mission.

Day 3 – Wednesday 06 November

Session 9: Landscape approach to wildlife enterprise

Date: 6 November 2024 Time: 08:30-10:30
Facilitator: Hayley Clements, AWEI (South Africa)

Mega living landscapes – a new platform for the Wildlife Economy in South Africa
Greg Martindale, Conservation Outcomes (South Africa)

LinkedIn profile

Through its Vision 2040, South African National Parks (SANParks) has adopted the concept of Mega Living Landscapes as central to its protected area expansion efforts. They place people at the centre of biodiversity conservation in support of sustainable rural economic development and build on the White

Paper on the Conservation and Sustainable Use of Biodiversity and the recently published draft Biodiversity Economy Strategy. They will be the principal mechanism to achieve 30x30 targets in South Africa. South Africa's protected areas are small and fragmented and most large national parks were established before the 1940s. Mega Living Landscapes will be established within a mosaic of conservation and compatible land uses under different forms of ownership and legal protection, including the use of Other Effective Area-Based Conservation Measures (OECMS) as envisaged in the Global Biodiversity Framework. They will shift the focus to the value of landscapes, where protected areas are embedded within ecologically connected compatible land-uses. Mega Living Landscapes will be the primary platform for the development of South Africa's wildlife economy, focused on protected area expansion and the promotion of compatible land uses such as wildlife ranching. They will form the focus for nature-based tourism and other wildlife economy-based activities and allow for the development of scale to allow the critical mass needed for successful initiatives such as the creation of wildlife product value chains. They represent an exciting approach to conservation, which seeks to secure biodiversity and catalyse a rural economy based on the value of the country's biodiversity.

The complex role of wildlife ranches in advancing conservation goals of Mega Living Landscapes

Alta de Vos, Centre for Sustainable Transitions, Stellenbosch University (South Africa)

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Mega living landscapes (MLLs) are SANParks' flagship strategy for achieving its vision 2040, which re-imagines a co-created, connected conservation future. MLLs are also South Africa's primary approach to meeting its commitments to the global biodiversity framework, particularly its goal of protecting 30% of land and sea by 2030. MLLs depend significantly on wildlife ranches and wildlife-based economies to meet their goals. Our research shows evidence that this is an effective biodiversity strategy: wildlife ranches perform similarly to protected areas in conserving natural land cover and preserve critical biodiversity areas and threatened habitats. However, a pilot case study indicates that wildlife ranches are not easy fits for 'other effective conservation area' designation, particularly due to criteria that could limit the ranches' ability to adapt to change. These findings highlight important challenges that MLLs will need to address as they pursue their expansion goals.

Exploring Commonly Harvested Wildlife Enterprises in the SADC Region: Trends, Impacts and Opportunities

Ashley Nolwazi Mpofu, Department of Environmental Management and AWEI, Stellenbosch University (South Africa)

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The potential of wildlife-based economies in the Southern African Development Community (SADC) region remains largely untapped despite its

rich biodiversity. This research explores commonly practiced wildlife-based economic enterprises within the SADC region, such as game meat, medicinal plants, insects, and oils from trees like baobab. It focuses on identifying the economic values, challenges, and opportunities associated with these enterprises, which offer significant prospects for income generation, economic growth, food security, and cultural preservation. Through a comprehensive literature review and country-specific case studies, the study examines the roles of key stakeholders, the economic impacts on local and regional economies, and the cultural significance of these enterprises. A SWOT analysis is used to assess strengths, weaknesses, opportunities, and threats, addressing critical issues such as overharvesting, regulatory enforcement, political instability, corruption, and market access. The findings aim to provide actionable insights and strategic recommendations for policymakers, stakeholders, and community leaders to enhance the SADC region's wildlife economy through integrated conservation and sustainable utilisation practices.

The Rewilding Africa "mega" community conservancy planning, development and management model and program
James Arnott, Rewilding Africa UK (UK) (recorded)

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When lease concession revenues, business equity, and profit and management opportunities and employment flow directly back to the communities, there is a set of land use and business regulations stipulated in the MEGA Community Conservancy constitution that must be enforced by the oversight entity. Further, business development and job creation must be a KEY MEASURABLE OUTCOME while ensuring the balance between biodiversity protection and development is upheld in perpetuity (80/20 principal). What may potentially happen if we don't develop "mega" Community Conservancies?

The impacts of rangeland carbon credit projects in Sub-Saharan Africa
Sarah Schumann, Stellenbosch University (South Africa)

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Rangelands cover an estimated 43% of Africa, where they are keystones of biodiversity, carbon storage, and livelihoods. Rangelands globally are facing increasing risk and threat, eroding ecosystem functioning and thus the resilience of livelihoods and the public good of carbon sequestration. Carbon markets for the mitigation of climate change present an opportunity to incentivize more sustainable natural resource models that improve carbon sequestration, as well as aligning conservation needs with those of improving human well-being and rural development. Carbon credits are generated by increasing or preserving the land's capacity to sequester carbon, which in turn directs financing back into the practices and people that facilitate this. In practice, some carbon projects have struggled to achieve their promised outcomes, and the potential of the mechanism for fully unlocking conservation and sustainable development remains poorly understood.

Carbon projects in Africa's rangelands remain underapplied in comparison to forest carbon projects, and their social-ecological impacts are understudied. This study is investigating what impacts are being realized by carbon projects in rangelands based on a review of registered and verified rangeland carbon projects. In this talk, preliminary results will be presented, reflecting on the role of the mechanism within the wildlife economy.

Frightening forestry facts in Zambia

Steven Johnson, AWEI and GrowthLeaders Africa (South Africa)

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Taking 'wildlife' in its widest sense, my research looked at approaches to reduce the massive and increasing rates of deforestation across Zambia. The causes of deforestation include: a) climate change-driven migration of drought victims in southern regions of the country to less affected areas in the north, around Kafue NP; b) poor economic conditions and resulting unemployment inducing people to cut trees, legally and illegally, in the Miombo woodlands to manufacture charcoal; c) a growing national reliance on charcoal as a fuel-energy source across the board; d). logging of endangered species like rosewood, and hardwood timber for export to China; and e) opportunistic illegal plunder of forest resources for commercial gain. In order to prioritize which areas contained the most 'important' stands of forest and their comparative levels of threat from any of the above causes, the country was divided into 23 areas: a) National Park areas, associated Game Management Areas plus any 'Areas of Ecological or Biodiversity Importance'; and b) communal areas with critically important ecosystems or landscapes. Then, using an Expert Opinion approach, these 23 areas were rated according to their perceived economic and social 'value' as well as their level of threat from the above categories. A matrix was created to evaluate their potential vulnerability, and using a colour coded ranking system, the 23 areas were mapped graphically to indicate which might require support according to their prioritization. This was then used as a discussion document with stakeholders to decide on future actions to be taken.

Session 10: Financing the wildlife economy

Date: 6 November 2024 Time: 1100-12:30
Facilitator: Michael 't Sas-Rolfes, Oxford Martin School & AWEI (South Africa)

Unlocking finance for wildlife ranching in Southern Africa

Susan de Witt, AWEI, Stellenbosch University (South Africa)

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Biodiversity and functioning ecosystems are critical for human well-being and are under threat around the globe. The Global Biodiversity Framework targets ambitious expansion of conserved and restored land beyond protected areas, requiring self-sustaining conservation efforts on land typically used for livelihoods.

Extensive and semi-extensive wildlife ranching (WR) in Southern Africa demonstrates potential for balancing conservation with sustainable use, supporting livelihoods and income generation. The sector shows positive socio-economic and environmental outcomes over decades. While modestly profitable, it surpasses livestock farming in semi-arid rangelands, the major competing land use across Southern Africa. However, access to finance remains a major hurdle for new entrants, particularly those transitioning from livestock farming, including communities and land reform beneficiaries.

Lessons from established WRs and investors regarding pathways to financial self-sustainability remain uncaptured. The extent to which high capital requirements constrain new entrants relative to other challenges is unclear. The sector's potential to tap impact-seeking funding through capital and environmental markets, or leverage commercial funding through innovative mechanisms, remains unexplored. This research will identify investable WR typologies and appropriate capital to grow the sector.

The findings hold relevance beyond the region, particularly in East Africa, buffer zones and other effective conservation measures globally. The large-scale transition to wildlife-based land use in Southern Africa can be seen as a regional example of ecosystem restoration, offering valuable insights for global stakeholders aiming to achieve the targets set by the GBF.

Assessing the effectiveness of the wildlife loan program in South Africa
Klarine Schutte, AWEI, Stellenbosch University (South Africa)

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South Africa's Wildlife Economy Program (WEP), initiated by South African National Parks (SANParks), aims to reconcile ecological conservation with social and economic equity by providing wildlife loans to previously disadvantaged communities. This study evaluates the social, economic, and biological dimensions of the WEP, focusing on the program's impact on wildlife species growth, farmers' revenue, and job creation. Through comprehensive analysis, including interviews with nine beneficiaries, the research highlights the program's contributions to biodiversity, financial sustainability, and community development. The study identifies significant challenges faced by farmers, such as poaching, market access, veldfires, compliance issues, and inadequate managerial skills. Despite these challenges, the program has led to increased assets, improved revenue streams, and a gradual rise in workforce numbers. The findings underscore the need for continuous support, tailored training, and mentorship to enhance the program's effectiveness and sustainability. This research contributes to the academic discourse on wildlife economy policies and offers practical recommendations for future policy and practice, aiming to foster an inclusive and resilient wildlife economy in South Africa.

Unlocking Africa's natural wealth: Bridging tourism and conservation through the Free Movement of Persons Protocol
Rutendo Nyaku, The Brenthurst Foundation (South Africa)

LinkedIn profile

This research explores the opportunities and limitations for intra-African tourism and conservation under the African Union's Free Movement of Persons Protocol (FMPP). Despite Africa's rich natural heritage, intra-continental tourism remains underdeveloped, with significant barriers such as visa restrictions and high costs hindering accessibility for African travellers. As a result, conservation efforts often rely heavily on international visitors, leading to disconnects between global policies and local needs, particularly impacting indigenous communities.

The FMPP aims to address these challenges by facilitating easier movement across African borders. Yet, its implementation faces hurdles, including low adoption rates and concerns over economic, security, and cultural impacts. This study examines these dynamics through case studies and interviews within the hospitality, tourism, and conservation sectors, assessing both successful and struggling tourism initiatives across the continent.

Key findings underscore the FMPP's potential to enhance economic opportunities and foster cultural exchange and conservation awareness among African nations. By advocating for supportive policies and proactive engagement with stakeholders, the tourism industry can leverage the FMPP to catalyse sustainable growth and inclusivity. This research contributes timely insights for policymakers and industry leaders aiming to align conservation goals with economic development under evolving regional frameworks like the African Continental Free Trade Area (AfCFTA) and the Sustainable African Regional Communities (SARC) wildlife-based economy framework.

Ultimately, this study advocates for a holistic approach to intra-African tourism, one that integrates local communities and prioritizes their economic empowerment while promoting a deeper appreciation for Africa's natural resources and biodiversity.

SA game auction statistics of species price data: 1986-2024
Riaan Nowers, Western Cape Department of Agriculture (South Africa)

LinkedIn profile

Quantitative research and access to reliable and timely data is the basis of rational policy and decision-making. It is important for commodity groups and organisations to source, deliver and/or have access to these datasets to remain relevant, to benchmark themselves against historical trends and to enable a 'paper trail' to its performances. The South African game ranching industry is a vibrant wildlife sector that needs to keep track of the performances of its value chains for present generations and maybe even more so for its future generations.

A comprehensive economic database was developed and maintained, which endeavours to keep track of all game auctions that are taking place within South Africa. This was and is possible due to the availability of auction results made accessible by auction houses, which is crucial within this industry to keep track of any possible structural changes that are taking place or that have taken place. The sharing of data is thus an extremely important part within the value chain of the industry.

This database keeps track of not only the performance of the industry but also provides detailed species price data for its contributors and participants. It keeps track of species numbers, average prices, weighted prices and highest prices achieved. In addition, it differentiates between timed and live auctions, thereby enabling differentiation between the performances of these auction methods. It also tracks the percentage of colour variants in terms of numbers, which is important to wildlife purists. Wildlife ranchers can thus compare their results to that of the industry as well as determine or budget in advance what they potentially can get for their animals or in the case when buying, what the market prices for certain animals are. In conclusion, reliable data is available and is shared monthly with interested groups, which at this stage are mostly game ranchers and auction houses.

Carbon credits, quality and biodiversity: The link with wildlife on the land
Mike Musgrave, School of Wildlife Conservation, African Leadership University

LinkedIn profile

Carbon finance has the potential to provide a source of income for game ranching through a grouped project approach. The wildlife co-benefits have the potential to produce high-quality credits. However, grouped projects require a common approach to management, MRV and third-party verification. We discuss the potential for grouped carbon projects and the barriers to the management of these projects.

Session 11: Special panel on mobilising action toward resilient wildlife economies

Time: 12:30-13:15
Facilitator: Wiseman Ndlovu, AWEI (Zimbabwe)

Hayley Clements, AWEI (South Africa)

Rodgers Lubilo, Community Leaders Network of Southern Africa (Zambia)

Joseph E.Mbaiwa, Okavango Research Instuture, University of Bothswana & AWEI (Botswana)

Nokuthula Mhene, UNDP BIOFIN (Zimbabwe)