Biodiversity Economy

Certification within the South African Wildlife Industry

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INTRODUCTION

The American wildlife culture is based on the belief that making money out of wildlife is immoral and that it caused:

- the extinction of the passenger pigeon in America
- the near extinction of many ducks in the early part of the 20th Century
- the near extinction of the American bison.

You cannot buy indigenous venison even in the highest class restaurants in the United States (except Texas); but you can legally shoot a white tailed deer and give its meat away. The majority of Americans are proud to tell you that their wildlife culture is Pro Hunting but “Anti-Market Hunting”.

The South African wildlife culture is just the opposite. Our wildlife culture is based upon sustainable use / commercialisation.

Image: wikimedia commons
Private Game Ranchers
16.8% of agricultural land

Protected Areas 6.1%

R9bn contribution to GDP

16 million head of game
and 6 million in protected areas

20% of red meat

100k people employed; reward systems 3x higher than conventional stock farmers
SA had 3 private game ranchers in 1960 with ownership of game and land vested in farmers. Currently 28,000,000 ha marginal, uneconomic, semi-desert agricultural land converted into sustainable land use option.

Kenya with similar agricultural industry banned private ownership in 1977 – their game declined by an estimated 70%.

All private game ranchers are marginal farms in economic terms that have been converted from domestic stock/crop farms into effective land-use options. (Note: none from the state conservation estate)

These and the success of the rhinoceros, bontebok, black wildebeest recoveries, to mention a few; are a function of economic value given to game animals.
Wildlife industry has grown from a R62 million industry to a R864 million in the last ten years, with a total turnover of just under R2.2 Billion (statistics from Vleissentraal’s auctions).

Over the past 15 years, the industry, measured in terms of turnover, grew at an average rate of 20.3% per annum.

Table 1 - Total Sales Figures on Vleissentraal Auctions 2003-2012

- 2003 = R62 Million
- 2012 = R864 Million

* All Species (including rare game species)
* Only Rare Game Species
### SOME STATISTICAL INDICATORS (continued)

#### Table 2 - Total Sales turnover on Vleissentraal Auctions 2012

![Pie chart showing total sales turnover 2012]

**TOTAL SALES TURNOVER 2012**

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>TURNOVER %</th>
<th>TOTAL</th>
<th>AVERAGE PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plains Game</td>
<td>8.70%</td>
<td>R75.14m</td>
<td>R  7 648</td>
</tr>
<tr>
<td>Roan</td>
<td>1.64%</td>
<td>R14.18m</td>
<td>R208 463</td>
</tr>
<tr>
<td>Livingstone Eland</td>
<td>0.89%</td>
<td>R7.67m</td>
<td>R  46 756</td>
</tr>
<tr>
<td>White Rhino</td>
<td>1.06%</td>
<td>R9.17m</td>
<td>R223 658</td>
</tr>
<tr>
<td>Buffalo</td>
<td>37.14%</td>
<td>R320.93m</td>
<td>R835 763</td>
</tr>
<tr>
<td>Sable</td>
<td>40.10%</td>
<td>R346.47m</td>
<td>R417 938</td>
</tr>
<tr>
<td>Black Impala</td>
<td>3.64%</td>
<td>R31.49m</td>
<td>R198 022</td>
</tr>
<tr>
<td>Golden Wildebeest</td>
<td>6.83%</td>
<td>R59.01m</td>
<td>R556 651</td>
</tr>
</tbody>
</table>

**Source:** Groenewald & York. 2013. An economic outlook, the wildlife industry. Golden Breeders. May 2013
Wildlife Industry in Summary

• Due to the value placed on scarce game, the wildlife industry has not only restored wildlife to the land but has also enhanced and restored the genetic quality of our wildlife.

• The wildlife industry has grown positively, predominantly as a result of the legal trade, the scarcity of wildlife and the hunting and tourism industry.
• **Game meat production** - local game meat consumption is 20% of total unprocessed red meat consumption during hunting season (SAMIC, 2009).

• Exports (current) = 2,000 tons valued at R200 million
  Potential – New Zealand exports R4bn to Europe

• Game meat fulfills supplementary role in fresh meat market, i.e. imports of 48% of local demand (SAMIC, 2009).

• Health benefits of game meat should be highlighted and marketed - free from medications, antibiotics, growth stimulants and vaccines (Reilly, Sutherland & Harvey, 2003).

• Game farmers progressed from world leaders in extensive sustainable utilisation of game species to fully-fledged suppliers of game meat, both to local and international meat markets (*Ebedes & Meyer, 2008; Reilly et al., 2003*).
• Outstanding health characteristics of game meat:
  - lower kilojoule value in fat
  - lower cholesterol (Hoffman et al. 2004; Aidoo and Haword 1995)

• The ambient hunting temperature does not have an influence on the bacterial quality of the game meat, therefore harvest throughout the year (Paulsen & Winkelmayer 2004).
Biodiversity - a matter of human survival

About 40% of the global economy is based on biological products and services.

More than 50% of all commercial medicines used today come from nature.

About 80% of the poor people in developing countries, are dependent on traditional medicines from nature (WHO).

(Source: Victor B. 2013. Human impacts on biodiversity. St Xavier’s College, Palayamkottai)
SELF-ASSESSMENT - In terms of Biodiversity Economy

• The wildlife of no other continent remotely approaches the actual and potential value of Southern Africa (RSA & Namibia).

• If carefully managed commercial wildlife ranching industry will always be Southern Africa’s competitive edge (unique selling point).

• Conserve not only obvious mammal species, but biodiversity e.g. dung beetles, oxpeckers and plants e.g. *Lippia javanica* (mosquito repellant), *Artemisia afra* (malaria remedy).

• Industry estate foot print 4x bigger than State owned estate (parks)
  – *industry required* to be major *enabler* in terms of NEMBA and Bioprospecting, Access and Benefit Sharing Regulations
  – *Convention of Biological Diversity*

Image: Hannes Maree
• Hunting – To be enhanced

• Eco-Tourism – Existing
• BIODIVERSITY ECONOMY

(1) National Registration/Certification of Commercial Game
   – Ranches

(2) Certification of Genetics
   - DNA testing/biotechnology/molecular biology for rare and endangered species
   - To ensure genetic diversity
   - Meta-species population management
(3) Movement of Game

- Between Registered/Certified game ranchers (no permitting)

- Between Registered/Certified game ranchers and non-registered game ranchers (permitting)

- Between non-registered/certified game ranchers (permitting)

- All species in RSA should be indigenous (no alien based on distribution ranges)
(4) Game Meat Scheme

- Meat production by game farmers is part of the production of good quality protein and underpins food security of South Africa.

- South Africa import more than R4bn worth of red meat annually. Clearly this is a national food security and foreign exchange concern. WRSA and Dept of Agriculture’s goals of increasing the game meat contribution by 20% per annum.
These are needs that the wildlife industry can help to be met;
- **Biodiversity and ecosystem goods and services**
- *private ownership of unique genetics of rare species*
- *game meat production*
- *established wildlife ranching and biotrade infrastructure*
- *scientific and veterinary expertise*
- *available natural land*

Looking at the deeper dynamics that are driving our industry and the international and national agendas, it is clear that we stand on the edge of a major opportunity to create a whole new wave of growth and prosperity.
ASPIRATIONAL VISION ADDRESSED BY THE CERTIFICATION FRAMEWORK

- Why can’t we be South Africa’s single biggest business success story of the next 10 years?
- Why can’t we be a R100 billion industry ten years from now, compared to the R10 billion industry we are today?
- Why can’t we be one of our country’s great, unique, natural strengths...where the game ranching industry is nurtured and encouraged to best deliver as the **engine room** for the Green Economy?
- Why can’t we become the #1 **hunting destination** in the world?
- Why can’t we become the #1 **eco-tourism destination** in the world?
- Why can’t we become the #1 **game meat producer/exporter**?
- Why can’t we create many thousands of new entrepreneurial equity or black-owned businesses in sustainable utilization of bio-resources?”
Urgently develop **enabling legislation** within NEMBA as a **national competency** only for the governance of the wildlife industry, maintain a national register of all game farms utilized for game ranching, bioprospecting and biotrading certification requirements while maintaining the established status for the National and Provincial protected areas.

Establish a dedicated **line function** (a branch in government terminology) within DEA with a specific legal mandate for governance of the wildlife game ranching industry in line with the National Development Plan.

Partnership between State Departments and Industry for effective **Self-Administration** to enhance service delivery.

*(Governance defined in the Green Economy context; Dr GC Dry)*
Under South African wildlife management laws, it is possible to import, export or trade in species provided the appropriate permits have been issued, unless otherwise stipulated on the CITES list of endangered species.

The South African wildlife industry can assist on a national growth agenda to ensure real progress. This can be done through a voluntary wildlife industry certification scheme that promotes biodiversity economy from wildlife goods and services, private ownership of unique genetics of rare species, game meat production, established wildlife ranching infrastructure, scientific and veterinary expertise, available natural land and fundamental tourism infrastructure.
The purposes of the SA Wildlife Industry Scheme is:

- to raise the level of awareness about the wildlife industry
- education and compliance with the regulatory requirements associated with the international and South African biotrade
- to ensure credibility of industry and mitigate against damage by “fly-by-night operators” e.g. recent game meat scandal

(Note: this is true for all industries)
Participation in the certification system will be open to all wildlife ranching practitioners and biotraders.

Typically this includes: Wildlife Ranching of South Africa and National Hunting Associations, etc. with Self-Administration fully employed.

**Participation in the scheme is voluntary.** Applicants for certification will be provided with an information kit, including a Certification Examination.

Applicants will be required to sign a declaration to biotrading in parts and products towards implementation of national growth agenda of a biodiversity economy.

Certification will be on an annual basis, with a declaration as to compliance to be submitted each year in order to maintain certification.

A reasonable annual fee will be charged.
Biodiversity trading is any activity relating to the commercial collection, processing and sale of products derived from biodiversity linked to criteria of environmental, social and economic sustainability.

According to WRSA Industry Standards (currently being developed):
- The ranching: how animals are kept and treated (e.g. medication, feeding and general welfare)
- Harvesting of animals based on acceptable standard operating procedures
- How carcass is handled/processed; WRSA, Vet & VIH Standards
- How meat is further processed/beneficiated; DoH and WRSA Standards

Key legislation relevant to the Certification Scheme; Meat Safety Act, Animal Disease Act, Animal Improvement Act, NEMA and NEMBA
OUTLINE OF THE INDUSTRY CERTIFICATION SCHEME
How to apply for the Certification Scheme

• Obtain a SA Wildlife Industry Certification Scheme Application Kit by downloading each of the forms from the DEA website

• The Application Kit includes:
  - Applicant Information Sheet
  - Application Form and Declaration
  - SA Wildlife Industry Booklet
  - Certification Examination
  - Anonymous Questionnaire

• The above materials, when completed, should be forwarded with the Application Fee to the DEA National office
The Certification Scheme assessment is performed by DEA and consists mainly of multiple choice questions with a small number of short answer questions relating to biodiversity economy and its contribution towards the implementation of the national growth agenda.
• Information on renewal of the Certification Scheme will be sent at least two months prior to the annual renewal date. This will include information on updates to the regulatory framework.

• In order to obtain renewal of Certification Scheme, participants will be required to:
  - submit a new declaration confirming their continuing compliance with the Certification Scheme conditions and their understanding of and agreement to abide by any changes to the regulatory framework
  - pay the annual renewal fee
CONCLUDING REMARKS

• In South Africa’s socio-political landscape, it is an undisputed reality that commercial wildlife ranching is about appropriate land-use and rural development; it is less about “animals per se”, not a “white affluent issue”, not a “conservation at all cost thing”, it’s about economical sustainability with a powerful “green footprint”.

• The wildlife industry certification scheme will:
  - give the green economy added traction to fulfill DEA’s role in respect of biodiversity economic and sustainable use strategy
  - give wildlife ranching economic acumen to ensure profitability and sustainability, allowing local communities to participate in commercial game farming to improve their income.