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COMMERCIAL OSTRICH FARMING: A CRITICAL ANALYSIS OF SOUTH AFRICA'S FLIGHTLESS ANIMAL WELFARE AND WELL-BEING LEGISLATION.

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KEY WORDS

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This research is up to date as on 15 November 2023. Legislative and related developments hereafter have not been considered.



DEDICATION

I dedicate this thesis to the one person I hoped to see me achieve - my dad, Thomas Doak. Your lessons did not stop once you left this earth, but your values, hard-work and kindness are things that kept me motivated to pursue this journey.



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PLAGIARISM DECLARATION

'I declare that *Commercial Ostrich Farming: A Critical Analysis of South Africa's Flightless Animal Welfare and Well-Being Legislation* is my work and that the sources I have used and quoted have been referenced and acknowledged as complete references.



LIST OF ABBREVIATIONS

AIA – Animal Improvement Act 62 of 1998

ADA – Animal Diseases Act 35 of 1984

AF – Avian influenza

ALRSA - Animal Law Reform South Africa

APA - Animals Protection Act 71 of 1962

APPA – Atmospheric Pollution Prevention Act 45 of 1965

BC - Broiler chickens

BD – Biological diversity

CFO – Commercially farmed ostriches

COI – Commercial ostrich industry.

CPA - Consumer Protection Act 68 of 2008.

DALRRD – Department of Agriculture, Land Reform and Rural Development (formerly the Department of Agriculture Forestry and Fisheries or DAFF) and reference to DALRRD is reference to the former DAFF as appropriate

DFFE – Department of Forestry, Fisheries and the Environment (formerly the Department of Environmental Affairs or DEA) and reference to DFFE is reference to the former DEA as appropriate

GMI – Game meat industry

GMS – Game Meat Strategy for South Africa, 2023

DoH - Department of Health

DWS – Department of Water and Sanitation

EWT – Endangered Wildlife Trust

EU – European Union

GHG – Greenhouse gases

GTA - Game Theft Act 105 of 1991

IA – Integrative Approach

LWCC – Livestock Welfare Coordinating Committee

MSA – Meat Safety Act 40 of 2000

NAMC - National Agriculture Marketing Council

NEMA – National Environmental Management Act 107 of 1998

NEMAQA – National Environmental Management: Air Quality Act 39 of 2004

NEMBA – National Environmental Management: Biodiversity Act 10 of 2004

NEMLAA – National Environmental Management Laws Amendment Act 02 of 2022

NEMWA – National Environmental Management: Waste Act 59 of 2008

NHA - National Health Act 61 of 2003

NSPCA – National Council of Societies for the Prevention of Cruelty to Animals

NWA – National Water Act 36 of 1998

SABS – South African Bureau of Standards

SAOBC - South African Ostrich Business Charter

SCA – Supreme Court of Appeal

SPCA – Societies for the Prevention of Cruelty to Animals

SPCAA – Societies for the Prevention of Cruelty to Animals Act 169 of 1993

WOAH - World Organization for Animal Health



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CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

Game farming is becoming an increasingly lucrative industry. The owning of game animals and farms has been around for decades and has increased significantly. This situation is illustrated by the fact that in 2019 there were approximately over 10 000 game farms in South Africa as opposed to 1991 where there were around 3 500. In the past, wild animals were considered as 'res nullius' meaning that they were owned by no one. Ownership was achieved by having physical control over the animals through the South African common law. Resultantly, animals roaming on a game farm did not necessarily belong to the landowner as they had no physical control over the animal concerned.

Game farms are essentially farms which keep and/or breed certain wild captive wild animals (referred to as 'game') on a farm for either commercial or aesthetic purposes.³ Already in 1980 and 1981, 1446 tonnes of venison was exported from South Africa, showing that game has been commercially farmed for decades.⁴ 'Industrial farming', in turn, has been defined by the National Resources Defence Council⁵ as being a large-scale intense production of both crops and animals and is also known as commercial farming or factory farming.

Ostriches have been commercially farmed in South Africa since the early 19th century.⁶ South Africa produces 70% of all ostrich products worldwide ranging from feathers and leather to meat.⁷ Feathers were the first product to be commercially farmed from ostriches. Wild ostriches were hunted for their feathers until 1822 when Proc. 21st March 1822 (Game Law) was enacted

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⁵ National Resources Defence Council 'Industrial Agriculture 101' 31 July 2020 available at https://www.nrdc.org/stories/industrial-agriculture-101 (accessed on 30 April 2022).

¹ Reuters 'The big business of South Africa's game farms' *Africa News* 19 June 2019 available at https://www.africanews.com/2019/06/19/the-big-business-of-south-africa-s-game-farms// (accessed 4 May 2022).

² Blackmore A 'Climate change and the ownership of game: A concern for fenced wildlife areas' (2020) 62(1) *Koedoe*, 2.

³ Luxmoore R 'Game farming in South Africa as a force in conservation' (1985) 19(4) Oryx, 225.

⁴ Luxmoore R (1985) 225.

⁶ Snyders M Perceptions about commercial ostrich farming: views of consumers, farmers and secondary stakeholders (unpublished MSc Agric thesis, Stellenbosch University, 2020) 3.

⁷ Barends-Jones V & Pienaar 'The South Africa Ostrich Industry Footprint' (2020) 5.

to prohibit the hunting of wild ostriches without the authorisation of the Crown. 8 This was done to 'guard against the total destruction of game in the Cape Colony'. ⁹ The demand for feathers for fashion was rife, hence the start of commercially farming ostriches for their feathers. 10 Ostrich farming is precarious as a constant supply of high quality products and an extreme amount of capital is needed. 11 Prior to 1993 the ostrich industry was regulated by a single market system approach, creating a monopoly for the Klein Karoo Korporaise, 12 which was found to be politically motivated. 13 The ostrich industry in South Africa is currently unregulated from a market perspective. 14 This means there is currently a free market system approach, creating an each to their own tactic where there are no clear set standards. This deregulation has created issues in the industry as the industry is growing unchecked. Regulation of the industry predominantly takes place through soft laws, largely created by organisations involved in the industry. The ostrich industry today relies on the global market and the rand versus dollar and euro exchange rates. 15 The deregulated industry allows a farmer to choose the market-value of their products. ¹⁶ This however is largely barred by the global market share price. Ostrich meat exports are also kept lower than what could be exported to create a scarcer commodity on the market. 17

There are several implications when an industry is deregulated. In the case of the ostrich industry, this was done to stimulate economic incentives, which it did. The ostrich industry did however experience its biggest crash in 2011¹⁸ due to the saturated market of ostrich products resulting from this free-market approach. This led to surplus of ostrich meat. ¹⁹ An industry needs regulation to ensure it is fair and that all participants (stakeholders in the ostrich industry, the consumer and the individual ostrich) are protected from the negative effects of deregulation.

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⁸ Proc. 21st March 1822 (Game Law).

⁹ Proc. 21st March 1822 (Game Law).

¹⁰ Louw M 'Ostrich Farming in South Africa' available at https://southafrica.co.za/ostrich-farming-south-africa.html (accessed on 4 July 2022).

¹¹ Louw M 'Ostrich Farming in South Africa'.

¹² Hereafter referred to as the Korporasie.

¹³ National Agriculture Marketing Council (NAMC) The South African Ostrich Value Chain; Opportunities for black participation and Development of a programme to link Farmers to Markets (2010) 4.

¹⁴ NAMC (2010) 4.

¹⁵ Duminy L A system dynamics approach to understanding the ostrich industry of South Africa (unpublished LLM theses, Stellenbosch University, 2016) 49.

¹⁶ Duminy L (2016) 49.

¹⁷ NAMC (2010) 10.

¹⁸ Barends-Jones V & Pienaar (2020) 9.

¹⁹ NAMC (2010) 4.

Ostriches in South Africa have been exported to the European markets since 1826 for their feathers. 20 Several South African abattoirs have licenses to export ostrich meat to Europe and other countries.²¹ The commercial ostrich industry is heavily reliant on the exportation of products sitting at just below 90%.²² These products consist of 'fresh' meat, dried meat (biltong), leather, eggs, egg shell products and feathers.²³ Exportation in the ostrich industry rests on shaky grounds due to several breakouts of mad cow disease and foot and mouth disease in 2000 and breakouts in Avian Influenza²⁴ in 2004, 2011 and 2017.²⁵ The latest breakout, reported by WHO²⁶ in China confirmed on the 11th of April 2021, has made three jumps to humans in the past months. The outbreak of AF in 2021 in South Africa resulted in the culling of 3.7 million egg-laying hens.²⁷ The most current outbreak of AF in South Africa has been ongoing since April 2023, ²⁸ and continues at the time of writing (November 2023).

Farming wild animals in South Africa is not a new concept. The farming of ostriches in South Africa receives less public attention. Wild animals were not regulated by the Animal Improvement Act²⁹ in any manner. Government Gazette No. 42464 of 17 May 2019³⁰ has since amended the AIA³¹ which reclassified 32 new wild animal species as landrace breeds. The implication of this is that these reclassified wild animals, which include lions and rhinos, are now classified as 'locally developed breeds'. 32 The AIA allows for these landrace breeds to be genetically improved and manipulated to ensure superior domesticated animals who produce and perform better.³³ The decision to reclassify these landrace breeds has been overturned by

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²⁰ Barends-Jones V & Pienaar (2020) 7.

 ²¹ Barends-Jones V & Pienaar (2020) 7.
 ²² Barends-Jones V & Pienaar (2020) 8.
 ²³ Barends-Jones V & Pienaar (2020) 5.

²⁴ Hereafter referred to as AF.

²⁵ Barends-Jones V & Pienaar (2020) 9.

WHO 'Avian Influenza (H3N8) China' available at https://www.who.int/emergencies/disease-outbreak- news/item/2023DON456#:~:text=On%2027%20March%202023%2C%20the,have%20been%20reported%20fr om%20China (accessed on 2 May 2023).

Thukwana N 'South Africa reported 145 outbreaks of avian flu and culled 3.7 million birds in 12 months' 21

June 2022 News24 available at https://www.news24.com/news24/bi-archive/south-africa-has-145-avian- influenza-cases-between-april-2021-and-march-2022-37-million-birds-killed-2022-6# (accessed on 2 May 2023).

²⁸ Refer to Chapter 2, 2.6.1 Zoonotic diseases and Human Health of this thesis for a full discussion on the most recent outbreak of AF in the poultry industry and the effects of this.

²⁹ Animal Improvement Act 62 of 1998 (hereafter referred to as the AIA).

³⁰ GN 664 *GG* 42464 of 17 May 2019.

³¹ AIA 62 of 1998.

³² Somers MJ, Walters M, Measey J, et al. 'The implications of the reclassification of South African wildlife species as farm animals' (2020) 116. S Afr J Sci 1.

³³ Somers MJ, Walters M, Measey J, et al (2020) 1.

the High Court.³⁴ Although ostriches were not one of these breeds, ostrich genes have been genetically improved since the 1820's through selective breeding to improve the quality of feathers and meat.³⁵ What this arguably does highlight is the government's motive to increase wild animal agriculture in South Africa.

Enforcement of regulations on game farms is already cumbersome. Somers MJ, Walters M, Measey J, et al,³⁶ disagree with wild animal genetic manipulation as this will not improve the genetic diversity of these animals but rather will create negative genetic consequences posing not only economic risks but ecological risks too. The Department of Agriculture Land Reform and Rural Development³⁷ (previously DAFF) released a statement in 2019,³⁸ admitting that this decision was made without scientific research and that this was allowed as wild animals already formed part of the 'farm animal production systems'.³⁹

Ostriches frequently battle with stress and are inherently complex and difficult to farm. These complexities often result in high chick mortality rates, low fertility rates and breakouts in AF, ⁴⁰ compromising ostrich welfare and well-being. ⁴¹ Wild Welfare ⁴² has released a presentation on the sentience of ostriches. They explain that ostriches often experience stress from commercial farming practices. Ostriches enjoy a varied diet ranging from insects to berries. ⁴³ Continuous grazing opportunities need to be provided to ostriches otherwise they will pluck out their feathers. ⁴⁴ Ostriches are social, flock animals who often congregate together and sometimes even adopt young from other flocks. ⁴⁵ Ostriches need to have accessible large open spaces to allow for socialising and foraging in flocks which will reduce aggression, stereotypical from

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³⁴ Refer to Chapter 4, 4.2.2.4 Animals Improvement Act 62 of 1998 of this thesis for discussion on the relevant case and the effects of the case.

³⁵ Louw M 'Ostrich Farming in South Africa'.

³⁶ Somers MJ, Walters M, Measey J, et al (2020) 1.

³⁷ Hereafter referred to as the DALRRD.

³⁸ Nordling L (2020).

³⁹ Nordling L (2020).

⁴⁰ Verwoerd D, Deeming D & Angel C, et al. 'Rearing Environments Around the World' in Deeming D *The ostrich: Biology, Production and Health. The Ostrich: Biology, Production and Health.* (1999), 196.

⁴¹ Refer to Chapter 2, 2.4.1 Welfare and Well-Being Challenges in the Ostrich Industry of this thesis for a discussion on how ostrich welfare and well-being is compromised by convention farmed animal production methods.

⁴² Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) Wild Welfare available at https://wildwelfare.org/wp-content/uploads/Common-Ostrich.pdf (accessed on 14 October 2022).

⁴³ National Geographic 'Ostrich' available at https://www.nationalgeographic.com/animals/birds/facts/ostrich (accessed on 2 November 2022).

⁴⁴ Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) (accessed on 14 October 2022).

⁴⁵ Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) (accessed on 14 October 2022).

stress in ostriches.⁴⁶ Large open spaces for ostriches are needed to allow them to practice natural behaviours such as running and having dust baths. Calls, body language as well as using their wings and tails acts as a form of communication between ostriches. An enclosure needs to have a social structure, with space and an entertaining environment allowing foraging, bathing and exploring.⁴⁷ Ostriches are polygamous where all females lay eggs in the same nest and the male will take turns with the female incubating them.⁴⁸ The male ostrich helps the female ostrich build nests, guard the eggs and help raise the young.⁴⁹

The above arguably illustrates that ostriches feel both positive and negative emotions as they are sentient beings. Given their sentient nature, it is important from a moral perspective to protect ostriches and ensure they have good welfare, as these animals have the capacity to suffer and experience positive feelings, affecting their well-being.⁵⁰ Ostriches have their own social structures containing hierarchies, multifaceted relationships, communication through their own languages, teamwork, etc.⁵¹ Good ostrich welfare is essential as South Africa is responsible for commercially farming the highest number of ostriches, globally. Ostriches with good welfare and well-being will improve the well-being of humans and the environment.

In South Africa, particularly in the courts, there has been a shift in thinking regarding animal welfare considerations and the impact animal welfare can have on the environment and humans. This shift is illustrated in the case *National Society for the Prevention of Cruelty to Animals v Minister of Justice and Constitutional Development and Another*.⁵² In this case, the constitutional court stated 'the rationale behind protecting animal welfare has shifted from merely safeguarding the moral status of humans to recognising the intrinsic value of animals'. ⁵³ The Supreme Court of Appeal⁵⁴ in *Lemthongthai v S*⁵⁵ noted that conservation and animal

⁴⁶ Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) (accessed on 14 October 2022).

⁴⁷ Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) (accessed on 14 October 2022).

⁴⁸ Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) (accessed on 14 October 2022).

⁴⁹ Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) (accessed on 14 October 2022).

⁵⁰ Papini M, Penagos-Corzo J & Pérez-Acosta A 'Avian Emotions: Comparative Perspectives on Fear and Frustration' (2019) 9 *Front Psychol*, 1.

⁵¹ National Geographic 'Ostrich' available at https://www.nationalgeographic.com/animals/birds/facts/ostrich (accessed on 2 November 2022).

⁵² (CCT1/16) [2016] ZACC 46; 2017 (1) SACR 284 (CC); 2017 (4) BCLR 517 (CC) (hereafter referred to as *NSPCA* (2016)).

⁵³ NSPCA (2016), para 57.

⁵⁴ Hereafter referred to as the SCA.

⁵⁵ Lemthongthai v S (849/2013) [2014] ZASCA 131; 2015 (1) SACR 353 (SCA).

welfare were two intertwined values reflected in section 24 of the Constitution. ⁵⁶ This arguably means that in the context of the environmental rights, specifically for the improvement in human health and well-being, cognisance needs to be given to the intrinsic value of animals, as the lack of adequate welfare consideration can impact the environment, humans and animals. One clear example to illustrate this is zoonotic disease outbreaks, which affects all of these interests. ⁵⁷ Putting the above into the context of this research, the improvement of welfare practices for ostriches can minimise the spread of disease which would result in less ostriches having to be culled as well as lessen the chance of AF transmission from ostriches to humans, effecting human health negatively. The mass culling of ostriches can also have major environmental impacts such as biodiversity loss which can negatively affect animals, humans and the environment. ⁵⁸

The purpose of this research is threefold. The ostrich will be used as an example throughout this research. The main aim of this research is to argue for the recognition of the intrinsic value of all animals as individuals and justify that this should be incorporated into appropriate legislation which affects them. In addition, this research aims to argue that individual animals, specifically ostriches, should be legally recognised as sentient beings, either in express legislation or in standards that affect them. Finally, based on the express legal recognition of individual animals' intrinsic value and sentience as aforesaid, their welfare and well-being must then be considered and regulated through strict legally enforceable standards.

Scholtz⁵⁹ defines intrinsic value as 'the value which entities have of themselves, for themselves'. The mere existence of the animal results in its individual worth and entitlement to its own set of rights. The legal recognition of animal's sentience would bring greater awareness to the individual intrinsic value of an animal. Sentience is based more on welfare principles looking at scientific indicators and biological realities of the animal's health and well-being such as pain indicators of distress. Sentience of an animal has been described by Broom⁶⁰ as having the awareness and cognitive ability to feel emotion. He goes further stating that sentient beings can distinguish themselves from a third party, remember their actions and

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⁵⁶ *NSPCA* (2016), para 58.

⁵⁷ This is discussed in detail in Chapter 2 of this thesis.

⁵⁸ This is further discussed in Chapter 2 of this thesis.

⁵⁹ Scholtz W ''Ethical and human use', intrinsic value and the Convention of Biological Diversity: Towards the reconfiguration of sustainable development and use' (2020) *Wiley* 77.

⁶⁰ Broom D Sentience and animal welfare. (2014) xiii.

consequences and assess risks. ⁶¹ Animal welfare has been defined as the individual animal's ability to cope with the environment, including their mental and physical health. ⁶²

Welfare is closely linked to animal sentience. Sentient animals are not only subject to the physiological stress but also emotional stress. These animals are not only subjected to stress but can feel and internalise this stress. Sentient animals can feel positive and negative emotions, avoiding suffering and pain. Commercial farming practices fail to acknowledge these animals needs and their capacity to suffer. Commercial farming does not allow these sentient beings to engage in natural behaviours, have adequate nutrition and water, have effective communication with their peers which causes stress, affecting their well-being.

Due to the shift in animal welfare perspectives present in the NSPCA ⁶⁶ case the author engages in the inability of South Africa's legislation to ensure holistic sustainable, commercial farming practices relating to animals. The author aims to provide a thorough explanation and assessment of certain aspects of South Africa's legislative and policy framework insofar as it relates to the legal recognition of animal sentience and individual intrinsic value, the sustainability of the commercial farming of wild animals and the need for express legal standards in regard to their welfare and well-being. This is to be contrasted with South Africa's current legislation, which has a human-centric approach when addressing animals' welfare and well-being.

1.2 RESEARCH PROBLEM

The preceding discussions illustrate that there is currently a significant gap in the regulatory framework: despite the capacity of suffering and sentience of animals, and the implications on the environment and human well-being, there exists no explicit binding legislation in South Africa that makes good animal welfare in commercial farming a requirement, specifically in terms of wild game being commercially farmed.⁶⁷ This gap further extends to the concepts of

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⁶¹ Broom D Considering animals' feelings: Précis of Sentience and Animal Welfare (2016) *Animal Sentience*, 2. ⁶² Broom D (2016), 6.

⁶³ Kumar R, Suresh k & Choudhary S, et al Animal Sentience and Welfare: An Overview. (2019). *International Journal of Current Microbiology and Applied Sciences*. 640.

⁶⁴ Kumar R, Suresh K & Choudhard, et al (2019) 634.

⁶⁵ Kumar R, Suresh K & Choudhard, et al (2019) 634.

⁶⁶ NSPCA (2016).

⁶⁷ Although there are currently some limited welfare provisions in the Meat Safety Act regulations, these are not adequate.

intrinsic value and sentience: the current legislative framework does not have the adequate proactive measures needed to ensure the legal recognition of animal sentience and intrinsic value. Currently, there are negative obligations in law in that require that farmers and others must refrain from acts of cruelty to these animals, in order to avoid committing an offence in terms of the Animals Protection Act,⁶⁸ this is purely anti-cruelty legislation. However, there are no specific positive obligations or requirements to meet their psychological needs and welfare. Basic food, water and shelter are not required to be provided to an animal by the APA yet, failure to do so, constitutes an offence.

Outside of the APA, there are some regulations relating to meat safety, although these are mainly concerned with welfare of the ostrich when slaughtered and not during their entire lifespan. Laws such as the Meat Safety Act⁶⁹ are mainly concerned with the welfare of the ostrich in relation to the quality of the meat and not for the ostrich's health and well-being.

Given the push by government to increase the game meat industry,⁷⁰ the possibility of the ostrich industry growing without sufficient safeguards in place in relation to commercially farmed ostrich welfare has highlighted a major lacuna in South Africa's legislative framework.⁷¹ This does not only impact on the animals who are farmed but also those impacted by farming operations (such as other wild animals), also it furthermore implicates the environment and human health and rights.

South Africa produces over 70% ⁷² of ostrich products globally and therefore should be the forerunners in ostrich welfare regulations. Organisations such as the South African Ostrich Business Chamber ⁷³ and the World Organization for Animal Health ⁷⁴ provide for welfare through standards for all animals including ostriches. Standards like these pose their own issues, including that these standards are only 'soft law' and can be considered as mere guidelines unless incorporated into legislation. Animal farmers and others involved in the industry are not bound by these welfare guidelines. There is also a direct conflict of interest

⁶⁸ Animals Protection Act 17 of 1962 (hereafter referred to as the APA).

⁶⁹ Meat Safety Act 40 of 2000 (hereafter referred to as the MSA).

⁷⁰ Hereafter referred to as the GMI.

⁷¹ Refer to Chapter 4, 4.2.2.3 Game Meat Strategy for South Africa, 2023 of this thesis for a discussion on governments intentions to grow the GMI.

⁷² Barends-Jones V & Pienaar (2020), 5.

⁷³ Hereafter referred to as SAOBC.

⁷⁴ Hereafter referred to as WOAH.

with organisations such as the SAOBC setting standards for an industry in which they economically benefit from. The SAOBCs incentive is to grow the ostrich industry to produce greater economic incentives. The conflict here is that the SAOBC may compromise on standards of ostrich welfare and well-being to gain economically.⁷⁵ Farmers are not bound by these guidelines meaning they are able to stray, which may compromise ostrich welfare and well-being.

National legislation such as the MSA and APA makes mention of welfare of animals, including ostriches, legislation which is supposed to expressly protect cruelty against these animals. Terms a such as 'necessary' in the APA may be used to bolster the argument that the welfare and well-being of ostriches is compromised as it is necessary for food security.

With effect from June 2023, for the first time, 'well-being' has now been defined in legislation in terms of National Environmental Management Laws Amendment Act. ⁷⁶ This includes the physical, emotional and physiological conditions of an animal's ability to cope within their environment. ⁷⁷ However, there is still no definition regarding 'welfare' of an animal. Due to these issues around uncertainty and gaps, this work will argue that national legislation must be developed and enacted with legally binding standards to ensure the recognition of sentience and intrinsic value, ensuring legally enforceable welfare standards for all animals in the commercial farming industry throughout their lifespan.

International law, that has been ratified or confirmed by South Africa, should be critically assessed as it relates to animals. In terms of section 39(2) of the Constitution of the Republic of South Africa, 1996, ⁷⁸ a court tribunal or forum when interpreting any provision in the Bill of Rights, must promote the values of an open democratic country being freedom, equality and dignity, international law must be considered and foreign law may be considered. ⁷⁹ Further, section 231 states than an international agreement will bind the Republic after it has been accepted by the National Assembly and National Council of Provinces, ⁸⁰ and comes into law when the international agreement has been incorporated into national legislation. An example

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⁷⁵ Refer to Chapter 4, 4.2.4.3 South African Ostrich Business Chamber Code of Conduct of this thesis for a detailed discussion.

⁷⁶ National Environmental Laws Management Amendment Act 02 of 2022 (hereafter referred to as NEMLAA). ⁷⁷NEMLAA, s1.

⁷⁸ Hereafter referred to as the Constitution.

⁷⁹ Constitution, s39(2).

⁸⁰ Constitution, s231(2).

of this is the Convention on Biological Diversity⁸¹ which was ratified by South Africa and acted as the basis for the National Environmental Management: Biodiversity Act.⁸² Of significant concern is that South Africa is yet to incorporate laws into national law, a measure that should have already been undertaken. As a result, an assessment on unincorporated legislation, such as the Terrestrial Animal Health Code (2023),⁸³ will take place. Animal welfare has the ability to be improved if such unincorporated legislation is domestically incorporated into national legislation.

1.3 RESEARCH QUESTION

To what extent does South Africa's legislative framework protect the welfare and well-being of ostriches against the impacts of commercial farming?

1.4 SIGNIFICANCE OF THE RESEARCH

South Africa has the largest commercial ostrich industry in the world and the highest population of ostriches. South Africa's legal framework needs to be updated and loopholes closed in order to meet the welfare and well-being needs of commercially farmed wild game, specifically ostriches. Ostriches have not been domesticated for a long period of time and because of this, are known to be difficult and dangerous to farm showing their inability to adapt to commercial farming practices. A This has been said to be a factor in commercial ostrich farming's 'poor production performance' seen in the high levels of chick mortality rates, low fertility of the ostriches, low hatching success of eggs and breakouts of avian flu. These issues illustrate the lack of concern in relation to the welfare and well-being of these birds, compared to the concern with the possible economic gain and mass production of products. The mortality rate in chicks under three months is almost 50% and serves as one of the main issues when it comes to commercial ostrich farming. A number of factors contribute to this but welfare of the ostriches, throughout their lifecycle, is seen to be a main factor. The lack of welfare includes

⁸¹ The Convention on Biological Diversity of 5 June 1992 (1760 U.N.T.S. 69) (hereafter the CBD).

⁸² National Environmental Management: Biodiversity Act 10 of 2004 (hereafter referred to as NEMBA).

⁸³ Terrestrial Animal Health Code (2023) (hereafter referred to as the TAHC).

⁸⁴ Snyders M Perceptions about commercial ostrich farming: views of consumers, farmers and secondary stakeholders (unpublished MSc Agric thesis, Stellenbosch University, 2020), 16.

⁸⁵ Snyders M (2020) 17.

⁸⁶ Verwoerd D, Deeming D & Angel C, et al (1999), 196.

the high levels of stress experienced in normal commercial farming practices such as vaccinating and weighing birds, the failure to adapt to farming environments, the high levels of disease, high levels of stress and the overall poor management.⁸⁷ A consistent theme throughout this research is the fact that regulations are mainly put in place when the ostrich is being handled for slaughter and not necessarily for their entire lifespan.

1.5 RESEARCH METHODOLOGY

The research methodology comprises of legal and non-legal research. This research comprises of desktop reviews where no empirical research will be conducted. This research draws from existing empirical research by assessing studies, for example, by Snyders who looked at the perceptions that surround commercial ostrich farming sand Barend-Jones & Pienaar, show who interviewed and gathered statistics in relation to commercial ostrich farming's carbon footprint. The legal research takes the form of primary and secondary sources consisting of the Constitution, case law, legislation, policy, regulations, journal articles, standards, reports, etc related to the field of animal protection and health, welfare, sustainability, pollution, agriculture, human health, the production of meat products, husbandry practices and the environment.

South Africa's international agreements will further be reviewed to assess South Africa's legal commitments to animal welfare and well-being and environmental commitments. An examination on the international agreements, both incorporated and unincorporated, will be done to show the current international framework in South Africa that could be used to improve animal welfare. International law and examples will be used as an illustrative example of a more progressive legal regime who ensures the welfare of all animals is met with the highest possible standards. This is supplemented with non-legal research which reviews journal articles, research, existing empirical research and scientific reports in relation to animal welfare, ostrich welfare, farming, husbandry practices, agriculture, sustainability, etc.

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⁸⁷ Snyders M (2020) 18.

⁸⁸ Snyders M (2020).

⁸⁹ Barends-Jones & Pienaar (2020).

The combination of these methods allowed the author to critically analyse the full scope and possible protection found in South Africa's legal framework in terms of commercially farmed ostrich's welfare and well-being.

1.6 CHAPTER OUTLINE

Chapter one introduces the research on the welfare and well-being issues facing ostriches in a commercial farming setting which will be further expanded upon in chapter two.

Chapter two analyses the welfare, well-being and sustainability (or lack thereof) issues of commercially farming wild game, specifically ostriches. The rationale behind why these animals should be protected is addressed. Non-welfare issues experienced by ostriches are also explored including health (such as zoonotic diseases), environmental harm, etc.

Chapter three critically analyses the current constitutional and international legislative framework relating to the welfare, well-being and sustainability of commercially farming game meat, specifically ostriches. The Constitution is critically analysed along with the CBD and the TAHC. The importance of welfare and well-being for animals is looked at through the scope of section 24 of the Constitution, along with other relevant sections and the analysis of case law throughout. International agreements are critically analysed to establish if these existing agreements can be used to better the welfare and well-being of commercially farmed ostriches. ⁹⁰

Chapter four assesses the legislative framework to see if the welfare and well-being of wild animals, specifically ostriches, can be supported though current legislation. Relevant law and policy are critically analysed. The lack of recognition of intrinsic value in legislation will be assessed and criticised. This chapter also delves into the sustainability of commercially farming game.

Chapter five concludes by answering the research question coupled with recommendations as to how legislation may be used to improve the welfare, well-being and sustainability of CFO under the South African legislative framework. Chapter five also includes recommendations

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⁹⁰ Hereafter referred to as CFO.

on the legal recognition of intrinsic value and sentience relating to animals. It also concludes on the sustainability of commercially farming game meat.



CHAPTER TWO: THE **IMPORTANCE OF** COMMERCIALLY **FARMED** OSTRICH WELFARE AND WELL-BEING: ISSUES WITH ENFORCEMENT, THE **RATIONALE** TO **PROTECT CONSEQUENCES** THEM AND THE OF NEGLECTING THEIR PROTECTION

2.1 INTRODUCTION

With the transformation of animal welfare perceptions, it is important to ensure that sentient beings, including animals, have their intrinsic value recognised in standards and legislation that affects them. From an anthropocentric perspective, it is also important to protect animal welfare and well-being because commercially farmed animals have major impacts on animal and human health and well-being and can be detrimental to the environment. In the first part of this chapter the author will explore and discuss the various values of the ostrich in South Africa. The second part of this chapter will delve into the significance of distinguishing 'welfare' from 'well-being' in the animal kingdom as well as objective versus subjective testing. The third part will probe into the well-being and welfare challenges inherent to the COI. Further, the fourth part analyses the environmental challenges that stems from the COI, from an environemtal perspective. The final part of the chapters examines any additional issues created by the COI. This is due to the current state of CFO in the COI in South Africa.

2.2 THE 'VALUE' OF OSTRICHES

The importance of ostriches and the different values attributed to them, as individuals, within the environment and otherwise will be discussed throughout this chapter. A distinction will be made between the intrinsic worth of the ostrich and other types of values of the ostrich. Although the economic value associated with CFOs is huge, it is generally the value that is most often considered. This is despite other known values that CFOs possess. Ostriches' other values include their intrinsic value, ecological, social and cultural values, amongst others, which are often not prioritised and will be discussed below.

2.2.1 The Intrinsic Value and Worth of Ostriches vs. the Economic Value

Intrinsic value and worth of an ostrich in South Africa are differentiated from the economic, ecological and other values of the ostrich. Intrinsic worth generally, can be described as how much an asset is worth or its inherent value. Human beings gauge the importance of value of

something based on the value that thing has for human use. The intrinsic worth and value of an animal, as described by Bilchitz⁹¹ is that the animal has value, merely for being an individual. The ostrich's intrinsic value is founded on the fact that the individual ostrich merely exists. Humans generally do not recognise animal's intrinsic value, rather ostriches are considered as economic resources who are to be exploited for human gain only, and this is their only value, to humans. One reason people argue for the recognition of intrinsic value is based on sentience.

Scientific evidence 92 shows that birds are sentient beings. 'Sentient beings' are said to have a 'conscious experience of the world'93 who can experience emotions, pain and suffering. Although this evidence is not directly linked to ostriches, ostriches are social, flock animals, who communicate, have families, need entertainment, engage in social hierarchies and behaviours and are capable of experiencing stress, happiness and sadness. 94

Sentientism relates to the being's ability to feel pain and pleasure. Sentience often relates to welfare practices where scientific evidence can be used to measure pain and comfortability. Intrinsic value on the other hand, is because the ostrich is a living being that exists with inherent value to itself, where the ostrich has 'moral patienthood', such as humans. Although these are two distinct concepts, where sentience has its basis in welfare practices and intrinsic value has its basis on a more philosophical animal rights based approach, these concepts are supported concurrently. An ostrich has intrinsic value merely because it exists, which could ultimately translate into rights in law. The protection against the suffering of ostriches is illustrated in law through anti-cruelty legislation and the promotion of positive experiences, through positive legal standards for improved welfare practices.

The minority judgment, written by Cameron JA, in *National Council of Societies for the Prevention of Cruelty to Animals v Openshaw*⁹⁸ was the first South African case which peered

⁹¹ Bilchitz D 'Exploring the Relationship between the Environmental Right in the South African Constitution and Protection for the Interest of Animals' (2017) 137 *SALJ*, 37.

⁹²Duncan I 'The changing concept of animal sentience' (2006) 100, *Applied Animal Behaviour Science*, abstract. ⁹³ Bilchitz D (2017) 38.

⁹⁴ Wild Welfare 'Care for Us Common Ostrich (Struthiocamelus) Wild Welfare available at https://wildwelfare.org/wp-content/uploads/Common-Ostrich.pdf (accessed on 14 October 2022).

⁹⁵ Lan T, Sinhababu N & Carrasco L 'Recognition of intrinsic values of sentient beings explains the sense of moral duty towards global nature conservation' (2022) 17 *PLoS One*, 1.

⁹⁶ See section below on objective versus subjective testing.

⁹⁷ Lan T, Sinhababu N & Carrasco L (2022), 1.

⁹⁸ National Council of Societies for the Prevention of Cruelty to Animals v Openshaw [2008] ZASCA 78 (hereafter referred to as Openshaw).

into the domain of animal sentience, recognising that they animals were capable of suffering and feeling pain. ⁹⁹ Cameron JA in *Openshaw* compared the slaves of the past with the animals of today where animals are legal objects. ¹⁰⁰ The case of *Lemthongthai v S*¹⁰¹ entrenched that a more caring attitude needed to be taken in relation to humans, animals and the environment that constitutional values dictate this, especially in light of South Africa's history of unfair discrimination which lead to many impoverished people unable to access environmental resources, causing environmental injustices. Building on from this jurisprudence, in 2016 the Constitutional Court made a pivotal development for animal law in South Africa. In the *NSPCA* case, ¹⁰² the Constitutional Court found that the way animal welfare was perceived in South Africa had shifted. Animal welfare was no longer protected for the benefit of humans, but it is rather because of the intrinsic value of the animal as an individual. ¹⁰³ The Constitutional Court had correctly adopted the integrative approach ¹⁰⁴, ¹⁰⁵ where the suffering of an individual animal is directly connected to conservation reflecting 'two intertwined values'. ¹⁰⁶

Bilchitz and Wilson reflect on the IA in relation to hunting. ¹⁰⁷ Here the authors state that hunting an animal for entertainment will never actively support conservation and doing so will lead to the 'destruction' of the species. ¹⁰⁸ When the income generated from hunting a specific species becomes strained, the incentive to conserve this species decreases. ¹⁰⁹ Utilising this rationale, with the commercial ostrich industry and comparing economics generated through hunting to the commercial, like other wild animals, ostriches are sold by the kilogram or by bird. Human beings exploit the ostrich as they have high economic value, and the farming of wildlife is often referenced under the guise of conservation. Commercially farmed wild animals are generally not subject to positive legally binding animal welfare standards and are not

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⁹⁹ Bilchitz D & Wilson A.P 'Key Animal Law in South Africa' *in Routledge Handbook of Animal Welfare* (ed) 2022 Taylor & Francis Group, 428.

¹⁰⁰ Openshaw (2008), para 32.

¹⁰¹ Lemthongthai v S (849/2013) [2014] ZASCA 131; 2015 (1) SACR 353 (SCA) 20.

¹⁰² NSPCA (2016), para 57.

¹⁰³ Bilchitz D & Wilson A.P (2022) 429.

¹⁰⁴ Hereafter referred to as the IA.

¹⁰⁵ Bilchitz D (2017), abstract.

¹⁰⁶ NSPCA (2016), para 58.

¹⁰⁷ Bilchitz D & Wilson A.P (2022) 429.

¹⁰⁸ Bilchitz D & Wilson A.P (2022) 429.

¹⁰⁹ Bilchitz D & Wilson A.P (2022) 429.

farmed for conservation purposes (despite claims to the contrary). Here the incentive may be referred to as to 'conserve' is to 'exploit'.

Ostriches' welfare and well-being cannot be undermined for mere monetary reasons. Purely economic incentives defeat the Constitutional Court's ruling in the *NSPCA*¹¹⁰ case. The COI struggles to conform to constitutional jurisprudence as seen by the COIs response to AF breakouts, which fails to recognise the intrinsic worth of the individual ostrich. This is because ostriches, whether they are infected with AF or not, may be culled.

As stated by Bilchitz and Wilson, ¹¹¹ the government has enacted policies ¹¹² in relation to some wild animals such as the lion, elephant, rhinoceros and leopard. In this policy the government calls for conservation of these species through increasing the 'wildness, naturalness and wellbeing of fauna'. ¹¹³ Concurrent with this, the government calls for growing the captive wild animal industry for the sustainable use of wild animals, ensuring responsible ecotourism and use of the benefits, assumed to me mostly monetary. The intrinsic value of the wild animal is not acknowledged, rather the monetary gain from the 'sustainable use' of these wild animals in ecotourism is benefitted by humans.

Economic value is implicated in the COI as the incentive is to grow the industry and increase ostrich meat consumption, products and awareness to ensure large profits can be made.¹¹⁴ Economic value is the main driver in the COI, to the expense of the ostriches' welfare and wellbeing, human health and well-being as well as the destruction caused to the environment through commercial ostrich farming.

2.2.2 The Ecological Value of Ostriches

Ecological value is the 'level of benefits that biotic or abiotic components provides for the maintenance of organisms' in the environment and should be associated with intrinsic value, biodiversity and conservation. ¹¹⁵ The ostrich would be the biotic component that can maintain

¹¹⁰ NSPCA (2016).

¹¹¹ Bilchitz D & Wilson A.P (2022).

¹¹² GN 870 GG 45160 of 14 September 2021.

¹¹³ GN 870 GG 45160 of 14 September 2021, 8.

^{114 &#}x27;South African Ostrich Business Chamber' *South Africa* available at https://southafrica.co.za/south-african-ostrich-business-chamber.html (accessed on 5 May 2023).

Amador-Cruz F, Figueroa-Rangel B & Olvera-Vargas M, et al 'A systematic review on the definition, criteria, indicators, methods and applications behind the Ecological Value term' (2021) 129 *Ecological Indicators*, 1.

other organisms associated through the ecological value of the ostrich, its contribution to biodiversity and conservation. Intrinsic value is related to the individual ostrich's mere existence, while the ostrich's ecological value is related to the collective value of the flock and how they contribute to the environment. There is limited literature in relation to the ostrich's ecological contribution where this research looks at the overall ecological value of birds in the environment and where possible draw specifically on ostriches.

Ostriches are known to contribute to ecosystems through their relationship with the environment. As stated in Section 1 of the National Environmental Management Act¹¹⁶ the environment encompasses the surroundings in which humans exist, including the relationships between these organisms. Wild ostriches live in the savanna grasslands and have an important symbiotic relationship with the grazers such as antelope and wildebeest. ¹¹⁷ As the grazers move along, they disturb the insects and rodents which the ostriches feast upon. In turn, ostriches act as guards and alert the grazers when predators approach. ¹¹⁸

There is a lacuna in research that concerns the ecological value of the ostrich. As such, this research draws from Whelan C, Wenny D & Marquis R's¹¹⁹ critical analysis of services birds provides to ecosystems. Birds are unique and diverse animals who provide different types of 'ecosystem services', services that benefit humans. ¹²⁰ These ecosystem services are recognised by the UN Millennium Ecosystem Assessment and are – provisioning, cultural, supporting and regulating services. ¹²¹ Birds disperse seeds and pollinate when they forage, excrete or when seeds stick to the feathers which aids in the maintenance of ecosystems worldwide. ¹²² Whelan C, Wenny D and Marquis R ¹²³ describe the relationship between birds and seed dispersal as a complicated network that is needed to main biodiversity and communities.

Wild ostriches contribute in this manner to the ecosystem. As stated above, wild ostriches in South Africa are known to inhabit savanna grasslands and the fynbos-filled Karoo. While these

¹¹⁶ National Environmental Management Act 107 of 1998, s1 (hereafter NEMA).

National Geographic Kids 'Ostrich Facts!' available at https://www.natgeokids.com/za/discover/animals/birds/ostrich-facts/ (accessed on 30 January 2023).

National Geographic Kids 'Ostrich Facts!' available at https://www.natgeokids.com/za/discover/animals/birds/ostrich-facts/ (accessed on 30 January 2023).

¹¹⁹ Whelan C, Wenny D & Marquis R 'Ecosystem services provided by birds' (2008) 1134 Ann N Y Acad Sci, 25.

¹²⁰ Whelan C, Wenny D & Marquis R (2008) 25.

¹²¹ Whelan C, Wenny D & Marquis R (2008) 25.

¹²² Whelan C, Wenny D & Marquis R (2008) 26.

¹²³ Whelan C, Wenny D & Marquis R (2008) 34.

ostriches forage for food or move onto new grazing land, seeds and pollen stick to their feathers which are then carried to other parts of the grasslands and Karoo. This aids with crosspollination and seed dispersal, an essential aspect of the environment. 124 CFO do not provide contributable ecosystem services but rather aid in the destruction of fynbos. 125 The CFOs feed on the vegetation without symbiotically dispersing the seeds over distances causing degradation. 75% of CFOs are located in the Little Karoo and is greatly responsible for the destruction of biodiversity in the Little Karoo. 126

Veld is used for holding breeding herds throughout the breeding period and rest season. Ostriches held in this manner cause a great negative impact on the veld due to it being trampled and eaten. 127 As admitted by the SAOBC, 128 there is a lack of research on the correct way to load the veld in a way to allow ostriches to contribute to biodiversity.

Sadly, the ecological value of the commercially farmed ostriches is not fully known in the industry due to lack of research. The COI rather disguises the ecological value of farmed wild animals to aid in 'conservation', where the contribution of the COI is unclear. Rather, the industry can be seen to be rather destructive on the environment due to the intensive farming 129 and where ostriches are therefore unable to partake in any natural ecosystems services they would if they were wild.

2.2.3 Economic Value of Ostriches and Ostriches as Products

The ostrich industry is one of the largest industries in South Africa where the Department of Agriculture, Land Reform and Rural Development 130 has reported 131 that South Africa holds a 75% global market share. 132 Various economic streams are seen in the ostrich industry in both the commercial faming of ostriches, the tourism and other economic viabilities presented using 'wild ostriches' in captivity. In 2020, Barends-Jones and Pienaar¹³³ released a report on the

¹²⁷ Ostrich Manual, 151.

¹²⁴ Whelan C, Wenny D & Marquis R (2008) 33.

¹²⁵ Wheeler A, Knight AT & Difford M, et al 'Ostrich farmer characteristics predict conservation opportunity.' (2019) 115 S Afr J Sci 2.

¹²⁶ Ostrich Manual, 151.

¹²⁸ Ostrich Manual, 151.

¹²⁹ The full extent is discussed further below in this thesis.

¹³⁰ Hereafter referred to as the DALRRD.

¹³¹ DALRRD A Profile of the South African Ostrich Market Value Chain (2021) 3.

¹³² DALRRD (2021).

¹³³ Barends-Jones & Pienaar (2020) 4.

ostrich industry footprint in South Africa, where it was revealed that the industry is responsible for supporting the livelihoods of 5 500 farm workers and value-adding facilities. The economic value of final products which consists of meat, feathers and leather was valued in the Klein Karoo as R1.9 billion. Barends-Jones and Pienaar gives insight into the Gross Value-Added income made through exports, possible impact on job creation and livelihood prospects.

Ostriches have brought large income into South Africa since the 1800's with the exportation of feathers for the fashion industry. ¹³⁶ The feather phase of the ostrich industry was unregulated and operated on a free market system. ¹³⁷ During 1959, the Korporasie obtained a single channel marketing right in relation to ostrich feathers. ¹³⁸ The result was a booming ostrich industry, greatly contributing to the economics. This was further entrenched by a monopoly where a legislative framework was put in place to ensure that it was illegal for live ostriches to be exported, which was eventually lifted. ¹³⁹

The DALRRD has stated that the value of an ostrich can be separated into 45% meat, 45% skin and 10% feathers, as of 2021. The DALRRD has expressed that the gross value for ostrich production is R393.3 million per year, over the past 10 years. ¹⁴⁰ Between 2019 and 2020 it was seen that the gross value of ostrich production was R645.5 million. ¹⁴¹ Massive breakouts of AF in 2010/2011 and 2012/2013 resulted in the industry reaching its minimum profits materialising at R276 million. ¹⁴²

The economic value of the ostrich in South Africa is unquestionable as seen from the above. Majority of ostriches are slaughtered between 10 and 14 months of age, they can produce up to 27kg of meat, 1 kilogram of feathers and 4.2m² of leather. ¹⁴³ Further, South Africa produces more ostrich products than local consumption demands, resulting a in surplus of ostrich

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¹³⁴ Barends-Jones & Pienaar (2020) 4.

¹³⁵ Barends-Jones & Pienaar (2020) 5.

¹³⁶ Louw M 'Ostrich Farming in South Africa' available at https://southafrica.co.za/ostrich-farming-south-africa.html (accessed on 30th January 2022).

¹³⁷ NAMC (2010) 4.

¹³⁸ NAMC (2010) 4.

¹³⁹ DALRRD (2021) 3.

¹⁴⁰ DALRRD (2021) 3.

¹⁴¹ DALRRD (2021) 3.

¹⁴² DALRRD (2021) 3.

¹⁴³ DALRRD (2021) 4.

products to export. Ostrich meat contributes 65% of income to the industry with a 17% increase in production and consumption. 144

The ostrich industry thrives off exporting ostrich products. Between 2011 and 2014, exportation of ostrich products was banned in the European Union's 145 market due to the outbreak of AF. 146 Exports increased from 2015. Once again, the export of fresh ostrich meat was banned in 2017 leading to 48% decrease in exports and 94% in 2018. 147 The ban was lifted in 2019, which in turn resulted in an increase of 325% in 2019 in exportation and an increase of 506% in value. 148 This is important to note as there were no ostrich products imported from 2018 to 2020¹⁴⁹ meaning that the economic value of the ostrich is only great when exportations are permitted.

This is bolstered by the fact that before the first ban in 2011, the exportation of ostrich products (mainly in the form of fillets) contributed \pm R1.2 billion per annum. ¹⁵⁰ The EU has remained, prior and after the ban as the top consumer of South African ostrich products with exports reaching up to 80%. 151 Ostrich meat carries great value as 43kg of meat is usually obtained from a slaughtered ostrich of which 15.5kg is exported. The remainder is used to manufacture ostrich meat products such as mince, burger patties and sausages domestically. 152

The deregulated industry in the international scene allows processors to sell their ostrich products independently from one another, causing undercutting of prices for higher volumes of product, having a cumulative negative affect on ostrich product income. 153

2.2.3.1 Ostrich Tourism, Related Activities and Values

Ostrich watching is an extremely popular tourist activity in South Africa. The Government of Communication and Information Systems ¹⁵⁴ released an Official Guide to South Africa where

¹⁴⁴ DALRRD (2021) 6.

¹⁴⁵ Hereafter referred to as the EU.

¹⁴⁶ DALRRD (2021) 7.

¹⁴⁷ DALRRD (2021) 7.

¹⁴⁸ DALRRD (2021) 8.

¹⁴⁹ DALRRD (2021) 7.

¹⁵⁰ DALRRD (2021) 7.

¹⁵¹ DALRRD (2021) 7. ¹⁵² NAMC (2010) 11.

¹⁵³ DALRRD (2021) 7.

¹⁵⁴ Government Communications and Information Systems (GCIS) Official Guide to South Africa 2021/22 (2021)

the tourism division recognised the significant contribution the ostrich industry has to tourism. The Little Karoo's key attractions include the world's largest bird, the ostrich. 155

Further, towns, such as Oudtshoorn, have been classified as a well-established tourist destination ¹⁵⁶ as the 'ostrich capital of the world'. ¹⁵⁷ One of the main tourist activities in Oudtshoorn includes visits to the ostrich show farms. ¹⁵⁸ Other ostrich tourism activities include a guided tour of the camps, ¹⁵⁹ riding an ostrich, eating ostrich meat and ostrich eggs, buying ostrich leather and goods and ostrich safari tours to see them in the wild. ¹⁶⁰ Infertile eggs are sold on the tourism market for the sale of whole eggs, decorative lamp shades, eggshells which are carved into with patterns and more. ¹⁶¹

The wingspan of the ostrich's value is so diverse and encompassing that it has major social effects as well. The COI has created and established Ostri-Black Economic Empowerment projects. ¹⁶² For example, projects at Mossel Bay Leather Goods employ unemployed women in Mossel Bay, who are then trained in manufacturing ostrich leather articles. ¹⁶³ Overall, Ostri-Black Economic Empowerment expenditure is R12 million per annum, there are 600 Black Economic Empowerment active farms, 15 000 beneficiaries benefit directly or indirectly from the programmes. ¹⁶⁴ Socially, the ostrich industry contributes 20 000 direct jobs to South Africans in rural areas and is increasing. ¹⁶⁵

2.2.4 Social, Cultural and Religious Value

Apart from the different values mentioned above, ostriches also have cultural, spiritual and social value. Ostrich eggs have been considered scared from a plethora of religions and times ranging from the Greek and the Romans to Muslim and Christian practices, even trickling down

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¹⁵⁵ GCIS (2021) 6.

¹⁵⁶ NAMC (2010) 11.

¹⁵⁷ Oudtshoorn & De Rust Tourism 'Oudtshoorn: *Heart of the Ostrich Industry*' available at https://www.oudtshoorn.com/project/heart-of-the-ostrich-industry/ (accessed on 24 February 2023).

¹⁵⁸NAMC (2010) 11.

¹⁵⁹ Cape Point Ostrich Farm available at http://capepointostrichfarm.com/ (accessed on 24 February 2023).

¹⁶⁰ Safari Ostrich Tours https://www.safariostrich.co.za/ostrich-farm-tours/ (accessed on 24 February 2023).

¹⁶¹ NAMC (2010) 11.

¹⁶² NAMC (2010) 25.

¹⁶³ NAMC (2010) 25.

¹⁶⁴ GCIS (2021) 22.

¹⁶⁵ GCIS (2021) 6.

to the metalsmiths in the 16th and 17th centuries. ¹⁶⁶ The White Paper on Conservation and Sustainable use of South Africa's Biodiversity ¹⁶⁷ looks at the importance of nature in the different contexts of South Africa. These include instrumental values, types of ecosystem services, relational values, how meaningful the human-nature interactions are, spiritual values and intrinsic values. ¹⁶⁸

In South Africa, prehistorian Texier, has been sifting through the Diepkloof rock shelter. A collection of ostrich eggshells dating to roughly 60 000 years ago, all engraved with 'intricate geometric patterns'. Nalahari people, from South Africa's Kalahari Desert, have been said to engrave ostrich eggs with meanings of who owned the egg or what was stored within the egg. 171

The San people, one of Africa's oldest communities have always praised the ostrich. ¹⁷² The ostrich was the only other living thing that cooked their food on fire, where the fire was stored and carried under their wings. ¹⁷³ The San-hunters came across the cooked food, tried some, where it was determined from then, that San people needed fire. The San hunters engaged in a dance with the ostrich and begged him to lift his wings, which the ostrich did and the coals of the fire spilled out. ¹⁷⁴ The San-hunters picked up the coal, threw it into the fig trees and from that moment, the ostrich ate food that came from the ground, while the San started to use fire. ¹⁷⁵ The significance of the ostrich and its shell in the San community is paramount. Even today, wherever there are fig trees, fire is made using their wood, the Sans traditional dance honours the ostrich, imitating an Ostrich waltz and ostrich-shell jewellery is still worn. ¹⁷⁶

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¹⁶⁶ Datiles J 'Myths in the Museum: The Iron-Eater and the Ostrich Egg' 4 July 2019 *UCL* available at https://blogs.ucl.ac.uk/researchers-in-museums/2019/07/04/myths-in-the-museum-the-iron-eater-and-the-ostrich-egg/ (accessed on 24 February 2023).

¹⁶⁷ GN 3537 GG 48785 of 14 June 2023(hereafter referred to as the White Paper).

¹⁶⁸ White Paper.

¹⁶⁹Balter M 'Engraved Eggs Suggest Early Symbolism' 1 March 2010 Science available at https://www.science.org/content/article/engraved-eggs-suggest-early-symbolism (accessed on 24 February 2023).

¹⁷⁰ Balter M (2010).

¹⁷¹ Balter M (2010).

¹⁷² Diekman D & Orffer M 'The Tale of the Ostrich Egg Shell' 4 June 2021 *The Narrative Namibia* available at https://narrativenamibia.com/blogs/news/the-tale-of-the-ostrich-egg-shell (accessed on 24 February 2022).

¹⁷³ Diekman D & Orffer M (2021).

¹⁷⁴ Diekman D & Orffer M (2021).

¹⁷⁵ Diekman D & Orffer M (2021).

¹⁷⁶ Diekman D & Orffer M (2021).

2.3 ANIMAL WELFARE, WELL-BEING AND PROTECTION ISSUES [ANIMAL-CENTRIC]

2.3.1 The Definition and Significance of 'Welfare' and 'Well-Being' in the Animal Kingdom

The distinction between these concepts is important as welfare is not defined in South African law, but well-being is. There are several reasons to understand these differences, and how they are captured in legislation and government mandates in respect thereof, which will be discussed. This is an issue as the Constitutional Court in the *NSPCA* case¹⁷⁷ clearly illustrates that animal welfare is included in section 24 of the Constitution where animal welfare and conservation are seen as intertwined values.¹⁷⁸ Notably, these sentiments were before the explicit inclusion of animal well-being in South African legislation. The link between animal health and welfare has been scientifically recognised where improvements in animal welfare can improve productivity, food safety and animal health.¹⁷⁹

'Welfare' is more closely associated with the five domains, ¹⁸⁰ which encompasses the five freedoms. The five domains evaluate an animal's welfare through their nutrition, environment, health and behaviour of the physical well-being of the animal, with the fifth domain which appreciates the avoidance of mental suffering. ¹⁸¹ The five freedoms are mainly used in terms of farmed animals and is useful to measure welfare. ¹⁸² The five freedoms are endorsed internationally, ¹⁸³ where an animal should be free from hunger, thirst and malnutrition; free from fear and distress; from physical and thermal discomfort; free from pain injury and disease and the ability to express their normal behaviours. These can be considered as basic animal rights. ¹⁸⁴ 'Welfare' has not officially been defined, where the five freedoms are rather aspects

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¹⁷⁷ NSPCA (2016) para 58.

¹⁷⁸ The anthropocentric interpretation of 'health' and 'well-being' in S24 is discussed below in chapter 3.

¹⁷⁹ Jones D, Litwak K 'The Critical Relationship between Farm Animal Health and Welfare' (2018) *The Animal Welfare Institute*, 2.

¹⁸⁰ Robertson I & Goldsworthy D 'Recognising and Defining Animal Sentience in Legislation: A Framework for Importing Positive Animal Welfare Through the Five Domains Model' (2022) 48 *Monash University Law Review*, 2.

¹⁸¹ Robertson I & Goldsworthy D (2022), 2.

¹⁸² Lerner H The Concepts of Health, Well-being and Welfare as Applied to Animals. A Philosophical Analysis of the Concepts with Regard to the Differences Between Animals (2008), 54.

¹⁸³ Terrestrial Animal Health Code (2021), art 7.1.1 (hereafter referred to as the TAHC).

¹⁸⁴ Lerner H (2008).

in welfare. 'Welfare' has been accepted to comprise of three approaches, firstly, where welfare is subjective to animals, secondly that welfare is seen as be the biological function of the animal and thirdly, welfare as the nature of the animal. ¹⁸⁵ What is not determined by this definition is the ability of these three approaches to exist concurrently, where an animals biological functioning may be dependent on their subjective experience. Authors agree that the subjective experience of welfare has proponents of negative and positive feelings and emotions, the difference between authors is determined by how much consciousness (or sentience) is involved. ¹⁸⁶ It is also mainly agreed that welfare concerns the ability to cope with the environment. ¹⁸⁷

'Well-being' in relation to farmed animals is a newer concept, where two main themes are present. Firstly, a definition that sees well-being as a total mental experience and secondly, where well-being is a wider concept which contains health, behaviour and positive experiences. Well-being focuses on the individual animals mental and physical health where their psychological well-being is reflected in their physical well-being. Well-being in respect of animals recognises 'animal health and welfare, physical and social well-being'. Physical well-being comprises of aspects such as pain, thirst, hunger shelter, while the physiological aspect of well-being concerns happiness, fears, thinking and solving problems.

It can be determined that animal welfare and well-being, although not akin, are extremely intertwined and dependent on one another. Welfare concerns the actual husbandry practices which serves as operational guidance. Well-being on the other hand is the ability of the individual animal to react and respond to stimuli. Well-being is the individual animal's ability to actually enjoy the 5 freedoms, concerning the mental and physical health of the animal, while welfare concerns the environment and circumstances under which the animal is kept.

The implications of these terms and definitions on the COI in South Africa are that 'well-being' has been defined and mandated in National Environmental Management Laws Amendment

¹⁸⁶ Lerner H (2008) 56.

¹⁸⁵ Lerner H (2008).

¹⁸⁷ Broom D. (2016), 6

¹⁸⁸ Lerner H (2008) 51.

¹⁸⁹ Lerner H (2008) 52.

¹⁹⁰ Lerner H (2008) 53.

¹⁹¹ Lerner H (2008) 53,

Act¹⁹² by the DFFE.¹⁹³ This ensures that the DFFE, responsible for wild animals, now has an obligation to ensure the well-being of wild animals to achieve section 24 of the Constitution, however this 'well-being' mandate does not necessarily fall on the DALRRD. A danger here is that fact that this definition was included in NEMLAA and not NEMA which would place the mandate on both departments.¹⁹⁴ Further, commercially farmed ostriches straddle the line between farmed animals and wild animals where they are not protected by the welfare mandate on the DFFE. 'Welfare' on the other hand is undefined in South African law but generally falls under the mandate of DALRRD, as welfare is more closely connected to domesticated and commercially farmed animals.

2.3.2 Objective Testing Versus Subjective Testing

Arguably, the assessment of animal use and care in the domain of animal welfare is one of the most challenging components to measure. Humans tend to look at animal welfare through an anthropomorphic lens as opposed to looking through the eyes of the animal themselves. He may be an accordance with the five domains, hot broad and specific factors need to be considered. A team of people who focus on animal care, research, veterinary science and members of organisations, such as the NSPCA, should be utilised in order to obtain a full picture of an animal's well-being and welfare through a subject and objective approach. Subjective and objective testing for welfare is the primary model which is followed. Subjective testing assess factors such as the animals mood, skin colour and feather quality, while objective testing factors considers the number of eggs hatched and viability of chicks.

In relation to CFOs people who specialise in caring for the ostriches daily would notice changes in the ostrich's behaviour and mood far quicker than a researcher. However, the combination of the animal care personnel coupled with the knowledge of the researcher could solve the issue with the ostrich faster and more effectively, taking both a subjective (looking at the specific

¹⁹² National Environmental Management Laws Amendment Act 02 of 2022 (hereafter referred to as NEMLAA). ¹⁹³ NEMLAA, s 43(c).

¹⁹⁴ Refer to Chapter 4 of this thesis, 4.2.3.1 National Environmental Management Act (NEMA) for a full discussion on the different mandates.

¹⁹⁵ Beaver B & Bayne K 'Animal Welfare Assessment Considerations' in Bayne K & Turner P.V, In *Laboratory Animal Welfare*, (2014) 29-38.

¹⁹⁶ Beaver B & Bayne K (2014) 29.

¹⁹⁷ Discussed in 2.2.1.

¹⁹⁸ Beaver B & Bayne K (2014) 29.

¹⁹⁹ Beaver B & Bayne K (2014) 30.

²⁰⁰ Beaver B & Bayne K (2014) 30.

animal) and objective (assessing the research of this species) into account and creating a holistic approach to animal well-being and welfare.

2.4 WELL-BEING AND WELFARE CHALLENGES INHERENT IN THE COMMERCIAL FARMING INDUSTRY

This section explores the multifaceted impacts the COI has on ostrich welfare and well-being. In addition, it explores the broader consequences that the COI has on the environment, its role in contributing to zoonotic diseases as well as the possible implications on consumer protection. A comparison is done between the broiler chicken industry and the COI highlighting the effects commercially farming animals on a large scale can have not only on the COI, but that the same or similar issues are prevalent in the broiler chicken industry.

2.4.1 Welfare and Well-Being Challenges in the Ostrich Industry

Ostriches are dangerous and difficult to farm which highlights their inability to adapt to commercial farming practices. ²⁰¹ This inability to cope is emphasised by the simplest farming practices such as weighing and vaccinating birds being stressful. The welfare of the ostrich throughout their lifecycle is not considered, greatly decreasing their well-being as concern is only given at slaughter. Snyders states that there is little information regarding the perceptions of animal welfare in the ostrich industry. ²⁰²

Ostriches are considered to have a 'poor production performance'. ²⁰³ This is seen through chick mortality rates, which can reach up to 50% before the age of 3 months, ²⁰⁴ high infertility rates of approximately 20%, the low hatching success of eggs at roughly 45%, the breakouts in AF and shell deaths of up to 30%. ²⁰⁵ The mortality rate of ostrich chicks has been linked to poor management practices. ²⁰⁶ Abnormalities present in artificially hatched chicks has been linked to the mismanagement of eggs, lack of nutrition in parents, incorrect incubation temperatures, etc. ²⁰⁷ Abnormalities such as deformed chicks and crooked or muscular legs severely affect the

²⁰² Snyders M (2020) 23.

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²⁰¹ Snyders M (2020) 16.

²⁰³ Snyders M (2020) 17.

²⁰⁴ Verwoerd D, Deeming D & Angel C, et al. (1999) 196.

²⁰⁵ Ostrich Manual, 2020, 53.

²⁰⁶ Ostrich Manual, 11.

²⁰⁷ Ostrich Manual (2020) 61.

chicks welfare as they are unable to access nutrition effectively and has been linked to aggression, where there mental well-being is affected. Many chicks die due to chronic starvation affecting their welfare.

Ineffective handling of temperatures affects the welfare of chicks causing them to either huddle with each or use their energy to keep warm.²⁰⁸ This affects their mental and physical well-being as they suffer skin damage, cannot grow optimally meaning they cannot develop correctly, leading to stress. As a result, newly hatched chicks are subject to toe declawing, where a hot blade or debeaking machine is used to amputate their nail and part of the joint. Because of this practice, ostriches may become flat footed; experience chronic pain and their gait may change.²⁰⁹ The % of A grade skins increases as ostriches are unable to kick one another which scars the leather.²¹⁰ Ostriches locomotive abilities are comprised in order to implicate the bottom line, economic gain. The welfare of the ostrich is compromised as some are unable to effectively walk to their food or water, engage in social behaviours, run, etc affecting ostrich well-being. The author argues that, despite claims to the contrary welfare of the commercially farmed ostrich is not a top priority, rather the exploitation of a deregulated industry has allowed stakeholders to compromise ostriches' welfare and well-being in order to retain their profits. The ostrich farming industry has not adapted commercial farming practices and as a result has not developed husbandry practices that ensure welfare and well-being.²¹¹

The above is reinforced by the NAMC who released a report in June 2010 that assess the COI. It was highly noticeable that the concern was based on economic gain once again. Welfare of the ostriches was not mentioned.²¹²

Undercover investigations run by People for the Ethical Treatment of Animals (PETA) in 2015²¹³ in South Africa bolsters this view. This investigation showed the callous manner in which CFOs are treated in South Africa for economic gain. Animal welfare travesties were

²⁰⁸ Ostrich Manual, 64

²⁰⁹ Glatz P 'Ratite Toe-trimming – For Ostriches and Emus- Training manual' (2008) 1.

²¹⁰ Glatz P (2008) 1.

²¹¹ Bonato M, Cherry M & Cloete S 'Mate choice, maternal investment and implications for ostrich welfare in a farming environment' (2015) 171 *Applied Animal Behaviour Science*, abstract.

²¹² NAMC (2010) 17.

²¹³ PETA Investigates 'Hermès and Prada Suppliers Exposed: Young Ostriches Butchered for 'Luxury' Bags' (2015) available at https://investigations.peta.org/ostriches-butchered-hermes-luxury/ (accessed on 15 August 2022).

witnessed where workers forced terrified ostriches into stun boxes causing them to slip and be trampled.²¹⁴ Workers were seen hitting and shouting at the ostriches while transported, feathers were plucked while the ostrich was still alive and they were forcibly restrained.²¹⁵ The commercialisation of the ostrich industry has led to exorbitant pressure on the ostriches to produce optimally under these intense and unsavoury conditions, directly affecting their welfare.²¹⁶

Commercial ostrich farming usually uses techniques where multiple ages are raised separately by breeding pairs. Breeding pairs are responsible for up to 60 chicks. Well-being is compromised as ostriches are unable to engage in their normal behaviours and social structures. Stress becomes evident when looking at females as the female becomes despondent and are not good foster parents. Stress causes the unhappy ostriches to pluck out their feathers.

Arguably, the greatest threat to the ostrich industry is AF.²²⁰ Ostriches in South Africa have been exposed to deadly AF breakouts in 2004, 2011 and 2017 with the most recent in 2021.²²¹ In 2011, this seemed to be the case where over 30 000 ostriches were culled for an AF strain that could not be transmitted to humans.²²² The ostrich industry needs to be reformed and research developed in order to stop the thousands of uninfected ostriches that are culled along with the infected ostriches compromising their intrinsic value and well-being.²²³

2.4.2 The Prevalence of Similar Welfare and Well-Being Issues in the Broiler Chicken Farming Industry

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²¹⁴PETA Investigates (2015).
²¹⁵ PETA Investigates (2015).

²¹⁶ Ostrich Manual, 99.

²¹⁷ Cruywagen V 'Karoo ostrich farmers and workers fear avian flu outbreak after Gauteng cases' 20 April 2021 *Daily Maverick* available at https://www.dailymaverick.co.za/article/2021-04-20-karoo-ostrich-farmers-and-workers-fear-avian-flu-outbreak-after-gauteng-cases/ (accessed on 11 October 2022).

²¹⁸ Ostrich Manual, 66.

Wild Welfare 'Care for Us Common Ostrich (Struthiocamelus) Wild Welfare available at https://wildwelfare.org/wp-content/uploads/Common-Ostrich.pdf (accessed on 14 October 2022).

²²⁰ DALRRD (2021), 19.

²²¹ Barends-Jones V & Pienaar (2020) 9.

Staff reporter 'Ostrich culling continues – in secret' 11 august 2004 *Mail & Guardian* available at https://mg.co.za/article/2004-08-11-ostrich-culling-continues-in-secret/ (accessed on 11 October 2022).

Fihlani P 'Bird flu empty's South Africa's ostrich farms' 13 January 2021 *BBC News* available at https://www.bbc.com/news/world-africa-16275280 (accessed on 3 November 2022).

In this section, the COI will be compared to the broiler chicken industry, where chickens are grown for food (meat). The comparison will delve into the shared characteristics present in both the broiler chicken industry and the COI. Doing so will illustrate that the welfare and well-being challenges prevalent in different intensively farmed animal industries is compromised by similar or the identical husbandry practices.

Both chickens and ostriches are sentient beings who are capable of experiencing both positive and negative emotions. ²²⁴ One of the similarities is that husbandry practices in the COI and broiler chicken (BC) industry cause locomotive complications where both birds welfare and well-being is ultimately detrimentally affected. Both industries practice's negatively affect the birds' immune systems and see that it is unnatural to have such a high number of members of a species in one place. ²²⁵ AF is prevalent in both industries and affects entire flocks. The fundamental incentive to farming BC and ostriches is economic value. Deformities in chicks and adult birds are seen as profit inhibiters and not inhibiters of welfare or well-being.

BCs genetic makeup is such that they grow extremely fast to ensure they reach profitable weights in the shortest time possible. BCs are unable to eat liberally as this would impair their health and cause reproductive issues due to their growth and rapid size. ²²⁶ BC are starved and fed 25% of their voluntary intake where diet restriction is practiced throughout their lifespan. ²²⁷ The well-being and welfare of BCs is compromised as they exhibit chronic hunger, abnormal behaviour, aggression, cannibalism, etc. ²²⁸

BCs welfare and well-being are adversely affected to ensure they are grown and sold as fast as possible by selecting birds for rapid growth which is known to cause poor bone health, deformities, leg issues and breakouts in diseases that infects the whole flock usually.²²⁹ The BCs well-being is affected as their high muscle mass is unable to be supported by their skeleton which makes them susceptible to heat stress easily, negatively affecting their well-being as

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²²⁴ Madzingira O 'Animal Welfare Considerations in Food-Producing Animals' in Abubakar M & Manzoor S *Animal Welfare* (2018) 102.

²²⁵ Madzingira O (2018) 112.

²²⁶ Madzingira O (2018) 112.

²²⁷ Madzingira O (2018) 112.

²²⁸ D'Eath R, Tolkamp B, & Kyriazakis I, et al 'Freedom from hunger and pre-venting obesity: The animal welfare implications of reducing food quantity or quality (2009) *Animal Behaviour* 281.

²²⁹ Madzingira O (2018) 112.

they are unable to cope with their environment. 230 BCs in intensive processes are raised on litter where bad management practices can result in poor air quality, negatively affecting their welfare as they are exposed to respiratory issues.²³¹

This comparison highlights the need for intensive farming practices to be reformed. Some implications found in the COI are also prevalent in other commercial animal farming environments. Improvements in one industry could lead to improvements in other industries. Well-being and welfare of farmed animals are compromised to meet the dietary needs of the growing human population.

2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH **INDUSTRY (ENVIRO-CENTRIC)**

The lack of concern that surrounds ostrich well-being and welfare in the COI fails to understand the compound implications that this can have outside of the animals themselves. Stressed ostriches can lead to non-welfare-based issues such as zoonotic diseases, implications on the quality of meat and other health implications such as the presence of stress hormones.

2.5.1 Highlighting Negative Environmental Impacts

The COI negatively impacts on the environment and is arguably unsustainable. ²³² Ostriches do not directly contribute to these when they are wild (or to a much lesser extent), rather it is the intensive farming practices that the ostrich is subjected to which contribute to and exacerbate environmental degradation. Ostriches form part of the biodiversity in South Africa. Having a large population of one wild animal is unnatural and would lead to environmental degradation.

Effects that commercial ostrich farming has on the environment are seen through environmental degradation, ²³³ loss of biodiversity in veld, ²³⁴ the contribution of greenhouse (GHG) emissions, ²³⁵ water usage, ²³⁶ etc. These negative environmental impacts in the context

²³⁰ D'Eath R, Tolkamp B, & Kyriazakis I, et al (2009) 280.

²³¹ Madzingira O (2018) 112.

²³² Wheeler A, Knight AT & Difford M, et al (2019) 2.

²³³ DALRRD (2021).

²³⁴ Wheeler A, Knight AT & Difford M, et al (2019) 2.

²³⁵ Barend-Jones & Pienaar (2020).

²³⁶ Barend-Jones & Pienaar (2020).

of South Africa will be assessed in detail below. The compound impact on the environment not only affects the ostriches, but affects all animals, humans and the environment.

2.5.2 Exposing the Current State of Commercial Ostrich Farming in South Africa²³⁷

South Africa's legal status and obligations in terms of commercial ostrich farming is discussed in chapters 3 and 4. This section will consider the impacts of the commercial ostrich industry on land use, climate change, biodiversity, etc.

2.5.2.1 Land Use

Commercially farming game animals does not fall within the scope or principles of sustainability. The overcrowding of habitats of one species is unnatural and will lead to ecological degradation. These practices include the excessive use of land needed to farm ostriches, where the carrying capacity recommends 12.36 acres for one ostrich. ²³⁸ The *Ostrich Manual* recommends the ecological carrying capacity of ostriches in the Little Karoo as 1 ostrich per 227999,89 m², a nonsensical amount of land. Most ostriches are farmed in the Klein Karoo where there is major loss of biodiversity of succulent plants. ²³⁹ Research has shown that the ostrich industry is responsible for using land unsustainably, resulting in a 50% degradation of land. Ostrich farmers believe that they use sustainable farming practices, something that has been proven to not be.

2.5.2.2 Greenhouse Gas Emissions

The ostrich industry's high exportation rates and the transportation of ostrich feed exacerbates GHG emissions. The Highveld and Waterberg/Bonjanala Priority Area Air Quality Management Plans for instance have recorded that agricultural dust is one of the major

²³⁷ Refer to Chapters 3 and 4 of this thesis for South Africa's legal status in terms of commercial ostrich farming. Further, there is a broad range of environmental issues stemming from the COI, directly or indirectly but due to the scope of the research not all of these issues as water use can be discussed. Water is governed by the National Water Act 36 of 1998. This piece of legislation cannot be discussed due to research limitations.

²³⁸ NAMC (2010) 7.

²³⁹ Wheeler A, Knight AT & Difford M, et al (2019) 2.

contributors to air pollution.²⁴⁰ The DFFE has also identified that agriculture significantly contributes to emissions.²⁴¹

Commercial ostrich farming exacerbates climate change and neglects animal welfare and well-being amid its impacts. Air pollution would directly affect the ostrich's welfare as research 242 shows air pollution is seen as a stressor on animals, creating health and safety issues. This has been further confirmed by the DFFEs report 243 where they acknowledged that animal health suffers from air pollution which negatively affects the ostrich's ability to enjoy the five freedoms. The International Union for Conservation of Nature (IUCN) 244 has released an issue brief which states that the rise in global temperatures causes serious and unknown impacts on species which affects their behaviour, genetic makeup, behaviour and the means in which they survive. With the declination of species, this threatens the services 245 that nature provides for humans and animals. 10 967 species on the IUCN Red List of Threatened Species list is detrimentally affected by climate change with their likelihood of extinction increasing. 246 The IUCN has also noted ecological, behavioural changes (earlier breeding times), physiological and genetic changes. 247

Further, the drought, a negative impact caused by climate change, has caused lucerne and other crops unviability, which farmers in the Little Karoo would grow to feed their ostriches.²⁴⁸ Added to this is the impact that the EU bans had on the industry. The result of this has led farmers to import their feed, further contributing to climate change due to transport-related²⁴⁹ emissions.²⁵⁰ Joey Potgieter, chairperson of Agri Klein Karoo, seemed to be more concerned about the financial pressure than the health and well-being of the ostriches who are also

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²⁴⁰ Tshehla C, Wright CY '15 Years after the *National Environmental Management Air Quality Act*: Is legislation failing to reduce air pollution in South Africa?' (2019) 115 S *Afr J Sci*, 3.

²⁴¹ Department of Forestry, fisheries and the environment *Chapter 10: Air Quality* 183.

²⁴²Ni J, Erasmus M & Croney C, et al 'A critical review of advancement in scientific research on food animal welfare-related air pollution' (2021) 408 Journal of Hazardous Materials 1.

²⁴³ Department of Forestry, fisheries and the environment *Chapter 10: Air Quality* 190.

²⁴⁴ IUCN 'Issues Brief; Species and climate change' October 2021 available at https://www.iucn.org/resources/issues-brief/species-and-climate-change (accessed on 1 March 2023).

²⁴⁵ Refer to ecosystem services above.

²⁴⁶ IUCN (2019).

²⁴⁷ IUCN (2019).

²⁴⁸ News24 (2019).

²⁴⁹ See above for discussion in 2.5.2.2 Greenhouse Gas Emissions for a discussion on the contribution to GHG emission by the COI.

²⁵⁰ News24 (2019).

experiencing the drought.²⁵¹ Ostriches are extremely sensitive to temperature change and during a freak hailstorm in the Karoo a farmer lost almost 30% of his ostriches. This shows how sensitive ostriches can be and the loss of water, caused by climate change, could detrimentally impact ostriches.

GHG emissions from the ostrich industry, especially the exportation of ostrich products does contribute to transnational climate change. The destruction of habitats, biodiversity and species can accelerate climate change. ²⁵²

Husbandry practices in the commercial ostrich setting have also been seen to contribute to climate change directly. The carbon footprint from the COI is rife, ²⁵³ due to 90% ²⁵⁴ of ostrich products being exported. High transportation costs linked to ostrich feed exacerbate this carbon footprint. Barends-Jones and Pienaar ²⁵⁵ found that improving husbandry practices can reduce emission from livestock systems by 30%. Although ostriches produce low amounts of methane, ²⁵⁶ the sheer volume, exportation and transportation of the ostriches/products, causes high GHG emissions in the industry. Food production, the processing of, distribution, consumption and waste as a by-product is responsible for up to nearly a third of greenhouse gas emissions. ²⁵⁷ Ostriches are produced and manufactured in South Africa, yet 80% are exported to the EU alone, leading to environmental injustices. ²⁵⁸

2.5.2.3 Biodiversity Loss

Habitat degradation and biodiversity loss are directly related to the intensive practices that accompanies commercial ostrich farming. Approximately 75% of the COI is located in the Little Karoo, where much of the biodiversity is ruined.²⁵⁹ Kirkwood²⁶⁰ has indicated that a large percentage of the veld, which is especially located in ostrich-producing areas, are either

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²⁵³ NAMC (2010) 7.

²⁵⁹ Ostrich Manual, 137.

²⁵¹ Berkhout N 'Challenges mount for ostrich farmers in South Africa' 11 September 2020 *Poultry World* available at https://www.poultryworld.net/poultry/challenges-mount-for-ostrich-farmers-in-south-africa/ accessed on (2 March 2023).

²⁵² IUCN (2019).

²⁵⁴ NAMC (2010) 4.

²⁵⁵ Barends-Jones V & Pienaar (2020) 19.

²⁵⁶ Barends-Jones V & Pienaar (2020) 26.

²⁵⁷ ALRSA (27 May 2022), 6.

²⁵⁸ DALRRD (2021) 7.

²⁶⁰ Ostrich Manual, 137.

endangered or critically endangered. Less than 3.5% of the current vegetation in the Karoo's habitat and biome is protected, exacerbated by the COI.²⁶¹

Biodiversity degradation has cumulative effects in the long-term. This effects ecological systems, the quality of the soil for farming and the social welfare and health of the area. The loss of vegetation can lead to the loss of soil and soil quality as there is no protection against water and wind erosion. Loss of vegetation biodiversity in the Little Karoo would have knock on effects such as the environments inability to retain water, the danger of surface runoff leading to flooding, the interaction of vegetation and the environment and the ability to combat drought.

Biodiversity loss extends further than the degradation of veld. Many wild predators are killed to stop stock losses caused by wild animals. Both baboons and black-backed jackal are seen as predators that have the ability to disrupt the breeding efficiency of the ostriches. Analysing this statement shows that mitigating harm predators have on ostriches is not due to the intrinsic worth of the ostrich, but rather its ability to produce chicks leading to greater profits.

Additionally, GHG emissions has led to biodiversity loss. As stated above, the loss of plant diversity in the Little Karoo has a negative impact on the water retention in the area. Lack of plant biodiversity has led to an increase in soil-run off and water erosion. The loss of biodiversity, ²⁶⁶ air pollution and GHG emissions have all contributed to climate change. The Centre for Environmental Rights has released a report which states that Southern Africa is vulnerable to climate change because it is already a dry and warm area. ²⁶⁷ The Karoo is experiencing a crippling drought as a result of climate change. The COI has been greatly impacted by this drought where farmers have been estimated to have lost R1 billion, have had to let go of up to 20% of their farm workers, farmers have reduced their flock sizes by 20%

²⁶¹ Ostrich Manual, 137.

²⁶² Ostrich Manual, 137.

²⁶³ Ostrich Manual, 137.

²⁶⁴ Ostrich Manual, 138.

²⁶⁵ Ostrich Manual, 42.

²⁶⁶ See above for discussion in 2.5.2.3 Biodiversity loss.

²⁶⁷ Centre for Environmental Rights Climate impacts in Southern Africa during the 21st Century (2021) 1.

and lucerne fields (ostriches main source of nutrition) lay barren.²⁶⁸ Farmers were denied drought relief from the government ²⁶⁹ as ostriches were classified as game and not livestock.²⁷⁰

2.5.2.4 Waste

The handling of ostrich waste in the ostrich industry is the most sustainable husbandry practice and has been argued²⁷¹ to be model to follow for other livestock systems. Ostrich products are so versatile that practically no 'by-product gets wasted; everything from the eggshells to the carcasses gets used', even the feed bags are reused.²⁷²

Ostriches are non-ruminant animals which lessens the contribution of methane into the environment.²⁷³ The compound effect of CFOs defeats this. The total emissions from the industry were around 62 134.55tCO2e.²⁷⁴ Primary production activities such as breeding, hatching, and rearing contributed 41.94% of the total emissions compared with secondary production.²⁷⁵ Secondary activities which include value-adding activities from meat, feather and leather production contributed 58.06% to the total emissions.²⁷⁶ The emissions from ostrich manure, a primary production activity, was minimal when compared to the export, water and electricity emissions made in the secondary-production activities. The production of meat (the most produced and valued ostrich product) releases the greatest emissions with feathers, leather and ostrich eggs following.²⁷⁷

This shows that although all aspects of the ostrich are used, the actual production of value-added products and the exportation of such still contributes to the waste in South Africa.

2.5.2.5 Externalities

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²⁶⁸ News24 'A fight for life and Death: Ostrich farmers battle as drought cripples Karoo' 23 January 2019 *News24* available at https://www.news24.com/news24/a-fight-for-life-and-death-ostrich-farmers-battle-as-drought-cripples-karoo-20190123 (accessed on 2 March 2022).

Refer to Chapter 4, 4.2.2.3 Game Meat Strategy for South Africa, 2023 of this thesis.

²⁷⁰ News24 (2019).

²⁷¹ Barends-Jones & Pienaar (2020) 4.

²⁷² Barends-Jones & Pienaar (2020) 31.

²⁷³ Barends-Jones & Pienaar (2020) 22.

²⁷⁴ Barends-Jones & Pienaar (2020) 28.

²⁷⁵ Barends-Jones & Pienaar (2020) 28.

²⁷⁶ Barends-Jones & Pienaar (2020) 27.

²⁷⁷ Barends-Jones & Pienaar (2020) 29.

The nature of the COI which has exportation rates of up to 90% contributes greatly to environmental injustices suffered by the people and animals of South Africa as well as the environment. The principle of environmental justice, prescribed by NEMA,²⁷⁸ will be expanded upon in chapter 4 coupled with a discussion of the law.

2.6 ADDITIONAL ISSUES OF COMMERCIAL OSTRICH FARMING

2.6.1 Zoonotic Diseases and Human Health

Zoonotic diseases are regulated by *inter alia* the Animal Diseases Act²⁷⁹. More than 60% of pathogens found in humans originate from animals.²⁸⁰ Scientists have estimated that 6 out of 10 known infectious diseases that are prevalent in people originate from animals, whereas 3 out of 4 new infectious diseases in people have stemmed from animals.²⁸¹ Influences such as urbanization, climate change, animal migration and trade, tourism, etc have had a major effect on the transmission, emergence and reemergence of zoonotic diseases.²⁸² The emergence of zoonotic diseases that is transmissible to humans from animals seems to be more common from this, ²⁸³ especially when ones looks at the COVID-19 pandemic.

A(H5N1) or more commonly known as AF, is spread amongst wild aquatic birds and can easily infect domestic poultry. ²⁸⁴ AF in birds usually affects their intestines and respiratory tracts, is extremely contagious and kills domesticated birds. ²⁸⁵ Domesticated animals play a major role in the spread of zoonotic diseases as domesticated animals amplify the pathogens with originate in wild animals. ²⁸⁶ Both game and pet birds are also carriers of various other diseases. ²⁸⁷

²⁷⁸ NEMA, section 2.

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²⁷⁹ Animal Diseases Act 35 of 1984 (hereafter referred to as the ADA).

²⁸⁰ Rahman M, Sobur M, & Islam M, et al 'Zoonotic Diseases: Etiology, Impact, and Control' (2020) 8 *Microorganisms* 1.

²⁸¹ Center for Disease Control and Prevention (CDC) 'Zoonotic Diseases (2021) available at https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html (accessed on 2 March 2023).

²⁸² Rahman M, Sobur M, & Islam M, et al (2020) 1.

²⁸³ Rahman M, Sobur M, & Islam M, et al (2020) 1.

²⁸⁴ CDC (2021).

²⁸⁵ CDC (2021).

²⁸⁶ Rahman M, Sobur M, & Islam M, et al (2020) 8.

²⁸⁷ Rahman M, Sobur M, & Islam M, et al (2020) 10.

The emergence of these zoonotic diseases poses a major risk to humans, which can be seen by the devasting effect COVID-19 has had on human health around the world. ²⁸⁸ As of the 25th of October 2023, WHO²⁸⁹ has reported 6 972 152 global deaths from COVID-19. Zoonotic diseases are more prevalent in developing states, affecting the most vulnerable and poor people. ²⁹⁰ AF causes respiratory infections that ranges from a fever to severe pneumonia and even death. ²⁹¹ These outbreaks have resulted in millions of poultry deaths, hundreds of human's cases and several human deaths. ²⁹² These outbreaks have caused serious impacts on the economy, livelihoods and international trade of countries. ²⁹³

In the context of South Africa, South Africa experienced major breakouts in AF in April and May of 2021 in commercial poultry (chicken) farms. while already battling the COVID-19 pandemic.²⁹⁴ Import bans were placed on South Africa while it was already suffering economically from COVID-19. The implications have severely affected people's day-to-day lives.²⁹⁵ South Africa reported 9 AF outbreaks in May 2021 with two different strains of AF.²⁹⁶ The drastic and frightening result is South Africa's lack of AF policies which makes it nearly impossible to achieve a One Welfare²⁹⁷ approach.²⁹⁸ The One Welfare approach links human health and animal welfare, where improved animal welfare can have positive direct and indirect effects on human health.²⁹⁹

The DALRRD has confirmed the latest outbreaks in the H5N1 strain that have been ongoing since April 2023 with 10 outbreaks in poultry and 39 outbreaks in non-poultry birds. 300 Since

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²⁸⁸ Farm workers health and well-being is also affected by the COI, but this is beyond the scope of this research.

²⁸⁹ WHO 'WHO Coronavirus (COVID-19) Dashboard' available at https://covid19.who.int/ (accessed on 25 October 2023).

²⁹⁰ Rahman M, Sobur M, & Islam M, et al (2020) 17.

²⁹¹ WHO 'Influenza (Avian and other zoonotic)' 13 November 2018 available at https://www.who.int/news-room/fact-sheets/detail/influenza-(avian-and-other-zoonotic) (accessed on 7 March 2023).

²⁹² WHO (2018).

²⁹³ WHO (2018).

²⁹⁴Adriano L, Chalhoub E & Uwishema O, et al 'Bird flu outbreak amidst COVID-19 pandemic in South Africa: Efforts and challenges at hand' (2021) 93 *J Med Virol*, 1.

²⁹⁵ Adriano L, Chalhoub E & Uwishema O, et al (2021) 1.

²⁹⁶ Adriano L, Chalhoub E & Uwishema O, et al (2021) 2.

 $^{^{297}}$ Refer to Chapter 2, 2.6.2 Consumer Protection Issues of this thesis for discussion on the 'One Welfare Approach'.

²⁹⁸ Adriano L, Chalhoub E & Uwishema O, et al (2021) 2.

²⁹⁹ Pinillos R, Appleby M & Manteca X, et al 'One Welfare – a platform for improving human and animal welfare' (2016) *Veterinary Record* 412.

³⁰⁰ National Institute for Communicable Diseases 'Low Risk of Human Infection Related to Avian Influenza Outbreak in South Africa (13 October 2023)' 13 October 2023 available at https://www.nicd.ac.za/avian-influenza-outbreak/ (accessed on 17 October 2023).

June 2023, outbreaks in influenza (H7N6) have been prevalent with fifty outbreaks reporting to have been identified, in poultry farms and non-poultry birds in Gauteng. ³⁰¹ Internationally, with the rise of scattered cases, AF has made the jump to humans. There have been no reports that this most recent outbreak has impacted the COI of late or that these specific strains have jumped to humans.

2.6.2 Consumer Protection Issues

The deregulation of the ostrich industry has caused effects for the consumer. An unregulated industry poses dangers to the consumers and the animals within the industry. If ostrich meat is not handled correctly this could lead to salmonellae, 302 ostriches can be more susceptible to AF which can be transmitted to humans, 303 as well as AF is extremely contagious to other ostriches and birds. 304 The drive for a short-term profit may lead to companies cutting corners in order to save costs. 305 Consumers are at the mercy of COI due to deregulation and have called for a more transparent and traceable practices to track products, welfare and well-being of these ostriches. 306

There is a trend amongst consumers, who are now buying meat that is more cost effective, sustainable and where welfare of the animal is a concern. 307 The importance of good welfare for the ostriches and good welfare for the consumers can be looked at though the 'One Welfare' approach. The 'One Welfare' debate was devised by Pinillos R where animal welfare and human health was linked. This One Welfare approach argues that improving animal welfare will directly and indirectly benefit human health and well-being as well as the environment. It is argued that improving animal welfare would improve food security. This is because farmed animals with poor animal welfare are stressed leaving them more vulnerable to zoonotic

³⁰¹ National Institute for Communicable Diseases (13 October 2023).

³⁰² Huchzermeyer, F 'Public health risks of ostrich and crocodile meat' (1997) 16 Rev Sci Tech.

³⁰³ KwaZulu-Natal Department of Health 'Avian Flu: Frequently asked questions' available at http://www.kznhealth.gov.za/cdc/avianfaq.htm (accessed on 2 November 2022).

³⁰⁴ KwaZulu-Natal Department of Health 'Avian Flu: Frequently asked questions' available at http://www.kznhealth.gov.za/cdc/avianfaq.htm (accessed on 2 November 2022).

³⁰⁵ Cohen S 'The Dangers of Deregulation' 2 December 2019 *State of the Plant* available at https://news.climate.columbia.edu/2019/12/02/the-dangers-of-deregulation/ (accessed on 13 October 2022).

³⁰⁶ Snyders M (2020), 23.

³⁰⁷ GN 2293 GG 47024 of 18 July 2022, 45.

³⁰⁸ Pinillos R, Appleby M & Manteca X, et al (2016) 412.

diseases.³⁰⁹ The greatest aspect of this approach is a 'more efficient multidisciplinary approaches. 310, This is because current animal welfare practices are fought in isolation. Rather, a multidisciplinary approach to animal welfare would create a more sustainable, effective and holistic approach. Farmers who care about animal welfare are seen to have greater well-being, superior yields of products and farming continuity with communities who care for animals and farming is more sustainable. This approach will benefit biodiversity, conservation, food security, societal problems and so many more which in turn would create a better environment, animal and human health and well-being. This approach benefits both the ostrich and the consumer, however it is still largely human and anthropocentric and protects animal interests for the sake of protecting human interests.

2.7 CONCLUDING REMARKS

This chapter illuminates the different and complex values that the ostrich has. The chapter aimed to illustrate the complex and interrelated environmental, economic and social consequences of an inadequately regulated commercial ostrich farming sector. The complex values attributed to ostriches in relation to their intrinsic value, economic, environmental and other values were discussed. Economic gain is the main concern in this industry and not the recognition or promotion of the intrinsic worth of the ostrich. Ostriches' inability to conform to commercial farming practices highlights the needs of ostriches as following practices for example toe declawing can be seen to not only affect the ostriches' feet, but this culminates in the ostrich's welfare and well-being not being optimal as they struggle to obtain the necessary nutrition. Ostrich welfare and well-being is compromised as seen by undercover investigations. The normal behaviours of ostriches are ignored causing stress to the ostriches. The handling of AF is concerning as this has detrimental effects on the industry and humans when mismanaged. The COI has several inherent challenges which effects the ostriches, the environment, other animals and human beings which was compared to similar to the BC industry. This shows how another commercially farmed animal industry has similar prevalent issues. The COI has major impacts on the environment seen by a loss of biodiversity, the contribution to GHG emissions, water and land usage.

³⁰⁹ Pinillos R, Appleby M & Manteca X, et al (2016) 413. ³¹⁰ Pinillos R, Appleby M & Manteca X, et al (2016) 413.

In order for COI to be sustainable, husbandry practices need to be developed to adhere to ostrich welfare and well-being concerns through legal reform. An impetrative step is expanding the Constitution beyond the conventional application to humans, but rather include animals as well. The recognition of the link between animals, their welfare and the environment plays a vital role in the true fulfilment of Section 24. To aid in this transformative process, international laws ratified or affirmed by South Africa should be effectively implemented. The integration of such is essential to ensure a comprehensive and sustainable coexistence with animals and humans as well as a transformed legal framework.



CHAPTER THREE: CONSTITUTIONAL AND INTERNATIONAL FOUNDATIONS: ANALYSING THE EXISTING POLICY FRAMEWORK FOR ENHANCING THE WELFARE OF COMMERCIALLY FARMED OSTRICHES

3.1 INTRODUCTION

The Constitution is the supreme law of South Africa.³¹¹ This means that all laws and government decisions must be in line with the provisions of the Constitution. Chapter 2 of the Constitution further contains the Bill of Rights, protecting the socio-economic, political and civil rights of the people of South Africa.³¹² Section 24 of the Constitution³¹³ is the right to an environment that is not harmful to one's health or well-being and is entrenched in the Bill of Rights. Section 24 of the Constitution calls for 'reasonable legislative and other measures' to be put in place to achieve this section.

International law is a source of soft law in South Africa and gets it force through the Constitution and other national laws. When interpreting rights in the Bill of Rights, ³¹⁴ the court tribunal or forum must promote the values that underlie an open and democratic society of human dignity, freedom and equality, ³¹⁵ as well as must consider international law. ³¹⁶ International law is agreed upon by the executive and only comes into force domestically when the international agreement has been approved by the National Assembly and the National Council of Provinces and has been enacted into national legislation. ³¹⁷ When interpreting legislation, the court must favour the reasonable interpretation of the legislation that aligns with international law over any other conflicting interpretation.

Chapter three will address the role or potential role of the Constitution and international law in providing commercially farmed wild animals with better welfare and well-being practices. Section 24 of the Constitution will be critically analysed to see if animal welfare and well-

³¹² Constitution, Chapter 2.

³¹¹ Constitution, s2.

³¹³ Section 24 of the Constitution will be discussed in detail in 3.2 Constitution of the Republic of South Africa, 1996.

³¹⁴ Contained in Chapter 2 of the Constitution.

³¹⁵ Constitution, s 39(1).

³¹⁶ Constitution, s39(2).

³¹⁷ Constitution, s231(1), s231(2), s231(3).

being could be afforded to commercially farmed wild animals through the interpretation of section 24. The sustainability of the COI will be assessed through the lens of section 24(b). South Africa's commitments to certain³¹⁸ international obligations will be assessed to determine whether South Africa is fulfilling these obligations and whether they can be interpreted to apply to animal welfare and well-being.

The Constitution and international law hold significant relevance in the context of the COI, given the COIs potential adverse impacts on biodiversity, including both fauna and flora, as well as its repercussions on issues such as air pollution, land usage, and biodiversity. The sustainability of COI often comes under scrutiny, as it can contribute to ecological degradation The COIs influence extends beyond international environmental concerns as additionally the COI impacts local ecosystems and communities.

3.2 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1996

Section 24 of the Constitution provides everyone with the right to an environment that is not harmful to one's health or well-being; and to have the environment protected for present and future generations through reasonable legislative measures to prevent pollution, and ecological degradation, promote conservation and ensure sustainable use and development of the natural resources. The following sections of this research explore different components of this environmental right as well as a constitutional interpretation of this right. One of the greatest shortfalls of the Constitution (in relation to animal interests) is that it is anthropocentrically phrased and interpreted. The author will engage in a discussion on breaking down and expanding on the specific components of this right, how this right has been interpreted by the courts and in some instances, international bodies. This is because section 24 is applicable to the COI. The first part of this section highlights interpretations through jurisprudence as they have been interpreted in the human animal context, and the second part of this section highlights existing and possible interpretations in the nonhuman animal context. This is in light

³¹⁸ Due to constraints in this research, select pieces of international law will be critically analysed.

³¹⁹ Constitution, s24(b)(i)-(iii).

³²⁰ As will be seen below.

of the fact that section 24 is affected by the COI³²¹ as well as animal welfare has been explicitly linked to section 24.

In *HTF Developers v Minister of Environmental Affairs and Tourism and Others*, ³²² the High Court declared that section 24 contains two components. Section 24(a) contains the fundamental environmental (human) right. ³²³ Section 24(b) was interpreted to be more of a directive principle which has a similar nature to a second-generation right that imposes a constitutional obligation on the state to entrench this right in reasonable legislation and other measures. ³²⁴ For purpose of this research, the effects of the COI on the environment and in turn peoples and animals health and well-being requires the state to enact reasonable legislation to help fulfil section 24 through their legal obligation.

The rights in the Bill of Rights are established to be mutually supportive and inter-related. 325 Bilchitz shows the interconnected nature of rights in the Bill of Rights when assessing the application of the Constitution, the provision on equality and the limitation clause where limitations can be justified as long as they are not arbitrary. 326 Stewardship over the environment rests on the state, where individuals have a social responsibility to protect the environment. This was confirmed in *HTF Developers v Minister of Environmental Affairs and Tourism and Others* by the SCA. 327

In addition to the positive rights, the constitutional environmental right bestows a negative obligation on the state to not engage in any activity that would adversely affect the environment. In *Government of the Republic of South Africa and Others v Grootboom and Others*), ³²⁸ Yacoob J stated that the implementation of legislative measures is not enough, the

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³²¹ Refer to Chapter 2, 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC) of this thesis for a full discussion on the effects the COI can have on the environment, people and humans, adversely affecting section 24.

³²² 2006 5 SA 512 (T), para 17 (hereafter *HTF Developers* (2006)).

³²³ *HTF Developers* (2006), para 17.

³²⁴ *HTF Developers* (2006), para 17.

³²⁵ Government of the Republic of South Africa and Others v Grootboom and Others (CCT11/00) [2000] ZACC 19; 2001 (1) SA 46; 2000 (11) BCLR 1169 (4 October 2000), para 23.

³²⁶Bilchitz D 'Does Transformative Constitutionalism Require the Recognition of Animal Rights?' (2010) SAPL 2.

³²⁷ HTF Developers v Minister of Environmental Affairs and Tourism and Others (337/06) [2007] ZASCA 37; [2007] 4 All SA 1108 (SCA); 2007 (11) BCLR 1230 (SCA); 2007 (5) SA 438 (SCA).

³²⁸ Government of the Republic of South Africa and Others v Grootboom and Others 2001 1 SA 46 (CC), para 69.

state must act to achieve the intended result and legislative measures (such as policies) must be used as support.

3.2.1 A Critical Examination of Constitutional Interpretations Made by the Courts Relating to the Scope of the Environmental Right

The following section contains a critical look into the interpretations of certain constitutional terms made by the different courts in South Africa.

'Everyone' has been interpreted by courts to include both citizens, non-citizens and has further been interpreted to include animal welfare, in terms of the *NSPCA*³²⁹ case. The result is that animals' interests must now be included when interpreting section 24. Notably the United Nations³³⁰ has a resolution recognising the right to a clean, healthy and safe environment, which includes animals, as a basic human right. ³³¹

'Environment' has been interpreted by the courts 'broadly' to encompass the full scope of the environment. In *BP Southern Africa (Pty) Limited v MEC for Agriculture, Conservation, Environment & Land Affair*, ³³² Justice Claassen defined the environment as 'all conditions and influences affecting the life and habits of man'. ³³³ The attitude of judicial precedent being anthropocentrically charged is evident where this phrasing indicates these are conditions and influences are only important to gauge when 'man' is affected.

The term 'health' has been adopted in the World Health Organization's Constitution as ³³⁴ 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. Section 24 of the Constitution contains the right to a healthy environment whereas section 27 of the Constitution encompasses the right to access healthcare. Health is generally

³²⁹ NSPCA (2016).

³³⁰ Hereafter the UN.

³³¹ A/RES/76/300.

³³² BP Southern Africa (Pty) Limited v MEC for Agriculture, Conservation, Environment & Land Affair (03/16337) [2004] ZAGPHC 18 (31 March 2004).

³³³ BP Southern Africa (Pty) Limited v MEC for Agriculture, Conservation, Environment & Land Affair (2004), 27.

³³⁴ UN General Assembly, Entry into force of the constitution of the World Health Organization, 17 November 1947, A/RES/131.

considered to not be the responsibility of the state, however this is different when looking at the environmental right, as health can be affected negatively by external factors.³³⁵

The term 'health' has been extended by the courts to include 'healthy living conditions'. This was seen in the case of *Minister of Health and Welfare v Woodcarb (Pty) Ltd and Another*³³⁶ which dealt with the concept of health in the Interim Constitution. ³³⁷ The Minister of Health and Welfare had applied to the court for an interdict under the Atmospheric Pollution Prevention Act³³⁸ against a company operating an incineration process without the required certificate, after neighbour complaints. The court held that the emissions of smoke without the required certificates was a violation to neighbours right to an environment that is not detrimental to their health. ³³⁹ The court did not provide a meaningful definition for 'health and well-being' but allowed the right to be realised, meaning the overall environment was being harmed. Protection of health was deemed to include protection from pollution. The court found that the people of South Africa's health must be protected from the negative impacts or potential impacts of environmental pollution.

'Well-being' (insofar as it relates to humans) is a term that is 'incapable of a precise definition' ³⁴⁰ but has been typically referred to as a state of appropriate living conditions or a good quality of life. ³⁴¹ Well-being is seen as subjective. The use of 'well-being' is often used where health implications are not obvious but rather is used for example, to safeguard against the destruction of habitats that will not necessarily have direct health effects, including mental health, or where there is a fear or threat to the environment. ³⁴² 'Health' and 'well-being' can be intertwined as seen in *Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products*. ³⁴³ Well-being also relates to environmental integrity where the maintenance of a natural habitat has been said to form a part of human well-being. ³⁴⁴

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³³⁵ Du Plessis A 'South Africa's Constitutional Environmental Right (Generously) Interpreted: What is in it for Poverty?' (2011) 27 *SAJHR*, 293.

³³⁶ 1996 (3) Sa 155 (N).

³³⁷ Constitution of the Republic of South Africa, Act 200 of 1993, s29.

³³⁸ Act 45 of 1965.

³³⁹ Minister of Health and Welfare v Woodcarb (Pty) Ltd and Another 1996 (3) SA 155 (N).

³⁴⁰ HTF Developers (2006).

³⁴¹ Du Plessis A (2018) 193.

³⁴² Du Plessis A (2018) 199.

³⁴³ Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products 2004 (2) SA 393 (E).

³⁴⁴ Du Plessis (2018) 199.

In *HTF Developers*³⁴⁵ the High Court recognised that 'well-being' at the bottom line must be seen as encompassing 'a sense of environmental integrity; a sense that we ought to utilise the environment in a morally responsible and ethical manner'. The SCA confirmed meaning that both the High Court and the SCA have recognised the aesthetic and moral dimensions of section 24. The court stated that the state had a duty of stewardship to protect the environment and hold it in trust for present and future generations.³⁴⁶

The phrase 'for the benefit of present and future generations' in section 24(b) of the Constitution incorporates the principle of intra-generational and inter-generational equity. Intergenerational equity is the need to preserve natural resources for future generations to benefit from while intragenerational equity is that natural resources which are exploited must be done so in an equitable manner considering present generations and other states. 347 Intragenerational equity concerns equality between people of the same generation and the use of natural resources. 348

'Ecologically sustainable development' ³⁴⁹ has been compared to 'sustainable development', but more emphasis is given for the need to integrate the environment and economy. ³⁵⁰ The Brundtland Report ³⁵¹ defines 'sustainable development' as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. The case of Fuel Retailers Association of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others ³⁵² concerned the authorisation for a new petrol filling station where the applicants believed that a new filling station would have adverse effects on the environment.

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³⁴⁵ HTF Developers (2006) 18.

³⁴⁶ HTF Developers (2006).

³⁴⁷ Loura J 'Principle of Intergenerational and Intragenerational Equity under International Environmental Law (2017) available at http://data.conferenceworld.in/SGTB/P01-06.pdf (accessed on 20 April 2023).

³⁴⁸ UNEP 'Intragenerational Equity' available at https://leap.unep.org/knowledge/glossary/intragenerational-equity (accessed on 20 April 2023).

³⁴⁹ Murcott M 'Transformative Environmental Constitutionalism's Response to the Setting Aside of South Africa's Moratorium on Rhino horn Trade' (2017) *Humanities*.

³⁵⁰ Preston B 'Ecologically Sustainable Development in the Courts in Australia and Asia' A paper presented to a seminar on environmental law organised by Buddle Findlay, Lawyers, Wellington, New Zealand, 28 August 2006, 6.

³⁵¹ Brundtland, G.H. (1987) Our Common Future: Report of the World Commission on Environment and Development. Geneva, UN-Dokument A/42/427.

³⁵² Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others (CCT67/06) [2007] ZACC 13; 2007 (10) BCLR 1059 (CC); 2007 (6) SA 4 (CC) (Fuel Retailers (2007)).

This was because it was alleged that the authorities did not assess the impact on social, economic and environmental factors. The Constitutional Court found that authorities failed to take a holistic approach when interpreting section 24. The court found that there is an interrelationship between the environment and development which not only recognises the need for protecting the environment but also the need for social and economic development. Economic and social development was declared essential to the well-being of human beings. 353

Section 24(b) also includes a directive. It instructs the state on how to fulfil the environmental right. The phrasing 'reasonable legislative and other measures' places a positive duty on the state to enact legislation to prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development. ³⁵⁴ Other measures includes legal and non-legal measures such as educational programmes. ³⁵⁵ Section 24 also imposes a negative duty on the state to refrain from developing and implementing law and policy, or any other measures, that would negatively impact on the environmental right. ³⁵⁶ NEMA coupled with SEMAs, regulations and policies were enacted to enable section 24.

3.2.2 The Role of the Constitution in Strengthening Animals' Welfare and Well-Being

The above section has dealt with the different components of the environmental right as they relate to humans. This section explores the application of the Constitution and the environmental right in specifics, as it applies or may be applied to animals.

The only explicit mention of animals in the Constitution can be found in the Schedules including Schedule 4 Part A of the Constitution including 'animal control and diseases' which is governed by concurrent national and provincial legislation. Abattoirs are regulated by Schedule 5 Part A of the Constitution but is regulated exclusively by the Provincial Legislature. Schedule 5 Part B of the Constitution deals with the facilities to accommodate, care and bury animals as well as the licensing of dogs regulated by local government. The

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³⁵³ Fuel Retailers (2007), 44.

³⁵⁴ van der Berg A *Municipal Planning Law and Policy for Sustainable Cities in South Africa* (LLD, Tilburg University, Netherlands and North West University, South Africa, 2020) 12.

³⁵⁵ van der Berg A (2020) 12.

³⁵⁶ Kidd M Environmental Law 2 ed (2011) Juta 21.

³⁵⁷ Constitution, Schedule 4 Part A.

³⁵⁸ Constitution, Schedule 5 Part A.

³⁵⁹ Constitution, Schedule 5 Part B.

distinction between national and provisional laws in this regards creates conflicting practices between the provinces, rather than a consistent manner of national animal law application.³⁶⁰

As a result, wild animals often fall between provincial and national laws as well as departments. ALRSA submitted that the welfare of wild animals has been isolated as a separate issue to their management, with a lack of co-operation between departments charged with the limited animal welfare regulations or environmental management.³⁶¹ It was further highlighted that 'current biodiversity management measures allow for zoonotic diseases transmission'³⁶², where changes are essential to address these crises. ALRSA illuminated that captive wildlife and wildlife farming needs to be recognised as putting pressure on South Africa's biodiversity.³⁶³

For effective implementation of these national wild animal welfare laws, no distinction should be made between animals.³⁶⁴ An issue with the current provincial regulations is the fact that regulations differ from province to province and can even differ between provincial and national regulations.³⁶⁵ The dangers with this is that there is no consistent legislation protecting wildlife, a national database of different permits has not been established and there is little transparency and co-ordination between the provinces.³⁶⁶ The result is the creation of legal loopholes and lacunas where the ramifications have had and continue to have a destructive effect on wildlife.³⁶⁷

Section 24 of the Constitution is argued in this chapter to apply to wild animals, specifically ostriches. This is because the COI has the possibility to adversely affect human and animal health and well-being, the environment, existing jurisprudence and the fact that animals are included in the definition of the 'environment'. Further the sustainability of commercially farming game meat is in question. The courts have a had a number of instances in which section 24 could have been extended to apply to wild animals. Murcott, however, states that the

³⁶⁰ Centre for Environmental Rights (CER) *Legal and practical regulation of the welfare of wild animals in South Africa* (2019) 2.

³⁶¹ ALRSA (3 May 2021) 7.

³⁶² ALRSA (3 May 2021) 8.

³⁶³ ALRSA (3 May 2021) 10.

³⁶⁴ Centre for Environmental Rights *Legal and practical regulation of the welfare of wild animals in South Africa* (2019) 2.

³⁶⁵ Wilson A.P (2020) 42.

³⁶⁶ Wilson A.P (2020) 42.

³⁶⁷ Wilson A.P (2020) 42.

³⁶⁸ Refer to Chapter 2 of this thesis for a full discussion.

³⁶⁹ Murcott M (2017) 6.

courts have missed the opportunity to define and extend section 24(b) to include interpret ecologically sustainable development. ³⁷⁰

Section 39(2)³⁷¹ requires the courts to interpret legislation in a manner that is in accordance with spirit, object and purport of the Constitution. The author proposes that 'transformative spirit' of the Constitution must be utilised to interpret laws in a more ecological centred way where intrinsic value of wild animals, specifically ostriches, is realised.³⁷² Bilchitz speaks to the different interpretation tools at the disposal of the courts which was utilized by Chaskalson P in *S v Makwanyane*.³⁷³ Reference was made to the importance of adopting a 'purposive and generous' approach when interpreting provisions and they must reflect the values of the Constitution.³⁷⁴ This is further confirmed in *Lemthongthai v S* where the court stated that 'constitutional values dictate a more caring attitude towards fellow humans, animals and the environment in general'.³⁷⁵

Wild animals who are commercially farmed for commercial purposes are equally entitled to welfare practices as farmed animals are. This was confirmed in *National Council of the Society for Prevention of Cruelty to Animals v Minister of Environmental Affairs and Others*³⁷⁶ where an application was made to the high court, asking for the decision made by the Minister of Environmental Affairs be declared unlawful and unconstitutional. The decision by the Minister was to set quotas for the exportation of lion skeletons at 800 and 1500 to trade for their skulls, claws and bones for commercial purposes. ³⁷⁷ The court distinguished between having the responsibility for the welfare mandate and taking welfare as a factor into account in decision-making. Consideration of welfare factors is not dependent on a welfare mandate, but rather the decision maker must consider welfare if it is relevant. ³⁷⁸ Kollapen J found the Minister of DFFE had erred in her reasons where it would be 'artificial and hierarchical' to argue that the welfare and well-being of wild lions was more of a concern than the well-being of captive lions. The suffering of lions who are bred for the mere purpose of trophy hunting (for monetary gain) and

³⁷⁰ Murcott M (2017).

³⁷¹ Constitution, s39(2).

³⁷² Murcott M (2017) 3.

³⁷³ S v Makwanyane 1995 (3) SA 391 (CC).

³⁷⁴ S v Makwanyane (1995) 9.

³⁷⁵*Lemthongthai v S* (2014), para 20.

³⁷⁶ (86515/2017) [2019] ZAGPPHC 337; 2020 (1) SA 249 (GP) (hereafter the *Lionbones* case).

³⁷⁷ *Lionbones* (2019), 1.

³⁷⁸ Lionbones (2019) 67.

the conditions they are kept in, is a public concern and is explicitly linked to the respect given to animals and the environment, where lions who are in captivity are still a part of.³⁷⁹ Kollapen J made an observation where in South Africa, the amount of captive lions exceeded the amount of wild lions and it would defeat the purpose to treat captive lions differently from wild lions.

The Constitution was developed to address the issues and divisions of the past. The eradication of all forms of arbitrary discrimination based on gender, age and sexual orientation, etc was a *grundnorm* of the Constitution. Notably, Bilchitz argues that the discrimination between species, the human species and a different species, is arbitrary and there are no good grounds to not extend this *grundnorm* to animals. Bilchitz states that all sentient creatures have worth, can experience dignity and true equality would include that members of other species have equal worth to humans. This argument can be used to extend section 24 to animal welfare and well-being, specifically for ostriches. Differentiating between the human species and animal species is arbitrary as treating individuals in a prejudicial and inferior manner provides no justification for the differential treatment. 383

A purposive and generous interpretation of section 24 demonstrates that when one ensures welfare and well-being is entrenched in this section for animals, this will ultimately improve conservation and biodiversity, would reduce pollution and ensure greater sustainable development. The 'One Welfare' section is potentially a good model to pursue. Another avenue that could be taken in that of transformative environemtal constitutionalism, where the Constitution can be used to strengthen the protection of animals. Although it has its own shortfalls such as having an anthropocentric purpose, it is a possible progressive tool to achieve some positive advancements towards the legal recognition of intrinsic value. This approach concerns that the direct or indirect improvement of animal welfare would positively contribute to the human well-being, conservation, biodiversity and the environment. Where animal and human well-being and health are pursed it would ultimately lead to an improvement for

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³⁷⁹ *Lionbones* (2019) 71.

³⁸⁰ Bilchitz D 'Does Transformative Constitutionalism Require the Recognition of Animal Rights?' (2010) 2.

³⁸¹ Bilchitz D (2010) 2.

³⁸² Bilchitz D (2010) 3.

³⁸³ Bilchitz D (2010) 6.

³⁸⁴ Murcott M (2017) 3.

³⁸⁵ Pinillos R, Appleby M & Manteca X, et al (2016) 412.

³⁸⁶ Bilchitz (2010) – a detailed discussion about this is beyond the scope of this research.

³⁸⁷ Refer to Chapter 2, 2.6.2 Consumer Protection Issues of this thesis for a full discussion.

³⁸⁸ Pinillos R, Appleby M & Manteca X, et al (2016) 412.

animals, humans and the environment. The use of a generous and purposive interpretation when arguing for the inclusion of animals in section 24, fully embraces section 24 where the concept of ecologically sustainable development is realised as environmental, social and economic factors are assessed concurrently for the benefit of all. These benefits however are not anthropocentrically inclined, rather the IA would be utilised. The IA is a strong argument when using the generous and purposive interpretation of section 24.

Bilchitz³⁸⁹ coined the so-called IA where welfare is included in section 24 of the Constitution and rejected the so-called 'aggregative approach'. The aggregative approach focuses on broad environmental goals, where the focus is on survival of the species, ³⁹⁰ whereas Bilchitz³⁹¹ describes the IA as an approach that 'requires the adoption of an attitude of respect to the individuals that make up a species, an eco-system or the components of biodiversity'. This approach is in terms of conservation and sustainable use. Here the value of the individual animal is recognised including their important role played in protecting and conserving the environment. The IA recognises the relationship between animals and their ecosystems. ³⁹² The IA in terms of sustainable use, has been said ³⁹³ to influence the attitude in which humans treat and cultivate animals in a manner that entrenches survival and the continuation of the species. Bilchitz³⁹⁴ describes the IA harmoniously so that 'individual animals may be used as a means, but never treated, merely as a means'. This is where the use of the animal is not condemned, but rather the animal should be used in its entirety for a legitimate purpose. ³⁹⁵ Bilchitz and Wilson ³⁹⁶ argue that the scope of protection of section 24 now extends to wild animals through the NEMA ³⁹⁷ and the NSPCA ³⁹⁸ case (where the IA was used). ³⁹⁹

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³⁸⁹ Bilchitz D abstract.

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³⁹⁰ Bilchitz D (2017) 1.

³⁹¹ Bilchitz D (2017) 10.

³⁹² Bilchitz D (2017) 10.

³⁹³ Bilchitz D (2017) 13.

³⁹⁴ Bilchitz D (2017) 14.

³⁹⁵ Bilchitz D (2017) 14

³⁹⁶ Bilchitz D & Wilson A.P (2022) 429.

³⁹⁷ NEMA 107 of 1998.

³⁹⁸ NSPCA (2016).

³⁹⁹ NSPCA (2016).

Openshaw⁴⁰⁰ contained a novel perspective in which sentience of animals was recognised in the minority judgement.⁴⁰¹ Animal welfare in the NSPCA case⁴⁰² has been directly linked to section 24 of the Constitution using the IA. This links the suffering of individual animals with aspects of conservation. Murcott highlights that in Kruger v Minister of Water and Environmental Affairs⁴⁰³ the court missed an opportunity to extend section 24 of the Constitution to apply to wild animals, in this case rhinos, when it comes to biodiversity conservation.⁴⁰⁴ Murcott states that the courts response showed an inability to appreciate the need to identify environmental issues within the Anthropocene, especially due to the possible implications of anthropocentrically charged laws (in terms of biodiversity conservation) and how this would affect the greater rhino population.⁴⁰⁵ The court was reluctant to define 'ecologically sustainable development'. If this was done, it would have been noted that development needs to be ecological where the environment must be heavily considered.

Given the potential for environmental harm, building the commercial GMI, as envisaged by the Game Meat Strategy for South Africa, 2023, 406 could arguably contradict section 24(b) of the Constitution 407 that requires development to be ecologically sustainable. When one critically analyses section 24(b) of the Constitution, the environment needs to be protected for the benefit of current and future generations through legislative means. 408 Section 24(b)(i) 409 directly states that the environment needs to be protected by a legislative framework and other measures which prevents pollution and ecological degradation. Through an exploration of several key factors, this section will delve into the holistic unsustainability present in the COI.

Assessing this holistically, an argument can be made that the COI goes against the object of section 24(b) of the Constitution. This is because environmental degradation, the use of land

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400 Openshaw.

⁴⁰¹ Refer to Chapter 3 and Chapter 4 of this thesis for discussion on animal-centric and environmental jurisprudence.

⁴⁰² NSPCA (2016).

⁴⁰³ [2016] 1 All SA 565 (GP).

⁴⁰⁴ Murcott M (2017).

⁴⁰⁵ Murcott M (2017) 2.

⁴⁰⁶ Game Meat Strategy for South Africa, 2023 in GN 4042 *GG* 49620 of 8 November 2023 (Hereafter referred to as the GMS).

⁴⁰⁷ Constitution, s24(b).

⁴⁰⁸ Constitution, s24(b).

⁴⁰⁹ Constitution, s24(b)(i).

and the destruction of biodiversity⁴¹⁰ are all prominent issues in the industry. Conservation is not promoted through the industry as biodiversity is lost, predators are killed and land that should be conserved is exploited for the COI, directly contradicting section 24(b)(ii). Further, ecological sustainable development arguably does not take place in the industry, as consuming ostriches is potentially not sustainable,⁴¹¹ especially since majority of ostrich products are exported,⁴¹² yet South Africa bears the environment, social and economic consequences. Section 24(b)(iii) is arguably compromised by the industry as the game farming industry does not promote sustainable practices, engages in environmental injustices and is mostly economically charged, with a disregard of social and environmental factors.⁴¹³ The High Court in the *Lion bones* case has directly and explicitly linked animal welfare to section 24(b) of the Constitution, specifically in terms of conservation. The fact that ostrich welfare and well-being, in the context of NEMLAA, is not given adequate consideration arguably directly contradicts the object and spirit of section 24(b) of the Constitution as well as constitutional jurisprudence intertwining animal welfare and conservation.

3.3 INTERNATIONAL LAW

South Africa has actively participated in various international environmental agreements and must consider international law in terms of section 39(2) of the Constitution. 414 One significant milestone in terms of South Africa's international agreements, was the adoption of the Convention on International Trade in Endangered Species in 1963, 415 following a meeting involving members of the IUCN. 416 This marked a pivotal moment in recognising the pressing need to conserve biological diversity.

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⁴¹⁰ Refer to Chapter 2 of this thesis, 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC) for a full discussion on the environmental effects of the COI.

⁴¹¹ Refer to Chapter 2 of this thesis, 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC) and Chapter 4, 4.2.2.3 Game Meat Strategy for South Africa, 2023 of this thesis for a full discussion on this unsustainability of the COI.

⁴¹² Refer to Chapter 4 of this thesis, 4.2.3.1 National Environmental Management Act, for a discussion on the principle of environmental justice.

⁴¹³ Refer to Chapter 2 of this thesis, 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC).

⁴¹⁴ Constitution, s39(2).

⁴¹⁵ Ostriches do not fall within the 'threatened or endangered species' realm, CITES does not apply to the COI. Due to space constraints within this research, this will not be delved into.

⁴¹⁶ DFFE 'South Africa as a part to the Convection on International Trade IN Endangered Species Wild Fauna and Flora (CITES) available at https://www.dffe.gov.za/legislation/international_agreements/sapartytocites

Furthermore, South Africa became a signatory to the CBD⁴¹⁷ on June 4, 1993, and has been a member state since November 2, 1995, highlighting South Africa's ongoing commitment to global environmental protection. ⁴¹⁸

3.3.1 Terrestrial Animal Health Code

The WOAH comprises of 183 Delegates of all member states who meet annually to discuss animal health on a global scale. South Africa is a member of the WOAH, represented by Dr. Botlhe Michael Modisane. Although South Africa is a member of the WOAH and therefore should adhere to the TAHC South Africa has not incorporated the TAHC into domestic legislation.

The TAHC applies to the COI as South Africa is a member of the WOAH and the TAHC applies to all animals, including ostriches. The TAHC also makes extensive reference to AF which has had detrimental effects on the COI, 420 including animal and human health. This is also significant as the TAHC refers to all birds, wild and domesticated. In South African law ostriches often straddle the line between domesticated and wild animals. 421 This is because ostriches have been domesticated and commercially farmed, resulting in the notion that ostriches are no longer wild, but rather a domesticated species. The TAHC guidelines are for the slaughter of animals for human consumption, the killing of animals for disease control purposes and the transport of animal by land and sea. 422



(accessed on 28 August 2023). CITES will however not be discussed as ostriches are not classified as 'threatened' or 'endangered'.

⁴¹⁷ The Convention on Biological Diversity of 5 June 1992 (1760 U.N.T.S. 69) (hereafter the CBD).

⁴¹⁸ 1760 UNTS 79, 31 ILM 818 (1992).

⁴¹⁹WOAH 'Members' Available at https://www.woah.org/en/who-we-are/members/ (accessed on 4 September 2023).

⁴²⁰ Refer to Chapter 2, 2.4.1 Welfare and well-being challenges in the ostrich industry for a discussion on AF.

⁴²¹ This is particularly relevant in the context of commercial ostrich farming.

⁴²² Caporale V, Alessandrini B, & Dalla Villa P, et al. 'Global perspectives on animal welfare: Europe.' (2005) 24 *Rev Sci Tech*, 567.

Member states are responsible for notifying WOAH about any listed disease which may occur. ⁴²³ AF and its variants, in poultry and wild birds, is a listed disease. ⁴²⁴ Both domesticated and wild animal health surveillance must take place. ⁴²⁵ This is especially important for wild animals as they may act as reservoirs of infection and cause risk to both humans and domesticated animals. ⁴²⁶ The TAHC is concerned with zoonotic diseases effects on animal and human health. A system must be put in place, for all animals' species susceptible to diseases. ⁴²⁷ These systems should consider, the objectives of the surveillance, the risk of spread of infection, husbandry practices, production systems, etc. ⁴²⁸

The TAHC addresses animal health measures which are applicable before and at departure when being imported or exported. Animals are exported, for either breeding, rearing or for slaughter, but are only required to meet the requirements of the importing country. Of concern is that if the importing country is not a member of WOAH, this importing country does not necessarily have to follow the guidelines of the TAHC. Further, if the importing country has weaker animal welfare protections compared to the exporting country, the welfare of animals could be undermined.

Live ostriches are not often exported, mainly their products and by-products are. Products of animal origin, when exported must meet the international veterinary certificate by WOAH. 430 The positive of this is that products are inspected and tested for infections to ensure that the product, if infected, is not detrimental to the welfare and health of the animals in the importing country.

The TAHC gives recommendations for veterinary public health which deals with veterinary science that directly or indirectly links to animals, their products or by-products in order to prevent, mitigate and control public health risks. 431 Public health areas of concern include safe and adequate food, the prevention, control and eradication of zoonotic diseases and the

⁴²⁴ TAHC, art 1.3.6.

⁴²³ TAHC, art 1.1.5.

⁴²⁵ TAHC, art 1.4.1.

⁴²⁶ TAHC, art 1.4.1.

⁴²⁷ TAHC, art 1.4.3.

⁴²⁸ TAHC, art 1.4.3.

⁴²⁹ TAHC, art 5.4.1.

⁴³⁰ TAHC, art 5.4.6.

⁴³¹ TAHC, art 6.1.1.

improvement of animal welfare. 432 WOAH acknowledges that anthropocentric factors such as production systems, increase in trade and movement of animals, disruptions of ecosystems, climate change, etc, influence's the occurrence of emerging diseases, where some are zoonotic. 433 Bearing this in mind, WOAH goes further where the 'One Health' approach is integrated to ensure the assessment, prevention, management and communication of health issues preserves the ecosystem for human health, biodiversity and the health of both wild and domestic animals. 434 The acknowledgement of anthropocentric factors contributing to the decline in animal health is pivotal. WOAH recognises that humans are the reason that animal and human health and the environment is degraded. The One Welfare approach is known to improve animal welfare and health which in turn would contribute to animals' greater well-being.

Additionally, veterinary services in food safety systems are guided by the TAHC. 435 Veterinarians have specialised knowledge in not only animal health, but also in ensuring food safety. The best way to ensure food safety is to take an integrated, multidisciplinary approach which assess the whole food chain system. 436 The TAHC integrates the One Welfare approach into food systems where all stakeholders, veterinarians, competent authorities and food business operators are responsible in ensuring good animal welfare. An interdisciplinary approach involving various departments, stakeholders, and individuals who share the common objective of enhancing animal welfare, particularly within commercial farming systems governed by the TAHC plays a crucial role to ensure that there is effective communication between these various stakeholders. This collaboration is instrumental in achieving improved welfare for farmed animals and, consequently, enhancing the overall well-being of these animals.

Animal feed plays a vital role in the spread of diseases, such as AF, as feed ingredients and feed is globally traded. The management of hazards of animal and human health in animal feed is set out in the TAHC. People who use/produce animal feed are responsible for the feed meeting regulatory requirements set by the Competent Authority.⁴³⁷ This Competent Authority

⁴³² TAHC, art 6.1.1.

⁴³³ TAHC, art 6.1.1.

⁴³⁴ TAHC, art 6.1.

⁴³⁵ TAHC, art 6.2.1.

⁴³⁶ TAHC, art 6.2.3.

⁴³⁷ TAHC, 6,4,4.

is defined as the Government Authority of the Member Country. Agricultural and husbandry practices must be put in place to achieve this. What is evident in the COI context is that South African Authorities have not released detailed guidelines on ostrich feed and good husbandry practices are not in place.

The main chapter of interest for purposes of this research in the TAHC for purposes of this research is section 7 on Animal Welfare. Animal welfare is seen as the physical and mental state of the animals in terms of the condition the animals lives and dies in and refers to the state of the animal. 438 Good animal welfare requires disease prevention, veterinary care, shelter, nutrition, a stimulating and safe environment and the human handling and human slaughter or killing. 439 Animal health and welfare are critically linked where the use of animals carries the ethical responsibility to ensure these animals have greatest animal welfare possible. 440 Interpreting this can arguably show that the TAHC recognises the intrinsic value of animals. The TAHC sets out the scientific basis for recommendations in the improvement of animal welfare. The applicability of the WOAH animal welfare standards globally must emphasise the most favourable outcome of the animal and where necessary, specific conditions relating to that animal. These recommendations must define explicit targets and thresholds, based on relevant experts and science. 441 The South African government has not released explicit targets. The Ostrich regulations of the Meat Safety Act 442 although are directly applicable to the COI, have no explicit targets or wording that is used. Rather vague wording such as 'appropriate nutrition' is used.

The general principles in relation to the welfare of farmed animals in livestock production must take into account that genetic selection must always consider the health and welfare of the animal. This is arguably unlike the broiler industry in South Africa, where chickens are bred to get bigger faster, compromising their locomotive abilities and therefore their welfare and well-being. 443 The physical environment must support the type of animal farmed which includes the

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⁴³⁸ TAHC, art 7.1.1.

⁴³⁹ TAHC, art 7.1.1.

⁴⁴⁰ TAHC, art 7.1.2.

⁴⁴¹ TAHC, art 7.2.4.

⁴⁴² Ostrich Regulations of the Meat Safety Act, 2000.

⁴⁴³ Refer to Chapter 2 of this thesis, 2.4.2 The prevalence of similar welfare and well-being issues in the broiler chicken farming industry for a discussion on the BC industry.

substrate which must not cause injury, slipping etc. Notably, the flooring used in the COI is prone ostriches slipping seen in the undercover investigation.⁴⁴⁴

In terms of the TAHC, social grouping of animals should be allowed to reduce stress and fear, however in the COI, foster parent ostriches are often stressed where female ostriches will pluck out their feathers due to being overwhelmed with the number of ostrich chicks. ⁴⁴⁵ The result is that not only the foster parent's welfare is compromised, but also the ostrich chick's welfare is also compromised as they may not receive the attention they may need.

In terms of the TAHC painful procedures must be avoided and where they cannot be avoided, the pain must be managed to the best of abilities. 446 Despite this, the COI makes use of toe declawing where newly hatched chicks' nail and part of their toe joint is removed by a debeaking machine to ensure scarring to ostrich skins is minimal. 447 Lastly, the handling of animals should create a positive relationship between humans and animals and should not cause injury, panic, lasting fear or stress for the animal. 448

The implications from the above illuminates that South Africa does not currently afford the legal recognition of the intrinsic value of animals, which includes ostriches, as opposed to the TAHC. The divergence between the recognition of intrinsic value by the TAHC and South African law underscores a misalignment between the two. This persists regardless of the fact that South Africa is a member of the WOAH and therefore assents to the TAHC. It is imperative that South Africa ratifies the TAHC to ensure a comprehensive animal welfare legal framework that promotes animal welfare and in turn improves animal well-being.

3.3.2 Convention on Biological Diversity (1992)

The Convention on Biological Diversity⁴⁴⁹ was established to ensure the conservation of biological diversity, the sustainable use of its resources and the fair and equitable sharing of

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⁴⁴⁴ Refer to Chapter 2 of this thesis, 2.4.1 Welfare and well-being challenges in the ostrich industry for a discussion on the undercover investigation.

⁴⁴⁵ Refer to Chapter 2 of this thesis, 2.4.1 Welfare and well-being challenges in the ostrich industry for a discussion on how ostriches handle stress in the COI.

⁴⁴⁶ TAHC, art 7.1.5.

⁴⁴⁷ Refer to Chapter 2 of this thesis, 2.4.1 Welfare and Well-being Challenges in the Ostrich Industry.

⁴⁴⁸ Refer to Chapter 2 of this thesis, 2.4.1 Welfare and Well-being Challenges in the Ostrich Industry for a discussion on the undercover investigation.

^{449 1760} UNTS 79, 31 ILM 818 (1992).

benefits that arise from the use of genetic resources.⁴⁵⁰ The CBD does not address animal welfare, specifically wild animal welfare. Notably, however, the CBD's Addis Ababa Principles and Guidelines for Sustainable Use of Biodiversity do call for not only the ethical, but also humane use of these biological resources while recognising intrinsic value.⁴⁵¹

'Sustainable use' under the CBD is the use of components of biological in a manner and rate that does not degrade biological diversity (BD) over the long term, allowing BD to meet the needs and aspirations of current and future generations. 452 The tone of this is very anthropocentric in nature. Biological diversity, 453 in this context, serves as a valuable resource for human beings where the primary condition is to maintain its integrity without degradation, thus enabling continued utilization by future generations. 454 The use of the terms 'sustainable use' and 'sustainable resources' can be an example of this, where economic advantages normally trump environmental issues, 455 benefitting humans only. When looking at wildlife law, this often involves some sort of conservation process where threatened or endangered species are protected as seen in CITES. Non-endangered or threatened species do not benefit from this protection and rather fall under the ambit of biological resources used in an instrumental manner. 456 The anthropocentric tone demonstrates that humans negate the fact that the environment is all encompassing for all, but rather see the environment as a resource to use to make money. The result is that wild animals who are sentient beings are not protected for their intrinsic value as they are seen as resources under the CBD.

As Scholtz states, the CBD is not ignorant to intrinsic value, but rather the CBD acknowledged that BD is conserved for reasons relating to both instrumental and intrinsic value. Scholtz expands this stating that the CBD does not call for the humane and ethical use of BD (mainly in terms of wildlife), highlighting that the instrumental value of wildlife often carries more value than the intrinsic value of wildlife.⁴⁵⁷ Rather, article 2 of the CBD⁴⁵⁸ advocates for a

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⁴⁵⁰ CBD, art 1.

⁴⁵¹ Scholtz W (2020) 73.

⁴⁵² CBD, art 2.

⁴⁵³ The new post 2020 Biodiversity Framework and Targets, CBD/WG2020/5/L.2 5 December 2022 states that Biodiversity is important for human well-being and a healthy plant, as well as economic prosperity. The intrinsic value of the environment has still not been recognised.

⁴⁵⁴ Scholtz W (2020) 74.

⁴⁵⁵ Scholtz W (2020) 77.

⁴⁵⁶ Scholtz W (2020) 77.

⁴⁵⁷ Scholtz W (2020) 79.

⁴⁵⁸ CBD, art 2.

human-centred approach to sustainable development, where BD is safeguarded to meet the anthropocentric needs of both present and future generations.⁴⁵⁹

One of the main aims of the CBD is to conserve biological diversity. Human interests cannot only be pursued, but rather environmental interests, which includes animal welfare.

The COI is affected by the CBD because South African biodiversity law incorporates the CBD. The effects of the COI on biodiversity have been discussed in chapter 2.⁴⁶³ Some of these negative effects incudes land degradation where succulent flora is compromised, such as the case in the Klein Karoo. Predators are often killed to protect the ostriches as ostriches a high economic value. Further the CBD relates to the COI as ostriches in the COI are treated as commodities and seen as a biological resource, exploited for economic gain. The anthropocentric tone applied to the COI has resulted in ostriches' welfare and well-being being compromised to ensure greater economic returns.

3.4 CONCLUDING REMARKS

In conclusion, South Africa's active participation in international organisations and environmental agreements, such as the TAHC and the CBD, underscores its commitment to greater animal welfare, environmental protection and the conservation of BD. These commitments have been entrenched in domestic legislation, notably within the Constitution, through Section 24.

⁴⁵⁹ Scholtz (2020) 79.

⁴⁶⁰ CBD, art 1.

⁴⁶¹ Mwaipopo R 'Significant Social and Economic Aspects of Biodiversity Conservation' UNEP (2016) available at

https://wedocs.unep.org/bitstream/handle/20.500.11822/11349/rsocr_printedition.compressed_Part11.pdf?sequence=12&isAllowed=y (accessed on 8 September 2023).

⁴⁶² NSPCA (2016) intertwined conservation and wild animal welfare as two reflected values.

⁴⁶³ Refer to Chapter 2 of this thesis, 2.5.2 Exposing the Current State of Commercial Ostrich Farming in South Africa, specifically 2.5.2.3 Biodiversity loss for a full discussion on the effects of COI on biodiversity.

However, there are major challenges in the interpretation and application of environmental laws, as they prioritise human interests over the broader ecosystem and animal welfare. This anthropocentric approach places humans needs at the forefront of environmental management and laws, often negatively impacting other forms of BD and animals.

This issue becomes particularly prevalent in the COI, where environmental degradation, biodiversity loss, and a lack of conservation efforts raise concerns in regards to the harmonious collaboration between Section 24(b) of the Constitution and international law. The COI's practices often conflict with the constitutional and international objectives of promoting conservation, sustainable development and environmental justice.

The Constitution when interpreted through the IA, can be extended to recognise the intrinsic value of the individual animal. Constitutional jurisprudence has demonstrated that the courts are open to such interpretations, viewing the Constitution as a tool that can be used to address and enhance animal welfare. This is evident by the intertwined nature of animal welfare and conservation. Constitutional jurisprudence compels all governmental departments and organs of state and holds them accountable to positively realise the link between animals, their welfare and the environment. Thus the Constitution is an instrument that is capable of foresting transformative changes in the farmed animal welfare space.

While the CBD promotes the conservation of biological resources, South Africa's alignment with the CBD greater than their application and adherence to the TAHC. The use of wild animals as biological resources does not recognise the intrinsic value of the individual animal.

In essence, South Africa's legal framework needs to reflect a collaboration between international commitments, constitutional principles, and the challenges that come with reconciling human interests with environmental and animal welfare and health concerns due to their intertwined and interconnected nature.

Constitutional jurisprudence and international law can be used as a tool for the transformation of human-centric legislation that governs animals and their welfare. There is need for a more balanced and harmonised approach to animal welfare, through the transformation of the South African legislative framework. This framework needs to reflect a more caring attitude towards animals and their welfare, legally recognising animals intrinsic value and sentience.

CHAPTER FOUR: A CRITICAL ANALYSIS OF THE LAW AND THE POLICY FRAMEWORK REGULATING COMMERCIALLY FARMED WILD ANIMALS IN SOUTH AFRICA: A FOCUS ON ANIMAL WELFARE AND WELL-BEING

4.1 INTRODUCTION

South Africa has a plethora of legislation protecting wildlife. However, protection is not the reality in practice due to various factors including but not limited to governance issues. Ostriches fall into a lacuna, existing between a domesticated and a wild animal leading to several issues. Legislation has been enacted domestically and partly internationally as South Africa is a signatory to international law instruments in relation to several matters relevant to ostrich farming including the environment, trade⁴⁶⁴ biodiversity⁴⁶⁵ and climate change.⁴⁶⁶ The lack of statistical data, information, transparency and legislation around the commercial ostrich industry (even where legislation exists) is largely a consequence of the deregulation⁴⁶⁷ of the industry in 1993.⁴⁶⁸The challenges faced by the ostrich industry⁴⁶⁹ primarily revolve around the economic incentives and advantages enjoyed by stakeholders involved.

This first part of this chapter consists of a discussion on the general legislation relevant to the COI, from an animal and human centric approach. The author examines the second part of this chapter through relevant environmental legislation and policies relevant. The final section of this chapter explores law and policy that is currently in development. In this chapter, the author seeks to assess the existing legislative framework to determine whether it provides sufficient safeguards for the well-being and welfare of ostriches.

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⁴⁶⁵ CBD.

⁴⁶⁴ CITES.

⁴⁶⁶ UN General Assembly, United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly, 20 January 1994; Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 162; Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 (a detailed discussion is beyond the scope of the research). ⁴⁶⁷ Refer to Chapter 1, 1.1 Background of this thesis for a discussion on the effects of deregulation.

⁴⁶⁸ NAMC (2010) 4.

⁴⁶⁹ Refer to Chapter 2 of this thesis for a full discussion of the effects of the COI in terms of the environment, human health, biodiversity, land usage, zoonotic diseases etc.

4.2 GENERAL LEGISLATION RELEVANT TO THE COMMERCIAL OSTRICH FARMING INDUSTRY.

Welfare issues have been said by Muvhali⁴⁷⁰ to be so prevalent in the ostrich industry as the industry is unique where farming practices have not been established. This shows the inadequacies with the regulatory framework that does not entrench and define what welfare is, nor what correct husbandry practices need to be adhered to.

Laws surrounding animal welfare and sustainability can be looked at twofold; through an animal-centric approach and a human-centric approach. The challenge lies in the fragmented approach where the welfare and well-being of ostriches is not considered in conjunction with the commercial farming practices. The laws are aimed at prioritising human consumption and economic benefit. These two aspects need to be tackled together for a comprehensive approach to welfare and well-being issues in the COI.

4.2.1 Animal-Centric Legislative Approach to Animals

Arguably, the APA read with the Societies for the Prevention of Cruelty to Animals Act⁴⁷¹ are the most animal-centric legislation applicable to the welfare of wild animals, specifically commercially farmed ostriches as ostriches are expressly defined in the APA.

4.2.1.1 Animals Protection Act 71 of 1962

The APA is the primary animal law in South Africa concerning the protection of animals which fall within its ambit. The APA regulates the manner in which ostriches should not be treated as they are included in the definition. The department responsible for the enforcement of the APA was the former Department of Agriculture, Forestry and Fisheries, which was renamed the DALRRD in 2019.

Section 1 of the APA defines 'animal' as "any equine, bovine, sheep, goat, pig, fowl, ostrich, 472 dog, cat or other domestic animal or bird, or any wild animal, wild bird or reptile which is in

⁴⁷⁰ Muvhali P Improving ostrich welfare by developing positive human-animal interactions (unpublished MSc Agric thesis, Stellenbosch University, 2018) 19. 471 Act 169 of 1993 (hereafter referred to as SPCAA).

⁴⁷² Own emphasis added.

captivity or under the control of any person' (own emphasis). This includes domesticated, wild, exotic and indigenous animals. Although ostriches are included in the scope of the APA, the issue is that the APA fails to challenge the institutionalised cruelty of animals. This has the effect that it does not challenge the inherently cruel husbandry practices dominant in the COI, where these practices are not prosecuted as they are accepted as industry norms or rather as 'necessary'.

The APA is a criminal statute imposing negative obligations in relation to animals included in the definition. The APA is largely regarded as a piece of legislation which recognises that animals can experience pain and therefore implicitly recognises the sentience of the animal. The APA is outdated and came into being before the international acceptance of the five freedoms, however the five freedoms can be read into the provisions of the APA. 476

Sections 2(1)(a) – (s) of the APA refer to all the offences in relation to animals, either negligently or intentionally. These offences can be mental or physical in nature. The APA fails to set out positive standards regarding animal use including husbandry practices. Terms present in section 2 are plain in meaning and contains no details on how animal welfare can be improved and animal cruelty avoided. Animals are protected from overdriving, overriding, ill-treatments, neglect, being cruelly beaten, kicked, terrified, etc. Although farmed animals are protected by section 2(1) of the APA positive welfare requirements or standards in terms of housing, transport and slaughter is not outlined.

Although ostriches are included in the scope of the APA, as aforementioned, due to the wording of the APA, it fails to challenge the institutionalised cruelty of animals. The danger here is that terms such as 'cruelly' and 'unnecessary' are vague terms, open to interpretation and legal uncertainty, leading to a dangerous watered-down effect of section 2. The CER has highlighted

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⁴⁷³ APA, section 1.

⁴⁷⁷ APA, section 2.

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⁴⁷⁴ Centre for Environmental Rights (CER) *Fair Game: Improving the well-being of South African wildlife* (2018), 20.

⁴⁷⁵ Bilchitz D & Wilson A.P (2022).

⁴⁷⁶ CER (2018) 20.

⁴⁷⁸ APA, section 2.

⁴⁷⁹ APA, section.

that it is difficult to see how beating, kicking, or terrifying an animals can be done in a cruelty-free manner, even though this is an exception to an offence.⁴⁸⁰

A major peril is the term 'unnecessary', and more specifically what 'necessary suffering' might be. Given that many standards are set by the industry, society or the way in which the animal is used, the result can lead to a dilution of this protection. ⁴⁸¹ In addition, 'unnecessary' is arguably used to defend practices that bring about economic gain. The objective of the APA is to prevent any 'unnecessary' harm to animals, rather it should impose mandatory regulations for the welfare and care of all animals. The term places the onus on the prosecution to prove the lack of necessity of the harm caused. 482 The five freedoms 483 are limited as necessary suffering appears to be permitted under the APA. 484 The assumption is that this condition is permitted in order to allow animal agriculture, where animals are known to suffer in feedlots and abattoirs, as seen as necessary for mass food production. 485 The undercover PETA investigation (described in detail below) shows how these loopholes are exploited. Ostriches suffer due to toe declawing, as it has been deemed 'necessary' by the industry to protect their skin from scarring. The incentive behind this unnecessary suffering is economic gain as the unscarred skin can be sold for more. Ostriches are considered necessary for mass food production, with a significant portion of the meat being exported to meet global demands. Due to their economic importance in the food industry, there are loopholes that permit practices that may cause suffering to these ostriches.

Section 2 of the APA sets out criminal offences which is examined with the COI in mind. In an undercover investigation by PETA in 2015,⁴⁸⁶ it was revealed that ostriches in abattoirs were cruelly beaten, shouted at, were slipping and feathers were plucked while still alive. This behavior arguably, contravenes section 2(a) as the ostriches were subject to beatings, ill-treatment, neglect and they were terrified.

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⁴⁸⁰ CER (2018), 21.

⁴⁸¹ CER (2018), 21.

⁴⁸² CFR (2018) 21

⁴⁸³ Refer to Chapter 2, 2.3.1 The Definition and Significance of 'Welfare' and 'Well-Being' in the Animal Kingdom of this thesis for a discussion on the five freedoms.

⁴⁸⁴ CER (2018) 21.

⁴⁸⁵ CER (2018) 21.

⁴⁸⁶ Refer to Chapter 2 of this thesis for a detailed discussion.

There are arguably several potential offences by the COI when tested against the provisions in the APA. The commercial farming of ostriches has increased the risk of AF as the number of wild birds in captivity increases. Section 2(e) of the APA requires an owner to not keep an animal in an area infected with external parasites. When breakouts in AF take place, the farmer exposes the healthy ostriches to AF, where these healthy ostriches are then culled due to possible exposure. This practice could arguably be seen as torture considering section 2(a). Section 2(f) bars the use of equipment or appliance that causes or will cause injury to the animal. In terms of the COI, toenail declawing is a practice used in the industry 487 where a debeaking machine is attached to the toes and joints of the ostriches, where their nail and part of the joint is removed. Toe declawing has led to ostriches becoming flat footed, their gait changing and they may experience chronic pain. 488 This arguably could directly contravene section 2(a) as this is arguably torture and section 2(f) as this practice is said to be painful to the birds and may cause locomotive issues. This practice can arguably also be declared unnecessary as this is done to protect the skin from scarring in order to sell the leather at a better grade, namely for purely economic reasons.

Offences committed against an animal by a person are dealt with through fines, imprisonment, or a combination of these. The offences in the APA were amended by the Abolition of Corporal Punishment Act. 489 The APA is outdated, even though it has been amended, especially in relation to the offences and penalties. Penalties are vague as no clear amount is set for a fine and imprisonment is restricted to a maximum of 12 months, with or without the option of a fine. 490 Imprisonment is often avoided and sentencing has been described by Kidd M⁴⁹¹ to be extremely lenient and laws pertaining to penalties as 'fruitless'. This is especially the case in farmed animal cruelty cases even where the NSPCA⁴⁹² has laid charges against battery hen farmers and abattoir owners. 493

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⁴⁸⁷ Soft law now bars this practice; however, it is unsure whether this practice has stopped.

⁴⁸⁸ Glatz P (2008) 1.

⁴⁸⁹ 33 of 1997.

⁴⁹⁰ Abolition of Corporal Punishment Act 33 of 1997, s2.

⁴⁹¹ Kidd M 'Sentencing Environmental Crimes' (2004) 11 SAJELP, 53.

⁴⁹² CER (2018) 24.

⁴⁹³ The author has tried to get into contact with the NSPCA since June 2023 in order to see if the NSPCA addressed the welfare concerns on this front. However, the NSPCA has neither responded to phone calls nor emails.

Section 8 of the APA states that any society for the prevention of cruelty to animals (SPCAs) who have the power to search, seize and arrest persons under certain instances. 494 Welfare under the APA falls under DALRRD, the NSPCA, SPCAs as well as other societies for the prevention of cruelty to animals duly authorised. The South African Police Services is responsible for law enforcement, including breaches of the APA, but have their own shortfalls such as lack of expertise and have more 'serious' matters but provide the SPCA with help where needed. 495

Section 10 of the APA allows the Minister to enact regulations, with the last set of regulations that were passed was in 1986. 496 The Minister could create standards for the COI under section 10 of the APA, ⁴⁹⁷ but has failed to promulgate any standards to date.

4.2.1.2 Societies for the Prevention of Cruelty to Animals Act 169 of 1993

The SPCAA 498 regulates the societies that are responsible for the prevention of cruelty to animals and for matters in connection with such. 499 The NSPCA is a society in terms of section 8 of the SPCAA, but there are also independent societies for the prevention of cruelty to animals (these are differentiated from registered SPCAs). 500 The responsibility of enforcing the SPCAA rests on the DALRRD. SPCAs and the NSCPAs are mandated to protect all animals, including those in the commercial farming ostrich industry included through the Farm Animal and Wildlife Protection Units.⁵⁰¹ As aforementioned, ostriches are as defined as an 'animal' in terms of the APA and SPCAA and therefore, the SPCAs and the NSPCA are responsible for enforcing the APA and SPCAA to protect the welfare of commercially farmed ostriches.

Although ostriches who are under control fall under the protection of the SPCAA and APA, the SPCAA lacks strict standards regarding the welfare of animals. Inspectors are unable to

⁴⁹⁵ CER (2018) 31.

⁵⁰⁰ SPCAA, section 8.

⁴⁹⁴ APA, section 8.

⁴⁹⁶ CER (2018) 26.

⁴⁹⁷ Refer to Chapter 5, 5.2 LEGAL RECOMMENDATIONS TOWARDS A LEGISLATIVE FRAMEWORK THAT SUPPORTS OSTRICH WELFARE AND WELL-BEING of this thesis for a discussion on the legal recommendations.

⁴⁹⁸ Hereafter referred to as SPCAA.

⁴⁹⁹ SPCAA.

⁵⁰¹ NSPCA available at https://nspca.co.za/units/ (accessed on 22 April 2023).

consistently assess the extent of mistreatment animals face within established husbandry practices because the SPCAA does not provide clear animal welfare standards. The SPCAA is mainly concerned with the administration of societies and does not publicly⁵⁰² set out guidelines to be followed to assess welfare standards or even define welfare.

The question before the court in *NSPCA* (2016)⁵⁰³ was whether the NSPCA had the power in accordance with its mandate to privately prosecute crimes of animal cruelty. The court declared that in accordance with section 8 of the Criminal Procedure Act⁵⁰⁴ read with section 6(2)(e) of the SPCAA, the NSPCA had the power to institute private prosecutions for crimes of animal cruelty.⁵⁰⁵ The enhancement of the SPCAA through *NSPCA* (2016) is valuable as animal welfare and conservation was entrenched in section 24 of the Constitution.

The NSPCA in 2022 had 9 successful prosecutions, with 110 pending prosecutions and 130 days spent in court.⁵⁰⁶ It is a major concern that there have only been 9 successful prosecutions in one year for cruelty, for an entire country which farms well over 1 billion land animals every year. This is comparison with New Zealand's SPCA who had 17 successful prosecutions between 2021 and 2022 from the 20 charges brought to court.⁵⁰⁷ An escalation in criminal charges was noted by the Wildlife Protection Unit where the APA was contravened.⁵⁰⁸ The ostrich industry is not opaque with their records resulting in the inability to report directly about any criminal prosecutions from ostrich welfare neglect.

4.2.2 Human-centric Legislative Approach to Animals

4.2.2.1 Animals Diseases Act 35 of 1984

The ADA⁵⁰⁹ was enacted to control animal diseases and parasites, for measures to promote animal health and matter connected.⁵¹⁰ The then Department of Agriculture, the now DALRRD, is responsible for enforcing the ADA.⁵¹¹ The ADA was promulgated to protect the

⁵¹⁰ ADA, preamble.

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⁵⁰² NSPCA has these internally but does not share these publicly.

⁵⁰³ NSPCA (2016), 1.

⁵⁰⁴ Act 51 of 1977, section 8.

⁵⁰⁵ NSPCA (2016), 65.

⁵⁰⁶ NSPCA National Council of SPCAs Annual Report (2022), 7.

⁵⁰⁷ SPCA Annual Report 2021-2022 (2022), 15.

⁵⁰⁸ NSPCA (2020) 24.

⁵⁰⁹ ADA.

⁵¹¹ ADA, s1.

farmer, their neighbours and the consumers. 512 Due to the ADAs wide definition of animal, this act is applicable to animals of the phylum vertebrates, which includes ostriches. 513

The then DAFF created certain criteria which needs to be met in order for a disease to be classified as a 'controlled animal disease'. 514 AF is classified as a controlled animal disease. The land owner or manager of the farm has a legal obligation to report any controlled animal disease where an animal is or is suspected to be infected with a controlled animal disease.⁵¹⁵ Landowners or farm managers who do not comply can be found guilty with the penalty being R8000 fine or two years in prison. ⁵¹⁶ Controlled diseases have specific treatment plans that are put into place and need to be conformed to. The TAHC⁵¹⁷ also requires certain diseases need to be reported to the WOAH. The WOAH has some international standards that need to be adhered to.

In order to curb the spread of the disease, the Director⁵¹⁸ may take control of the land to help prevent the spread of the disease for a specified period of time. ⁵¹⁹ This control can include the erecting of fences, the removal of vegetation, the director may enter the land without notice, seize those animals that are infected and may order the slaughter or treatment of the animals. The landowner is entitled to compensation from the state when both infected and uninfected animals are culled, in accordance with section 35 of the ADA. 520

Section 10(1) of the ADA empowers the Minster of the DALRRD to enact regulations to establish an animal health scheme for any controlled purpose or to improve animal health.⁵²¹ There are currently no animal health schemes that have been put in place in order to improve animal health. An animal health scheme, especially in the feat of the COI is drastically needed



⁵¹² Du Pisanie K 'Notifiable and controlled animal diseases in South Africa' (2021) Stockfarm 47.

⁵¹⁴ Du Pisanie K (2021) 47.

⁵¹³ ADA, s1.

⁵¹⁵ ADA, s11(b)(1)(i).

⁵¹⁶ Du Pisanie K (2021) 47.

⁵¹⁷ Refer to Chapter 3, 3.3.1 Terrestrial Animal Health Code of this thesis for a full discussion on the TAHC.

⁵¹⁸ A 'director; is a veterinarian from the Division of Veterinary Services.

⁵¹⁹ ADA, s9(2)(e).

⁵²⁰ ADA, s35.

⁵²¹ ADA, s10(1).

to help eliminate unnecessary ostrich deaths as there is no prescribed treatment for AF, rather the treatment is the culling of infected and uninfected birds. 522

Of notice is the human-centric approach taken towards animal health. This is evident as the ADA primary focus is to protect the producer, the landowners and their neighbours. Due to this lack of urgency, producers often do not report outbreaks, where there is often no response from government and animal diseases are overlooked by the state. Legislation needs to be developed where animal health is the main priority, especially when considering the impact the COVID-19 Pandemic had globally.

4.2.2.2 Meat Safety Act 40 of 2000

The MSA was enacted to promote meat safety and animal products, to establish and maintain national standards for abattoirs, to regulate the importation and exportation of meat and to govern matters connected. This ensures the safety of meat products for human consumption. This applies to the COI as ostriches are slaughtered and processed in an abattoir as well as ostriches are exported, for human consumption. The department responsible is the DALRRD.

'Animal' is defined in the MSA as any animal referred to in Schedule 1 of the Act. 527 Schedule 1 classifies animals into domesticated animals and wild game. The implication is that only animals listed in Schedule 1 are covered by the MSA, where animals that are not included by this list, can be slaughtered without regulatory oversight in terms of this act. Ostriches are covered by schedule 1 in the MSA. 528 This compromises the well-being and welfare of these animals in addition to raising various human and public health concerns.

In the Schedule to the MSA, ostriches are classified as a domesticated animal, which is significant as they are wild game. However, since ostriches are primarily raised using conventional farming methods, they are classified separately from other game animals. ⁵²⁹ This is alarming as this creates two adjacent populations who are treated and governed by different

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⁵²² Fihlani P 'Bird flu empty's South Africa's ostrich farms' 13 January 2021 BBC News available at https://www.bbc.com/news/world-africa-16275280 (accessed on 3 November 2022).

⁵²³ Du Pisanie K (2021) 47.

⁵²⁴ Du Pisanie K (2021) 47.

⁵²⁵ Refer to Chapter 2, 2.6.1 Zoonotic Diseases and Human Health of this thesis for a full discussion.

⁵²⁶ MSA, purpose.

⁵²⁷ MSA, section 1.

⁵²⁸ MSA, schedule 1.

⁵²⁹ GN 2293 *GG* 47024 of 18 July 2022, 38.

policies. Ostriches are partly domesticated but are argued⁵³⁰ to be inapt to adapting to commercial husbandry practices. One danger of domesticating a wild animal is the transferability of zoonotic diseases to humans and other birds.⁵³¹. Due to the high population of ostriches in South Africa, a greater a risk of a transferable strain of AF jumping to humans is greater. The effect on the industry is also worse as most of the ostrich population is situated in South Africa.

Scholtz illuminates the issues with domestic jurisdiction in relation to welfare law and wild animals.⁵³² Scholtz finds that domestic jurisdictions respond to animal welfare issues through anti-cruelty legislation. The issue with this is that this animal welfare legislation regulates domestic and agricultural animals and does not apply to wild animals,⁵³³ highlighting the above. The protection of wildlife is not the focus of laws rather the focus is on the sustainable use and conservation of wildlife.⁵³⁴

Stemming from this, in 2022, the DALRRD has proposed amendments to the MSA for exemptions in terms of section 11(1)(i).⁵³⁵ Section 11(1)(i) states that no animal who may be suffering from a condition that may render the meat unsafe for human or animal consumption, or are dead may not be presented to an abattoir for slaughter.⁵³⁶ The exemption the DALRRD requests is the ability to present game that has been shot outside of an abattoir, to an abattoir for dressing in compliance with the other provisions in the MSA.⁵³⁷ In a submission by the ALRSA, there are a host of issues with this exemption, such as the exemption is in direct conflict with the purpose of the MSA, the manner of death does not seem to be of issue, there is no definition of 'game animal', and the exemption creates food safety, public health, diseases, infections, animal health and other implications.⁵³⁸

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⁵³⁰ Muvhali P (2018) iii.

⁵³¹ See discussion below on how having a 'domestic' wild animal population and a 'wild' wild animal population can cause impacts on biodiversity.

⁵³² Scholtz W 'Introduction' in Scholtz W Animal Welfare and International Environmental Law: From Conservation to Compassion (2017), 1.

⁵³³ Scholtz W (2017) 1.

⁵³⁴ Scholtz W (2017) 2.

⁵³⁵ GG 46959 GoN 2533 of 23 September 2022, 159.

⁵³⁶ MSA, s11

⁵³⁷ GG 46959 GoN 2533 of 23 September 2022, 159.

⁵³⁸ ALRSA 'Submission in respect of exemption from section 11(1)(i) of the meat safety act 2000 (act no. 40 of 2000) for the slaughter of game animals' 23 November 2022 available at https://www.animallawreform.org/wp-content/uploads/2023/01/ALRSA-Meat-Safety-Act-Submission.pdf (accessed on 13 July 2023).

For example, section 11(1)(h) of the MSA, requiring the humane handling of animals presented for slaughter in an abattoir in relation to *inter alia* the transport, off-loading, killing, loading, must be in accordance with the APA. ⁵³⁹ The exemption explicitly excludes game animals from section 11(1)(h). The result is that all animal welfare requirements set by the MSA are rendered ineffective in relation to game animals compromising their welfare. ⁵⁴⁰ Poor welfare leads to poor animal health, impacting on their well-being, which can bring about harm to humans as well. ⁵⁴¹ The primary purpose of the MSA is to ensure food safety for both human and animal consumption. However, the exemption in question raises concerns as it could have a detrimental impact on animal welfare. Moreover, promoting the consumption of game meat, which is not subject to many provisions of the MSA due to the exemption, arguably creates a direct conflict with the fundamental objectives of the regulation. ⁵⁴² The potential risks associated with game meat consumption underscore the need for a careful re-evaluation of the exemption to align it more effectively with the MSA's core mission of safeguarding both food safety and animal welfare. Furthermore, the MSA is arguably contradictory in nature where an animal being presented for slaughter needs to be done so humanely. ⁵⁴³

As aforementioned, in terms of the MSA, animals are prohibited from being slaughtered in any place other than an abattoir, unless it is for personal consumption or cultural or religious purposes, given that this meat is not sold and does not infiltrate the public domain. ⁵⁴⁴ Furthermore, one cannot permit the slaughter of an animal at another place or may not sell or provide meat for either human or animal consumption which has not been slaughtered in an abattoir. ⁵⁴⁵ The exemption would defeat this purpose.

Additionally, the development of abattoir data needs to be enacted to monitor levels of stress, welfare, well-being, air pollution, waste, etc. The lack of information, reporting requirements and transparency in the COI prevents statistics and research on the COI. This is exacerbated by the deregulation of the industry in 1993.⁵⁴⁶ Transparency is important for consumers.

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⁵³⁹ MSA, s11.

⁵⁴⁰ ALRSA (23 November 2022) 17.

⁵⁴¹ ALRSA (23 November 2022) 17.

⁵⁴² ALRSA (23 November 2022), 17.

⁵⁴³ MSA, section 11(1)(h).

⁵⁴⁴ MSA, section 7(2)(a).

⁵⁴⁵ MSA, section 7.

⁵⁴⁶ Refer to Chapter 2, 2.6.1 Consumer Protection Issues of this thesis for a discussion on the dangers of a deregulated industry.

Consumers want meat products where the welfare of the animal promotes their well-being and the where the industry is sustainable.⁵⁴⁷ Legislation must be enacted to reflect a transparent framework where consumers can report and hold abattoirs accountable for animal cruelty.

4.2.2.2.1 Regulations enacted in terms of the MSA

The Minister of Agriculture, now the Minister of DALRRD, has enacted Ostrich Regulations in GN 8622 *GG* 29559 of 2 February 2007⁵⁴⁸ in accordance with section 22 of the MSA. These regulations contain several explicit welfare requirements for ostriches mainly regarding the slaughter of ostriches. Most of the regulations refer to the design of the abattoirs⁵⁴⁹, hygiene compliance⁵⁵⁰, marks and markings,⁵⁵¹ condemned material,⁵⁵² etc. Although provisions require the humane treatment of ostriches, of notice is the lack of definitions for 'humane' and 'welfare'. Of major concern is that the Ostrich Regulations consist of 12 parts and 118 regulations, where Part V is the only part relating the humane handling of ostriches during slaughter. From this it is unsure how these regulations ensure the humane handling of ostriches where it is evident that that ostrich welfare is not the top priority with only 15 regulations directly applying to the ostrich while they are being put up for slaughter.

Part II distinguishes between different types of abattoirs, the number of ostriches each abattoir may process, etc. Something noteworthy, is the use of 'livestock' when referring to ostriches as ostriches are wild animals. While the abattoir requirements encompass various aspects, such as the provision of bathrooms, multiple separated rooms for different functions, sanitisation protocols for vehicles and personnel, and the handling of chillers, it is important to acknowledge that these aspects primarily cater to human needs.

These regulations are intended to regulate the manner in which an ostrich is humanely slaughtered, rather these regulations are human-centred, for example stating that abattoir facilities must adhere to the same requirements as human bathrooms. Requirements that pertain to human workers and surrounding concrete also apply to the ostrich. An example is that the

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⁵⁴⁷ Snyders M (2020) 121.

⁵⁴⁸ Ostrich Regulations in GN 8622 GG 29559 of 2 February 2007, (hereafter referred to as Ostrich Regulations).

⁵⁴⁹ Ostrich regulations, Part II, B, reg 8-reg 31.

⁵⁵⁰ Part II, III and IV, C of the Ostrich Regulations, reg 32-reg 65.

⁵⁵¹ Ostrich Regulations, Part VII, reg 98-reg 102.

⁵⁵² Ostrich Regulations, Part VIII, reg 103-109.

floor must be resistant to wear, not slippery, etc, where the same requirements apply to the humane handling of the ostrich. ⁵⁵³ Requirements for the equipment used to aid in the slaughter of the ostrich contain no provisions that they must ensure a humane death, but rather regulates aspects such as meat contamination from lubricants from the equipment.

Part V of the regulations pertains to the 'humane treatment of ostriches and slaughter process' and contains detailed provisions relating to the handling of ostriches during and after their slaughter. A notable aspect about the Ostrich Regulations is that it provides for the welfare of ostriches just before and during their slaughter. A lacuna exists where standards should be enacted that would institute requirements of welfare for the entirety of the ostrich's actual lifespan: including on the farm, from hatching to slaughter. This is especially the case when the ostrich is commercially farmed for meat.

In accordance with the ostrich regulations, the vehicle must have no sharp objects which could cause harm, the sides of the vehicle need to be solid to prevent jumping and there must be ventilation. ⁵⁵⁴ Ostriches are to be offloaded in a humane, calm manner and many not be picked up. ⁵⁵⁵ Specific mention of not hitting or shouting when herding the birds is made. ⁵⁵⁶ In the event an ostrich is injured during transportation, emergency slaughter is made available. The regulations also ensure that the feathers and carcass are managed after death. ⁵⁵⁷ Although, the undercover investigation by PETA, ⁵⁵⁸ shows direct violations to the ostrich regulations, where no action has taken place. this is not evident in undercover investigation.

Penalties for contravening these regulations for a first-time offender is liable to a fine or imprisonment not exceeding one year and for a second conviction a fine or imprisonment not exceeding two years.

4.2.2.3 Game Meat Strategy for South Africa, 2023

The GMS for South Africa, 2023 seeks to regulate, expand and implement a plan to formalise the GMI in South Africa which will help contribute to biodiversity, conservation, sustainability,

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⁵⁵³ Ostrich Regulations, reg 11.

⁵⁵⁴ Ostrich Regulations, reg 66.

⁵⁵⁵ Ostrich Regulations, reg 68.

⁵⁵⁶ Ostrich Regulations, reg 71.

⁵⁵⁷ Ostrich Regulations, reg 78 – 81.

⁵⁵⁸ Refer to Chapter 2 of this thesis and above for discussion on the undercover investigations by PETA.

food security and economic growth.⁵⁵⁹ The DFFE has confirmed that the GMS has been approved by Cabinet on 28th September 2023, and was published on the DFFE's website on 10 November 2023.⁵⁶⁰

Under the GMS, ostriches are considered as one of the broad categories of game meat.⁵⁶¹ Game meat in the GMS is defined as meat that is wild, free-roaming, undomesticated terrestrial animals that are harvested or culled for commercial purposes.⁵⁶² This negates wild free-roaming animals from the definition of 'animal' in section 1 of the APA.⁵⁶³ The result is that these free-roaming wild ostriches are not protected by the APA, which may result in their welfare and in turn well-being being negatively affected. The DFFE interprets section 24⁵⁶⁴ in the constitutional context, setting out the different roles and responsibilities of the different departments and definitions.⁵⁶⁵ The DFFE fails to acknowledge constitutional jurisprudence ⁵⁶⁶ as there is no mention of the link between animals, their welfare and conservation in terms of the DFFEs interpretation.⁵⁶⁷

Of notice is that the DFFE acknowledges that the game industry lacks of research, data and statistics to accurately inform decision-making, yet the DFFE has made the decision to publish the GMS and increase the GMI. ⁵⁶⁸ In addition, it is clear that the GMS' ultimate goal is economic gain, as the increase in the game market would contribute favourably to economic development, creating more jobs, food security and sectoral transformation. ⁵⁶⁹ It is unsure how these will come about given that there is very limited research on the industry currently and therefore it is unsure how future predications can be made. The GMS acknowledges that

⁵⁵⁹ GMS, 5 and 16.

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⁵⁶⁰ DFFE Publication of the Game Meat Strategy for South Africa for Implementation' 10 November 2023 available at https://www.dffe.gov.za/mediareleases/creecy_gamemeatstrategy2023publication (accessed on 19 November 2023).

⁵⁶¹ GMS, 38.

⁵⁶²GMS, 14.

⁵⁶³ Section 1 of the APA protects ostriches that are under control but does not protect animals that are free-roaming and wild.

⁵⁶⁴ Constitution, s24.

⁵⁶⁵ GMS, 16.

⁵⁶⁶ NSPCA (2016).

⁵⁶⁷ Refer to Chapter 3, 3.2 Constitution of the Republic of South Africa, 1996 of this thesis for a full discussion on constitutional jurisprudence and interpretations.

⁵⁶⁸ GMS, 16.

⁵⁶⁹ GMS, 16.

information available to the public is fragmented and inaccurate in regard to amount of game meat in the informal and formal markets.⁵⁷⁰

The goals present in the GMS ranges from increasing the amount of game meat, creating more job opportunities, etc.⁵⁷¹ Out of the nine goals, two refer to the environment, with one reducing the impact of risks to the environment and biodiversity when growing the GMI and for game meat producers to contribute to biodiversity conservation.⁵⁷² There is no goal to ensure that animals well-being (which has been defined in the GMS) or animal welfare to be upheld and improved. Goal 8 of the GMS⁵⁷³ is to reduce the impact of environmental and biodiversity risks related to the growing of the GMI. The growth of the GMI will ultimately lead to biodiversity loss which has been linked to land use for agricultural purposes. Statistics on current husbandry practices in the GMI and the effects on biodiversity conservation is not available.⁵⁷⁴ Wildlife/game ranching is believed by the DFFE to be an environmentally friendly agricultural practice due to the sustainable use of land and conservation of biodiversity and land.⁵⁷⁵ Rather, the opposite is true. The COI alone has caused a 50% degradation to land in the Klein karoo where endangered succulents are harmed.⁵⁷⁶

A report by Chatham House⁵⁷⁷ indicates that the global food system is the leading driver for biodiversity loss. The food system today has been designed to produce greatest amount of food ever with the lowest cost in mind.⁵⁷⁸ Intensive farming practices have caused the loss of natural habitats to make space for crops, livestock or livestock feed, degradation in soil and ecosystems, use of pesticides and fertilizers, over use of land and water, the use of monocrops, etc.⁵⁷⁹ The global food system is a major contributor to climate change through the GHG emissions which causes an increase in biodiversity loss as habitats are altered.⁵⁸⁰ This results

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⁵⁷⁰ GMS, 17.

⁵⁷¹ GMS 18.

⁵⁷² GMS, 18.

⁵⁷³ GMS, 18.

⁵⁷⁴ GMS, 27.

⁵⁷⁵ GMS, 59.

⁵⁷⁶ Wheeler A (2019) 2.

⁵⁷⁷ Benson T, Bieg C, Harwatt H, et al *Food system impacts on biodiversity loss* (2021) Chatham House, 2.

⁵⁷⁸ Benson T, Bieg C & Harwatt H, et al (2021) 2.

⁵⁷⁹ Benson T, Bieg C, Harwatt H, et al (2021) 2.

⁵⁸⁰ Benson T, Bieg C, Harwatt H, et al (2021) 2.

in species dispersal where new species are brought into contact with other species, causing competition and the possibility of an emerging infectious disease. ⁵⁸¹

In addition, the GMS identifies a number of risks associated with the growing of the GMI. The GMS seeks to mitigate climate change by recovering affected natural systems, ⁵⁸² yet goal 6 ⁵⁸³ wants one million hectares of community owned land to be brought into the natural game meat production. ⁵⁸⁴ This is concerning as the GMS also confirms that the risks associated with intensively breeding wildlife is nuanced and due to the lack of data and statistics, the ecological and evolutionary consequences cannot be quantified or materialised. ⁵⁸⁵ Going further, as reported by the GMS the 'summary of what the risk entails' (the risk being the particular disease), the DFFE only considers the risk to the 'economic aspect of the industry' and the fact that 'the outbreak can have a devasting effects in the wildlife industry' with the effects mentioned being that exportations of wild meat would need to be halted. It is obvious that the transmission of the diseases to other animals, affecting both their welfare and their well-being is not a risk that is taken seriously.

Animal welfare is mentioned once throughout the 100 pages and is identified as a potential risk, yet this is the only risk that is not expanded upon in the GMS. Furthermore, the term 'animal well-being' is defined in the GMI in accordance with the definition provided in NEMLAA. What is noteworthy is that animal well-being has been categorised as a potential risk, albeit in a notably contrasting context. The DFFE highlights that animal well-being is identified as solely a reputational risk to the GMI. This risk arises from the perceived impacts on certain species, potentially leading to disinvestments from the sector due to public outcry. The concern of this assessment of animal well-being is primarily framed within a human-centric perspective, specifically where there is a potential loss of investments. The troubling aspect is that the primary focus is arguably on how the public perceives animal welfare, with the implication that animal well-being itself is not the central concern. This raises questions

⁵⁸¹ Benson T, Bieg C, Harwatt H, et al (2021) 2.

⁵⁸² GMS, 74.

⁵⁸³ GMS 29

⁵⁸⁴ GMS, 29.

⁵⁸⁵ GMS, 74

⁵⁸⁶ GMS 70

⁵⁸⁷ GMS, 87.

⁵⁸⁸ GMS, 87.

about the prioritisation of animal welfare within the framework of the GMS, as the GMS is potentially driven by economic incentives rather than a genuine commitment to the well-being of the animals involved.

The GMS appears to selectively highlight certain facts. For example, the GMS only speaks to two zoonotic diseases that are potential risks in the GMI, being Foot and Mouth Disease and Malignant Catarrhal Fever.⁵⁸⁹ There is no mention of the risks associated with AF, especially in light of the context that South Africa is currently affected by a number of AF infections affecting both wild and domesticated birds.⁵⁹⁰

Moreover, constitutional jurisprudence⁵⁹¹ acknowledges the intrinsic value of wild animals, where this recognition has not been reflected in the GMS. This is evident as the wildlife sector value chain is based on the utilisation of both undomesticated animals and ecosystems and how they produce goods and services for human benefits.⁵⁹² This becomes more evident when examining the eleven listed barriers to entry. Of prominence is the absence of animal welfare legislation was not identified as a barrier.⁵⁹³ Instead, the sole legislative barrier addressed related to the time consuming and costly process in relation to obtain permits for firearms and harvesting. costly and time-consuming process of obtaining permits for firearms and harvesting.⁵⁹⁴

Increasing the GMI is not as sustainable as it is alleged to be, nor will it cure food insecurity, rather, it directly harms our environment. In relation to this, the DFFE has acknowledged that consumers are less interested in consuming red meat, coupled with the need to reduce meat consumption. Additionally, the GMS mentions that there is limited to no data available on the local consumption of game meat, especially in relation to impoverished families. This is in conjunction with consumer preferences that indicates a growing inclination towards

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⁵⁹⁰ Refer to Chapter 2, 2.4.1 Welfare and Well-being Challenges in the Commercial Ostrich Industry and 2.6.1 Zoonotic Diseases and Human Health of this thesis for a discussion on AF.

⁵⁸⁹ GMS, 84.

⁵⁹¹ Refer to Chapter 3, 3.2 Constitution of the Republic of South Africa, 1996 for a discussion on constitutional jurisprudence on animal welfare and intrinsic value.

⁵⁹² GMS, 34.

⁵⁹³ GMS, 56.

⁵⁹⁴ GMS, 56.

⁵⁹⁵ GMS, 55.

⁵⁹⁶ GMS 61.

purchasing meat that is both cost-effective and environmentally sustainable, while also prioritizing animal welfare. 597

Wilson argues that where a government knows of the effects animal agriculture has on the environment in regard to water usage, for example, (especially when regions of South Africa are currently experiencing droughts), the active support and encouragement by government to increase production in animal meat (seen in the GMS) directly contravenes achieving the right to access water. The concern lies in the DFFE's implementation of initiatives to expand the GMI without the necessary data to assess the local demand for game meat. Moreover, it appears contradictory that one of the primary purposes and goals of the GMS is to address food insecurity, when there is a lack of statistical evidence supporting the notion that impoverished families consume and depend on game meat. This is further supported by the fact that the majority of ostrich products are exported highlights the fact that commercial ostrich farming does not and will not adequately provide to cure food insecurity by. The above raises questions about the value and rationale behind promoting the GMS as a solution to food insecurity without a solid foundation of supporting data.

The newly published GMS seems to be flawed in many respects, where the DFFEs mandate to conserve and protect wild animals and ensure sustainable use of resources is in direct contravention with the GMS. 600 The GMS is arguably based on little to no data and statistics, frequently acknowledging the need for additional research in order evaluate the holistic impacts of expanding the GMI and whether there is local demand. There is no concern for animal welfare or well-being, despite the fact that animal well-being is defined in the GMS. Intrinsic value of the wild animals is not considered as economic incentives are seen as the driving force. This raises concerns about the extent to which the GMS engages with, understands and addresses the potential multifaceted impacts that can be associated with growing the GMI.

4.2.2.4 National Health Act 61 of 2003

⁵⁹⁷ GMS, 58.

⁵⁹⁸ Wilson, A.P '(Non) Human(imal) Rights: Dismantling the Separateness in Law and Policy' (2019) 3 Society Register, 53.

⁵⁹⁹ GMS, 61.

⁶⁰⁰ ALRSA (25 September 2022) 28.

The National Health Act⁶⁰¹ was enacted to provide a framework for a uniform national health system where the constitutional obligation to access healthcare is imposed and matters that are connected. The NHA sets out the responsibilities of the local, provincial national spheres of government. The department responsible for the enactment of the NHA is the Department of Health (DoH). Section 24 of the Constitution is explicitly mentioned in the preamble of the NHA, showing the clear connection between a clean and healthy environment and one's actual health.⁶⁰² The application of the NHA to the ostrich industry is due to the industries mercy to AF which may affect human health. The interlink between human and animal health, well-being and welfare is central.

'Communicable diseases' are defined as a disease which results from an infection due to pathogenic agents or toxins which are generated by the infection, either through direct or indirect transmission from the agent source to the host. 603 The WOAH has confirmed that AF is a highly communicable virus which can be transferred through faeces and respiratory fluids. 604 Not only poultry is impacted by AF as wild birds are capable of contracting it. WOAH has reported that sporadic cases of AF in humans tend to increase whenever there is a breakout of AF. 605 Currently at the time of writing in November 2023, the South African poultry industry is ravished with AF, killing thousands of chickens as there are two different strains of AF affecting the industry. 606 This outbreak, along with previous outbreaks, are affecting not only domesticated birds, but wild birds, such as penguins in South Africa 607 and more concerningly, the first cases of AF have been identified in Antarctic penguins, most likely due to migratory wild birds. 608

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⁶¹ of 2003 (hereafter referred to as NHA).

⁶⁰² NHA, preamble.

⁶⁰³ NHA, section 1.

⁶⁰⁴ WOAH 'Avian Influenza' available at https://www.woah.org/en/disease/avian-influenza/ (accessed on 1 May 2023).

⁶⁰⁵ WOAH 'Avian Influenza' available at https://www.woah.org/en/disease/avian-influenza/ (accessed on 1 May 2023).

 $^{^{606}}$ Refer to Chapter 2, 2.6.1 Zoonotic Diseases and Human Health of this thesis for a discussion on the current AF crisis in South Africa.

⁶⁰⁷ Engel K 'Highly Pathogenic Avian Influenza hits African penguins at SANCCOB in Cape Town' 1 December 2022 *IOL* available on https://www.iol.co.za/capeargus/news/highly-pathogenic-avian-influenza-hits-african-penguins-at-sanccob-in-cape-town-17c761ba-9313-41fa-a48f-ddca31abc8af (accessed on 29 October 2023).

⁶⁰⁸ DTE Staff 'H5N1 bird flu could wipe out thousands of penguins across Antarctica' 28 October 2021 *Down to*

⁶⁰⁸ DTE Staff 'H5N1 bird flu could wipe out thousands of penguins across Antarctica' 28 October 2021 *Down to Earth* available at https://www.downtoearth.org.in/video/wildlife-biodiversity/h5n1-bird-flu-could-wipe-out-thousands-of-penguins-across-antarctica-92520 (accessed on 29 October 2023).

The NHAs predecessor, the Health Act 63 of 1997, defined 'intensive animal-feeding systems', which recognised the link between human health and animal health, specifically animals' health who are commercially farmed. The NHA makes no reference to these intensive animal-feeding systems, not necessarily calling for the improvement of animal and human health concurrently. Rather the NHA is more human-centred where zoonotic diseases are only mostly important to combat as they are detrimental to humans.

The calamitous effect of zoonotic diseases has been amplified in the 21st century due to COVID-19.⁶⁰⁹ On average, a new zoonotic disease present in humans every four months.⁶¹⁰ Although many of these diseases originate in wildlife, domestic animals often serve as the link between wild animals and humans.⁶¹¹ The pressing concern highlighted by examining the COI lies in the significant proximity between wild animals, such as ostriches, and humans due to ostriches being commercially farmed for meat. Commercially farmed animals' genes are manipulated with to produce greater production characteristics, rather than disease resilience, ⁶¹² showing that animals health is compromised for economic gain.

For example, the UNEP⁶¹³ underscores the concept of "disease bridges" in the context of the livestock sector where certain pathogens originating in wild birds, infect domestic poultry within the ambit of the agricultural system, ultimately leading to the transmission to humans. This exemplifies the potential pathways through which zoonotic diseases can emerge and spread, necessitating a thoughtful approach to ensure the safety and well-being of both human and animal populations.

Ecosystem changes, climate change, change of land usage, increase in agriculture, are only a few drivers for the spread of zoonotic diseases and what can be deduced, is this stems from human effects on the environment and animals. 614

4.2.2.5 Animals Improvement Act 62 of 1998

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⁶⁰⁹ Refer to Chapter 2, 2.6.1 Zoonotic Diseases and Human Health of this thesis for a discussion on COVID-19. ⁶¹⁰ UNEP *UN Frontiers 2016 Report: Chapter 2; Zoonotic Diseases* (2016) 18.

⁶¹¹ UNEP (2016) 18.

⁶¹² UNEP (2016) 18.

⁶¹³ UNEP (2016) 18.

⁶¹⁴ UNEP (2016) 18.

The Animals Improvement Act⁶¹⁵ was enacted to regulate the breeding, identification and utilisation of genetically superior animals to improve production and performance for the benefit of the Republic.⁶¹⁶ The DALRRD is responsible for the enforcement of the AIA.

The purpose of the AIA alone is evident of the human-centric approach taken to animals. Animals who are genetically superior are exploited for the benefit of the Republic. It can be argued this benefit is economic is nature bolstered by wording such as 'utilisation' and the direct reference to improving production.

Commercially farmed wild animals are not regulated by the AIA⁶¹⁷ unless the Minister has published such in a government gazette. Government Gazette No. 42464 of 17 May 2019⁶¹⁸ amended the AIA which reclassified 32 new wild animal species as landrace breeds. The implication of this is that these animals are now classified as 'locally developed breeds'.⁶¹⁹ The AIA allows for these landrace breeds to be genetically improved⁶²⁰ and manipulated to ensure superior domesticated animals who produce and perform better.⁶²¹

DALRRD released a statement in 2019,⁶²² admitting that this decision was made without scientific research and that this was allowed as wild animals already formed part of the 'farm animal production systems' where the Animal Improvement Act allows for improving the genetic makeup of superior animals.⁶²³ Stemming from this, the DALRRD announced in May 2021 that permits issued for breeding and farming lions would be amended to prohibit breeding and tourism with captive bred lions,⁶²⁴ raising questions as to the welfare of other captive wild animals commercially farmed in South Africa. The implications this could have on the COI is major as they are arguably the largest farmed wild animal industry in the country.

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⁶¹⁵ Hereafter AIA.

⁶¹⁶ Refer to Chapter 3, 3.3.1 Terrestrial Animal Health Code of this thesis to see how the TAHC regulates the health implications that may occur when animals are genetically altered to improve production and performance. ⁶¹⁷ The TAHC applies to both domesticated farmed animals and wild animals, ensuring that to all animal's health and welfare is not compromised for better production and performance.

⁶¹⁸ GN 664 GG 42464 of 17 May 2019.

⁶¹⁹ Somers MJ, Walters M, Measey J, et al (2020) 1.

⁶²⁰ The TAHC, discussed in Chapter 3, 3.3.1 Terrestrial Animal Health Code of this thesis, only allows the genetic manipulation of animals DNA if the manipulation does not cause adverse welfare and health effects on the animal. ⁶²¹ Somers MJ, Walters M, Measey J, et al (2020) 1.

⁶²² Nordling L (2020).

⁶²³ Nordling L (2020).

⁶²⁴ Green J, Jakins C, Waal, L, et al 'Ending Commercial Lion Farming in South Africa: A Gap Analysis Approach.' (2021) 11 *Animals* 2021, 1.

In the case of Endangered Wildlife Trust v Minister of Agriculture, Land Reform and Rural Development and Others; SA Hunters and Game Conservation v Minister of Agriculture, Land Reform and Rural Development and Others, 625 the applicants, Endangered Wildlife Trust (EWT) and SA Hunters and Game Conservation Association (SAHGCA) had approached the high court to set aside the decision by the Minister of DALRRD where a number of wild animals were added to the landrace breeds. The applicants produced evidence showing their concerns about commercially farming wild animals, 626 where the manipulation of genes could result in unreversible genetic, phenotypic and adaptive value and nature of the wildlife in South Africa. 627 The court indicated that the purpose of section 24 of the Constitution is conservation, while the AIAs is aimed at production. The court entrenched that the precautionary and preventative approach needs to be taken when decisions that may affect conservation, as the expansion of the wild animal industry could jeopardise conservation. 628 The court found that this impugned decision had negatively contributed to the principle of conservation seen in NEMA and NEMBA and that the Minister had not considered relevant material or other organs of state.629 The decision, although not based on environmental law, was made using administrative law. The court's decision entrenched that the farming of wild animals did, however, have a negative impact on conservation and was therefore the farming of wild animals is averse to section 24 of the Constitution. The court stated that this was clear from the evidence that the constitutional rights in section 24 of the Constitution of not only the applicant but rather 'everyone' in South Africa, does and continues to be adversely affected by the impugned decision. 630

4.2.3 Environmental Legislation Relevant to the Commercial Ostrich Farming Industry

4.2.3.1 National Environmental Management Act 107 of 1998

The NEMA is South Arica's framework environmental legislation and was enacted to implement section 24 of the Constitution. NEMA's purpose is to provide for a regulatory framework to allow for co-operative, environmental governance to establish principles for decision-making on matters that affect the environment, the institutions that will help achieve

625 (1138/2022;94568/2019) [2023] ZAGPPHC 163 (hereafter EWT (2023), 9).

627 EWT (2023) 29.

⁶²⁶ EWT (2023) 29.

⁶²⁸ EWT (2020) 42.

⁶²⁹ EWT (2023) 42.

⁶³⁰ EWT (2023) 29(i).

this, the authority of organs of state, etc. The Department obligated to enforce NEMA is the DFFE, along with other departments due to NEMAs co-operative governance mechanisms.

The 'environment' in NEMA is defined in an inclusive manner as the surroundings in which humans exists which where all living organisms, which exclusively mentions animal life, the land water and atmosphere of the earth, physical, chemical, aesthetic and chemical properties and all the relationships among and between them, that influences human health and wellbeing.⁶³¹

The applicability of NEMA to the COI is clear, as ostriches are included in the definition of 'animal' under the APA⁶³² and in the definition of 'environment' in NEMA.⁶³³ Furthermore, the APA appears in Schedule 3 of NEMA. As discussed in chapter 2, the farming of wild animals in the COI creates multifaceted problems including harmful animal welfare violations and ecological consequences. 634

NEMA does not provide directly for the welfare or intrinsic value of any animal. A lacuna exists in NEMA as wild animals, specifically ostriches, form a part of the environment and therefore, ostriches should be afforded the same protection and concern in terms of their intrinsic value, akin to the environment. Animal welfare has direct and indirect effects on the relationship between humans, animals and the environment.

The principles contained in section 2 of NEMA are entrenched to protect, promote and fulfil section 24 of the Constitution. These principles have been recognised as important by various court decisions, ⁶³⁵ yet courts fear interpreting these principles to the full extent. Section 2(2) of NEMA calls for environmental management to place people and their needs area the forefront of its concern. 636 Environmental benefits, resources and services must be equitably accessed to meet the basic needs of human beings and to ensure human wellbeing. Non-human life is regarded as 'environmental benefits, resources and services' 637 which must be equitably used to meet the basic needs of human beings and ensure human well-being. 638 The way the

⁶³¹ NEMA, s1.

⁶³² APA, s1.

⁶³³ NEMA, s1.

⁶³⁴ Bilchitz D & Wilson A.P (2022) 433.

⁶³⁵ Fuel Retailers (2007), 66-67.

⁶³⁶ NEMA, s2(2)

⁶³⁷ NEMA, s2(4)(b).

⁶³⁸Murcott M (2017) 5.

environment is referred to in sections 2(4)(a)(v) and (vi)⁶³⁹ reflects an attitude where the environment is a resource for humans to develop, use and exploit.⁶⁴⁰ Environmental legislation is used to protect the environment and its surrounds for the benefit and use of humans and not for its intrinsic value and importance of the environment itself.

Different principles can be interpreted to reflect a more eco-centric approach where the intrinsic value of non-human organisms is valued, separate to the value it provides to humans. Development must be *environmentally*,⁶⁴¹ socially and economically sustainable.⁶⁴² Sustainable development is called for where factors such as disturbance to ecosystems and loss of biological diversity,⁶⁴³ degradation and pollution of the environment must be avoided,⁶⁴⁴ the appeal for the responsible use of non-renewable resources,⁶⁴⁵ and the use of renewable resources that does not harm their integrity. The precautionary approach ⁶⁴⁶ and preventative approach to the environment ⁶⁴⁷ requires a cautious approach to the environment where harms and risk are prevented. It can be argued that the interpretation of these principles affirms that the environment needs protection for its intrinsic value and not seen as a commodity.

NEMA is concerned with biodiversity, conservation and sustainability of the environment but negates that animal welfare plays a pivotal role in these aspects. The obligation to enforce NEMA rests on the DFFE and provincial government departments, who have a mandate for conservation and the protection of the environment (which includes wild animals), while the DALRRD, has a mandate to ensure farmed animal welfare. The result is environmental legislation, NEMA, regulates wild animals who are seen as resources to use and exploit for the benefit of humans. Different departments, discharged with different mandates concerning social, economic and environmental factors under the umbrella of sustainable development, ⁶⁴⁸ results in these departments working in isolation leading to a disconnect between these departments. The consequence is a disjointed approach where sustainability is compromised.

⁶³⁹ NEMA, s2(4).

⁶⁴⁰ Murcott M (2017) 5.

⁶⁴¹ Own emphasis added.

⁶⁴² NEMA, s2(3).

⁶⁴³ NEMA, s4(a)(i).

⁶⁴⁴ NEMA, s4(a)(ii)

⁶⁴⁵ NEMA, s4(a)(v).

⁶⁴⁶ NEMA, s4(a)(vii).

⁶⁴⁷ NEMA, s4(a)(viii)

⁶⁴⁸ All organs of state are bound by s24 of the Constitution and therefore all have an obligation to ensure development is sustainable.

As a result, the DFFE and DALRRD rely on their mandates as a defence when wild animals are treated differently to domesticated animals, which is arguably in direct violation of section $2(4)(1)^{649}$ due to lack of intergovernmental co-operation. Ostriches are stuck in this lacuna, being a farmed wild animal, where the welfare of the ostrich and sustainability of the industry is questionable. This is evident from the DALRRD report⁶⁵⁰ which makes no mention of welfare or well-being but rather refers to the economic value and losses.

Section 2(4)(o) states that the environment is held in public trust where environmental resources must be used to serve public interest. 651 The true sustainability of the ostrich industry is questionable as further discussed in chapter 2.652 The unregulated COI does not serve the public trust as this industry can work in a vacuum that harms ostriches (other animals), humans and the environment. The state is therefore obligated to enact detailed regulations addressing the welfare and well-being of ostriches for the public interest. This is especially since the state is in the process of growing the GMI and that the COI is the largest worldwide, yet less than 1% of the population eats ostrich meat. 653 This arguably leads to a further violation of a NEMA principle, the principle of environmental justice, where environmental impacts must not unfairly discriminate against any person, especially vulnerable and disadvantaged persons. 654 The people of South Africa are unfairly impacted by the environmental impacts of COI as the ostriches are farmed in South Africa, 655 using the environment and available resources, for the final ostrich product to then be exported. South Africans, the environment and the animals bear the brunt of the industry and in return the environmental impacts, all while importing countries reap the ostrich products.

NEMA is outdated but has been recently updated with NEMLAA. The update misses the mark in entrenching the contribution animals make to the environment, their intrinsic value and the negative effects the mishandling of animals can have on the environment. Penalties, fines and convictions are all pursued through criminal sanctions in terms of section 34 of NEMA. Environmental prosecutions are often not successful through the criminal system, especially in

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⁶⁴⁹ NEMA.

⁶⁵⁰ DALRRD (2021).

⁶⁵¹ NEMA \$2(4)

⁶⁵² This will be reflected in the SEMAs below and was discussed in Chapter 2 of this thesis.

⁶⁵³ GN 2293 GG 47024 of 18 July 2022, 39.

⁶⁵⁴ NEMA, s2(4)(c).

⁶⁵⁵ Refer to Chapter 2, 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC) of this thesis for a full discussion.

animal cruelty cases due to weaknesses in the criminal law system. ⁶⁵⁶ The reactionary nature of criminal law is not ideal to deal with environmental concerns. Criminal law reacts to the harm already done to the environment instead of preventing the damage in the first instance, entrenched in the preventative principle in NEMA. ⁶⁵⁷ The time and cost of criminal procedures, burden of proof and lack of awareness are other hinderances of section 34 of NEMA, where animal welfare and well-being are not often pursued. ⁶⁵⁸ Administrative and civil penalties and procedures are also present in NEMA. ⁶⁵⁹

NEMA contains 3 specific schedules which regulates listed activities that require environmental authorisation from competent authorities before any activity can take place. In order to implement environmental management, Section 24(2) of NEMA empowers the Minister of the DFFE to enforce that certain activities require environmental authorisation prior to the listed activities commencement. The Minister promulgated Listing Notice 1 660 which contains certain activities and is applicable to the COI as it regulates 3 activities in relation to ostriches. The first activity is where the development or management of an activity exceeds 6 units of red meat per day. 661 The second is applicable to the development or management of facilities with high concentrations of animals, exceeding 250 square meters of ostriches, or over 50 ostriches per facility. 662 The last activity is where the facility plans to expand the number of units by an additional 50 ostriches. 663

The environmental authorisation process, currently overseen by the Minister of the DFFE should be mandated to incorporate a consultation process with the DALRRD. The collaboration between these two departments is essential as the DALRRD may possess a more comprehensive dataset and understanding of the holistic impacts of inadequate animal welfare. ⁶⁶⁴ Given that these listed activities do not affect the environment in isolation, but the animals as well, it is crucial to ensure that considerations for animal welfare are an integral part

⁶⁵⁶ Kidd M (2011) 269.

⁶⁵⁷ Kidd M (2011) 273.

⁶⁵⁸ Kidd M (2011) 269.

⁶⁵⁹ NEMA, s29(1) and s34(2).

⁶⁶⁰ GNR 983 of 4 December 2014.

⁶⁶¹ GNR 983 of 4 December 2014, activity 3.

⁶⁶² GNR.983 of 4 December 2014, activity 4.

⁶⁶³ GNR.983 of 4 December 2014, activity 39.

⁶⁶⁴ Refer to Chapter 2 of this thesis for a full discussion on the holistic effects of the COI.

of the environmental authorisation process. A collaborative approach would aim to enhance the expertise to address all of the potential implications that may result from the listed activity.

4.2.3.2 National Environmental Management: Biodiversity Act 10 of 2004

The NEMBA is a SEMA to NEMA, which specifically address the management and conservation of biodiversity in South Africa and the sustainable use of biological resources. The management authority is the DFFE. NEMBA is relevant to the COI as NEMBA regulates wild animals, which ostriches fall under.

NEMBA requires that the South African National Biodiversity Institute (hereafter referred to as SANBI) monitor and report to the Minister of the DFFE, is terms of the biodiversity in South Africa, the conservation status of threatened and endangered species and ecosystems and the status of invasive species. 665

Monitoring and reporting solely on the biodiversity of endangered and threatened species, as well as ecosystems, could have adverse effects on the well-being of animals who do not fall under this category. It is of utmost importance to have a comprehensive understanding, reporting, and monitoring of all animals and ecosystems concerning biodiversity to ensure the welfare and health of all living organisms. Additionally, such comprehensive efforts would provide invaluable data on specific species in each area.

Notably, the intrinsic value of animals is currently not given due consideration in NEMBA or even in the Revised South Africa's National Biodiversity Framework for 2019-2024. ⁶⁶⁶ Incorporating the intrinsic value of wild animals into NEMBA is crucial, given NEMBA's anthropocentric orientation where the state assumes custodianship over South Africa's genetic resources. Recognising and valuing the intrinsic worth of all living beings becomes pivotal in fostering a more ethical and holistic approach to wildlife management, encompassing the well-being and significance of all species and ecosystems.

NEMBA can be interpreted as implicitly encompassing welfare considerations. The Threatened or Protected Species Regulations (2007)⁶⁶⁷ falls under NEMBA and identify

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⁶⁶⁵ NEMBA, s11(1)(a).

⁶⁶⁶ GN 2423 GG 46798 of 26 August 2022.

⁶⁶⁷ Hereafter TOPS.

specific species for protection. However, a limitation arises in that only endangered, threatened, or protected wild animals listed under TOPS receive national safeguarding. Other wild animals not listed might have protection under provincial law but lack special preservation status. ⁶⁶⁸ As discussed in the *Lion bones* case above, the court has confirmed that the DFFE has a welfare mandate in respect of wild animals that are commercially farmed and the absence of such would be truly illogical and irrational. ⁶⁶⁹

Additionally, NEMBA is aimed at protecting the ecologically sustainable use of biodiversity of threatened and protected species of plants and animals to ensure the survival of species and environmental integrity. The use of these species requires a permit given under different environmental authorities. Ostriches, whether free-roaming or commercially farmed, are not protected or threatened and therefore are open to human use and consumption. Murcott stresses that NEMBA's approach to conservation is such that these species are for human use and consumption, rather than entrenching intrinsic value on these species due to their contribution to biodiversity.

Conserving biodiversity yields significant advantages, while its depletion leads to a range of adverse outcomes. The term 'sustainable use of natural resources' has been used as a guise to exploit animals, including wild animals. This includes the failure to consider the welfare of animals and their impact on ecosystems. The conservation of biodiversity has several important benefits, and the loss thereof, several harmful consequences. For example, the WHO has strongly linked biodiversity loss with the increase in and prevalence of zoonotic diseases. In contrast, high amounts of biodiversity make it harder for the transmission of a disease. Natural predation, competition and the life cycle in normal habitats reduces the rates in which the vectors and the hosts interact. ⁶⁷² Zoonotic diseases often originate in wild animals, with farmed animals serving as the bridge between wild animals and humans. ⁶⁷³ Zoonotic diseases then reinfect wild animals which causes a greater decline in biodiversity.

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⁶⁶⁸ CER (2018) 37.

⁶⁶⁹ *Lion bones*, 71.

⁶⁷⁰ Murcott M (2017) 5.

⁶⁷¹ Murcott M (2017) 6.

⁶⁷² WHO (2022) 15.

⁶⁷³ UNEP (2016) 18.

⁶⁷⁴ WHO (2022) 15.

In the context of the COI, this is vital due to commercially farmed ostriches impact on the environment and the link between loss of biodiversity, zoonotic diseases, particularly AF and the transmission between wild animals, livestock and humans.⁶⁷⁵ This is especially prevalent where ostriches in South Africa have been selectively bred for better feathers and meat production, resulting in a genetically similar flock, who lack the genetic diversity to be resistant to transmission.⁶⁷⁶ Ostrich's welfare is compromised as they are bred for production characteristics as opposed to disease resistant characteristics.⁶⁷⁷

The farming of wild animals for commercial purposes has various effects on biodiversity and other wildlife. For instance, humans may kill predatory animals that try to prey on farmed animals. This is addressed by NEMBA, ⁶⁷⁸ which permits hunting caracal and black-backed jackal causing livestock losses at night with a granted permit.

Increasingly, wildlife welfare is emerging as an international environmental principle. ⁶⁷⁹ South African biodiversity legislation incorporates principles from international law ⁶⁸⁰ including the CBD. ⁶⁸¹ Scholtz suggests that if intrinsic value of wildlife is affirmed, wildlife welfare will fall under the environmental component of sustainable development. ⁶⁸² Captive wild animals also fall under the jurisdiction of environmental policies as this can have major environmental effects. ⁶⁸³ Scholtz prevailing view is such that conservation and welfare are said to be opposing concepts, where animals are conserved for human use and their welfare is protected for animals intrinsic value. ⁶⁸⁴ Judicial precedence has changed this where in *NSPCA* these two concepts could not be separated as conservation and welfare need to be fought concurrently. ⁶⁸⁵

4.2.3.3 White Paper on Conservation and Sustainable Use of South Africa's Biodiversity

Cabinet approved the White Paper in July 2023.⁶⁸⁶ The DFFE is responsible for the implementation of the White Paper. The White Paper aims to provide a policy framework on

679 Scholtz W (2020) 74.

⁶⁸⁶ GN 3537 GG 48785 of 14 June 2023.

⁶⁷⁵ This was discussed in chapter 2.

⁶⁷⁶ UNEP (2016) 18.

⁶⁷⁷ UNEP (2016) 18.

⁶⁷⁸ NEMBA.

⁶⁸⁰ Refer to Chapter 3, 3.3 International Law of this thesis for a full discussion.

⁶⁸¹ Refer to Chapter 3, 3.3.1 Convention on Biological Biodiversity of this thesis for a full discussion on the CBD.

⁶⁸² Scholtz W (2020) 76.

⁶⁸³ Scholtz W (2020) 75.

⁶⁸⁴ Scholtz W (2020) 80.

⁶⁸⁵ NSPCA (2016)

issues that relate to the conservation and sustainability of biodiversity, the fair and equitable sharing of benefits that arise from use and to ensure that disadvantaged people from past injustices are equally included within the biodiversity-based economy.

Continuing to reap the rewards of South Africa's diverse wildlife hinges on having ecosystems that work well and species populations that are healthy and full of genetic variety, an aspect acknowledged by the DFFE. Along with this, South Africa's biodiversity is said to be affected by climate change, pollution, invasive species, ecological degradation, and various other threats. Of importance was the blatant omission of agriculture, not mentioned throughout the entire White Paper, moreover animal agriculture. This is in light of the DFFE's goal to grow the GMI. 687 Wildlife farming has contributed to the expansion of agriculture causing huge losses on biodiversity. 688 Natural land and ecosystems have been converted to farm pastures where fertilisers and pesticides are known to degrade the soil and pollute the environment. 689 Farms are less diverse with the farming of monocrops and singular livestock breeds.

The White Paper acknowledges that adopting an integrated approach will serve as the primary framework to tackle challenges to biological diversity and establish conservation priorities. ⁶⁹⁰ However, the DFFE did not necessarily adopt this approach as the White Paper is economically charged and does not call for the improvement of animal welfare, which can directly improve biodiversity. ⁶⁹¹ This becomes clear as that the objective of the DFFE to bolster the GMI runs counter to the primary aim of the White Paper, which is centred around the preservation of biodiversity. This contradiction arises from the inherent detrimental impact of animal agriculture on biodiversity and the lack of application of the IA. An important point of consideration follows from this discrepancy: the omission of explicit reference to animal welfare in the White Paper. This becomes particularly significant in light of constitutional legal principles, where both animal welfare and conservation are intertwined values. In addition, the DFFE states that biological diversity is best conserved in the wild, ⁶⁹² yet also calls for the

⁶⁸⁷ Refer to Chapter 4, 4.2.2.3 Game Meat Strategy for South Africa, 2023 of this thesis for a full discussion of the GMI.

⁶⁸⁸ National Academy of Sciences '2 Agriculture's Impacts on Biodiversity, the Environment, and Climate.' in *The Challenge of Feeding the World Sustainably: Summary of the US-UK Scientific Forum on Sustainable Agriculture* (2021), 12.

⁶⁸⁹ National Academy of Sciences (2021), 12.

⁶⁹⁰ White Paper, 11.

⁶⁹¹ This despite the NSPCA (2016) case where the court directly linked animal welfare and conservation.

⁶⁹² White Paper, 11.

commercial farming of wild animals in the GMS. Acknowledging the importance of animal welfare is imperative due to the potential consequences of commercial animal farming on the broader aspects of biodiversity and conservation. ⁶⁹³

In addition, the DFFE claims that 'wildlife ranching and livestock farming are vitally important land uses for both socio-economic development and biodiversity conservation' ⁶⁹⁴ and only recognises these practices as an issue when done intensively or inappropriately. This is inaccurately reflected throughout this research. ⁶⁹⁵. The current food system reflects this clearly, where there are clear effects on the climate, land, transmission of zoonotic diseases, etc. ⁶⁹⁶ Further, farming wild animals for uses other than conservation defeats the ecological sustainability of biodiversity, required by the Constitution where the use of wildlife needs to be ecologically sustainable. ⁶⁹⁷ Using the COI as an illustrative example, this discrepancy is exemplified by the detrimental impact of commercial ostrich farming on the biodiversity of the Klein Karoo region. Evidently, such farming practices have led to a notable 50% rise in land degradation attributed to these activities, ⁶⁹⁸ impacts on predators, the degradation of land and vegetation contributing to the drought in this region, etc. ⁶⁹⁹ Furthermore, it becomes evident that the primary concern of commercial farmers tends to revolve around economic gains, rather than prioritizing the conservation facet inherent in their farming ventures. ⁷⁰⁰

Animals are seen as resources in the White Paper. This can be seen by terms such as 'faunal biological resource' which is attributed to animals in the White Paper. Sentiments to intrinsic value and sentience of nature were removed from the final White Paper, despite appearing in earlier public drafts. This arguably contravenes section 24 of the Constitution as interpreted by the courts. The state is required to ensure 'ecological sustainable development'. This means that development must be environmentally inclined assessing social, economic and environmental impacts. The DFFE, in the impact statement, finds that biodiversity and

⁶⁹³ Refer to Chapter 2, 2.5.2.3 Biodiversity Loss of this thesis for a full discussion.

⁶⁹⁴ White Paper, 13.

⁶⁹⁵ Refer to Chapter 2 of this thesis for a discussion on the effects intensively farming wild animals can have on the environment, people and other animals.

⁶⁹⁶ Refer to Chapter 4, 4.2.2.3 Game Meat Strategy of South Africa, 2023 of this thesis for the discussion on the current global food system and the implications.

⁶⁹⁷ ALRSA (11 November 2022) 11.

⁶⁹⁸ Wheeler A (2019) 2.

⁶⁹⁹ Refer to Chapter 2, 2.5 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC) od this thesis for a discussion on the impacts of biodiversity loss. ⁷⁰⁰ Wheeler A (2019) 2.

conservation would create a competitive advantage for the wildlife-based economy as this will enable significant contribution to the economy. However, this is not necessarily the case. The result is that the environment is not protected for wild animals, leading to habitat loss, and where current and future generations do not benefit from this economic approach. Exploitation is justified by the blatant disregard of values, section 24 of the Constitution and the protection of animals, biodiversity or the environment.

As discussed previously, the unsustainability of the COI is evident when assessing the goals and problem statement prevalent in the White Paper. The problem statement recognises the lack of transformation in the biodiversity sector, the limited participation in ingenious and disadvantaged communities, the lack of access to and sharing of benefits derived from biodiversity, etc.⁷⁰⁴ The farming of ostriches has arguably caused environmental injustices, contravening the principle of environmental justice in NEMA and section 24(b)(iii) of the Constitution, requiring ecological sustainable development for present and future generations. This is in light of the fact that majority of ostrich products are exported, even though the ostriches have been farmed and processed in South Africa.

4.2.3.4 National Environmental Management Laws Amendment Act 02 of 2022

The National Environmental Management Laws Amendment Act⁷⁰⁵ was enacted to address and correct certain provisions and clarify definitions in NEMA and the SEMAs. NEMLAA is to be enforced by the DFFE. NEMLAA was published in June 2022, where the bulk of the provisions only came into effect on the 30th of June 2023.⁷⁰⁶ NEMLAA was enacted to clarify and correct measures related to the making and adoption of environmental management processes and set new requirements in relation to application for environmental authorisation

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⁷⁰² Expressly mentioned in section 24 of the Constitution.

⁷⁰⁵ Hereafter NEMLAA.

⁷⁰¹ White Paper, 11.

⁷⁰³ ALRSA (11 November 2022) 6.

⁷⁰⁴ White Paper, 10.

⁷⁰⁶ DFFE 'Bulk of the provisions contained in the National Environmental Management Laws Amendment Act, 2022, proclaimed' 30 June 2023) available at https://www.dffe.gov.za/mediarelease/nationalenvironmentalmanagement_lawsamendmentactproclaimed (accessed on 21July 2023).

and waste management licenses.⁷⁰⁷ Definitions in relation to waste were declared unconstitutional on the 26th of June 2023.⁷⁰⁸

NEMLAA welcomes the explicit definition of 'well-being' in respect of animals. It provides for the holistic circumstances and conditions of an animal which considers the physical, phycological and mental health, the quality of life and the ability to cope with its environment. This definition has limited use. Well-being was not included in NEMA, but rather NEMLAA amended 'well-being' under NEMBA, a SEMA. If NEMA was utilised, animal well-being would be a factor to consider in all environmental legislation and not just when referring to NEMBA. No guidelines are given to determine an animal's quality of life, ability to cope or animal health. The limitation of this definition is arguably greater as NEMBA views animals as biological resources for human use and exploitation. Although, progress has been made with the explicit inclusion of animal well-being; the intrinsic worth and sentience of all animals was not recognised.

The consideration of animal well-being in management, conservation and the sustainable use thereof, was added to help achieve the objectives of NEMBA. Of great potential is section 46 of NEMLAA which provides the Minister of the DFFE with the authority to prohibit certain activities that may negatively impact on the well-being of an animal.⁷¹¹ One potential is that the Minister can determine that farming wild animals is unsustainable and negatively effects the animal's well-being as well as does not aid in conservation.⁷¹² The Minister has the authority to enact regulations in relation to the monitorisation and compliance with and enforcement of norms and standards.⁷¹³ Animal well-being can be regulated for all farmed animals, coupled with clear guidelines with the enactment of norms and standards by the Minister.

Section 45 of NEMLAA, amends section 3 of NEMBA⁷¹⁴, allowing for the Minister to make regulations which specifies which species and under what circumstances the state may remain

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⁷⁰⁷ DFFE (30 June 2023).

⁷⁰⁸ DFFE (30 June 2023).

⁷⁰⁹ NEMLAA, s43(c).

⁷¹⁰ This will be discussed in detail below.

⁷¹¹ NEMLAA, s46.

⁷¹² Refer to Chapter 2 of this thesis for a full discussion.

⁷¹³ NEMLAA, s50.

⁷¹⁴ This section concerns the states trusteeship of biological diversity.

control over 'faunal biological resources' that escapes from land under the state's control.⁷¹⁵ Of critique is the refence to animals as 'faunal biological resources' where intrinsic value is not bestowed upon them and arguably defeats the statements made in the *NSPCA* (2016) case and previous others as the term 'resources' is not aligned with recognition of intrinsic value.

4.2.3.5 National Water Act 36 of 1998⁷¹⁶

The National Water Act⁷¹⁷ was enacted to reform the riparian rights-based water system and ensure equitable access for all. The department responsible for enforcement is the Department of Water and Sanitation. The NWA is applicable to the COI as the COI uses water in both the farming and processing of ostriches in South Africa.⁷¹⁸ The water is held in a public trust⁷¹⁹ where the government has an obligation to ensure the compliance and enforcement of the NWA and prevent pollution. Listed activities⁷²⁰ are regulated by the act and includes animal agriculture. In addition, Section 27 of the Constitution discharges the right to have access to sufficient water. Section 27 and section 24 are interlinked due to the dependent nature of rights in the Bill of Rights and the vital role of water in the environment.⁷²¹

4.2.3.6 National Environmental Management: Air Quality Act 39 of 2004⁷²²

The National Environmental Management: Air Quality Act⁷²³ is enforced by the DFFE. NEMAQA was enacted to regulate air quality to protect the environment. NEMAQA is relevant to the ostrich industry as the industry is known to contribute greatly to GHG emissions due to a high number of exportations and transportation of ostrich feed.⁷²⁴ NEMAQA is

⁷¹⁵ NEMLAA, s45.

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⁷¹⁶ Due to the limited scope of this research and lack of available information, the National Water Act cannot be critically analysed.

⁷¹⁷ Hereafter NWA.

⁷¹⁸ Refer Chapter 2, 2.5.2.3 Biodiversity loss and 4.2.3.7 National Environmental Management: Waste Act 59 of 2008 of this thesis for a discussion on water usage by the COI.

⁷¹⁹ NWA, s3.

⁷²⁰ NWA, s37(1) and s38(1).

⁷²¹ *Grootboom*, para 23.

⁷²² A limited analysis will be done due to the limited scope of this research. See below for discussion on the Climate Change Bill.

⁷²³ Hereafter NEMAQA.

⁷²⁴ Refer Chapter 2, 2.5.2.2 Greenhouse Gas Emissions and 2.5.2.3 Biodiversity Loss of this thesis for a full discussion.

anthropocentrically charged seen in the preamble where air quality in the 'Republic is not conducive to a healthy environment for the people'. 725

Section 21 of NEMAQA requires the Minister to enact regulations regulating the listed activities which are said to have a detrimental effect on human health and the environment. There is no regard given to animal health and welfare. Rather, the regulations only reference to animals is a listed activity known as 'animal matter processing'. Here the only requirement is where meat is processed, the best practice measure must be used to avoid offensive odours causing air pollution.

A major lacuna exists concerning agriculture and air pollution. This is because research⁷²⁸ shows there is a 'gap between science and policy'. The Highveld and Waterberg/Bonjanala Priority Area Air Quality Management Plans for instance have recorded that agricultural dust is one of the major contributors to air pollution.⁷²⁹ This would directly affect the ostrich's welfare as research⁷³⁰ shows air pollution is a stressor on animals, creating health and safety issues which could lead to adverse effect on their overall welfare. This has been further confirmed by the DFFEs report⁷³¹ where they acknowledged that animal health suffers from air pollution. However, agriculture is not a listed activity, although has been identified by the DFFE⁷³² as a significant contributor to emissions. Air pollution must be monitored in the agricultural sector to ensure the health and welfare of the animals housed in these areas is considered.

4.2.3.7 National Environmental Management: Waste Act 59 of 2008

The National Environmental Management: Waste Act⁷³³ forms the regulatory framework in relation to waste to protect the health of people and the environment, including animals.⁷³⁴ Waste in the agriculture, food preparation, processing as well as leather waste is all governed

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⁷²⁵ NWA, preamble.

⁷²⁶ NEMAQA, s21(1)(a).

⁷²⁷ GN 284 *GG* 33064 of 31 March 2010, reg 19.

⁷²⁸ Tshehla C, Wright CY (2019) 3.

⁷²⁹ Tshehla C, Wright CY (2019) 3.

⁷³⁰ Ni J, Erasmus M & Croney C, et al (2021) 1.

⁷³¹ DFFE Chapter 10: Air Quality 190.

⁷³² Department of Forestry, fisheries and the environment *Chapter 10: Air Quality* 183.

⁷³³ Hereafter NEMWA.

⁷³⁴ Department of Environmental Affairs *A user friendly guide to the National Environmental Management: Waste Act 2008* (2011) 8.

by NEMWA. NEMWA is enforced by DFFE. NEMWA's relevance to the COI lies in the processing of ostriches for human consumption, leather, and related products. Consequently, NEMWA regulation is necessary for the COI to ensure appropriate waste disposal practices.

Animal waste in terms of NEMWA is animal manure, abattoir waste and animal waste, yet no description is given in respect to animal waste. A waste management licence is required to process animal waste where a basic assessment process under the environmental impact assessment regulations under section 24(5) of NEMA is required. 735

The COI is applauded for the lack of waste when it comes to processing the ostrich. All aspects of the ostrich are used and is arguably an industry with the least amount of waste⁷³⁶ as every by-product is utilised.⁷³⁷ The waste that is generated is mainly during the primary production phase, usually water waste, when feeding and watering the ostrich, cleaning equipment, etc. Feed bags are reused to minimise waste. 738 Waste is therefore not produced by by-products, rather the production process contributes to waste through water use and exportation emissions. 739

4.2.3.8 Game Theft Act 105 of 1991

The Game Theft Act⁷⁴⁰ is responsible for growing the game industry in South Africa through the privatisation of game animals. This entrenches the property status of animals and emphasises economic value. The GTA was enacted to combat the theft of game, the unlawful hunting, catching and taking possession of game. The DFFE is discharged with the enforcement of the GTA as opposed to co-operative governance with the DALRRD. The application of the GTA to the COI is such that ostriches are game animals who are commercially farmed. The result is that game that is commercially farmed is exposed to protection from environmental policies, instead of the mandate falling on the DALRRD, which includes (for the benefit of human use) farmed animals. As a result, wild free-roaming ostriches are regulated by the DFFE while commercially farmed ostriches are regulated by the DALRRD.

⁷³⁵ NEMWA, section 19.

⁷³⁶ NAMC (2010) 11.

⁷³⁷ Barend-Jones and Pienaar (2020) 28.

⁷³⁸ Barend-Jones and Pienaar (2020) 28.

⁷³⁹ These issues have been discussed in Chapter 2 of this thesis.

⁷⁴⁰ Hereafter the GTA.

In the MSA, 'game' is defined as all game that is kept or held for commercial or hunting purposes which includes but is not limited to the skin, meat, carcass, of the game. The GTA bestows economic value on game where game is farmed be for commercial or hunting (arguably another economic incentive) purposes. Of significance is that the GTA categorises game animals as legal objects or property. Wild animals have been completely commodified by the GTA where game owners and the state can enforce ownership over a wild animal by presenting a certificate.⁷⁴¹

The GTA, along with other environmental legislation, gives landowners the right to hunt and allow others to hunt on their land. Dangers linked to this is that private ownership of land does not always foster a 'ecological stewardship' over their land. Landowners may decide rather to dedicate their land to commercially farming wild game for monetary value.

The GTA governs how humans can manage game animals without needing to exert direct physical control over them. Consequently, humans gained the ability to possess wild animals by enclosing them within fences. Certainly, one might argue that if an individual lacks the means to exercise direct physical control over a wild animal, the necessity of owning and profiting from such an animal becomes questionable. The fact that game animals cannot be readily managed through physical handling underscores their limitations in adapting to the demands of commercial farming practices.

The fencing of large natural habitats enclosed with wild game has detrimental effects and degrades the land in which the wild animal is kept and effects the ecosystems in which the animals cannot reach. This is evident in the ostrich industry where the commercial farming of ostriches on Karoo veld has caused a 50% in land degradation.

Further, the GTA is extremely short and outdated, enacted during the apartheid era. There are no clear regulations in terms of plot size, care and welfare of game animals, provisions that require specialised husbandry knowledge when caring for game, nutrition guidelines or anticruelty protections, etc. Further the sustainability and effect of commercially farming game on the environment need not be considered. The dangers of a largely unregulated game industry

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⁷⁴¹ CER (2018) 42.

⁷⁴² CER (2018) 42.

are alarming as these could have major effects on conservation and biodiversity in South Africa. 743

4.2.4 Regulations, Softer Laws and Standards

4.2.4.1 Livestock Welfare Coordinating Committee Standards

The Livestock Welfare Coordinating Committee Standards⁷⁴⁴ advises the government on livestock welfare policies in relation to certain livestock.⁷⁴⁵ Some codes have been developed in respect of sheep, pigs, cattle and goats.⁷⁴⁶ There are currently no codes in terms of ostriches and ostriches are not included in the definition of 'livestock' even though ostriches are non-ruminant livestock.⁷⁴⁷

4.2.4.2 South African Bureau of Standards

The South African Bureau of Standards⁷⁴⁸ are soft voluntary industry standards. This means these standards have no legally binding effect unless these standards are incorporated into legislation or permits. The standards regarding the farming of ratites needs to be purchased and are not the most cost effective. The standard applicable to commercial ostrich farming is SANS 994-1: 2022 Edition 1.1.⁷⁴⁹ For purposes of this research, the author has purchased these independently and licenced exclusively, License ID: 113D-UV6U-ICNV. This standard sets the basic requirements for the holding and farming of ostriches in commercial farming, aiming to promote sustainable farming practices that encompass animal welfare, environmental preservation, social approval, economic development, and optimal production.⁷⁵⁰

Arguably, these standards are a result of the inaction of the South African government to regulate matters in terms of animals.⁷⁵¹ Wilson⁷⁵² emphasises the lack of sanction and non-

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745 Wilson A.P (2019) 43.

⁷⁴³ Refer to Chapter 2, 2.5 ENVIRONMENTAL ISSUES PREVALENT IN THE COMMERCIAL OSTRICH INDUSTRY (ENVIRO-CENTRIC) of this thesis for a discussion on the negative effects of commercially farming wild animals, specifically the COI.

⁷⁴⁴ Hereafter LWCC.

⁷⁴⁶ LWCC 'Species' available at http://lwcc.org.za/approved-codes/species/ (accessed on 5 May 2023).

⁷⁴⁷ The Agri Handbook 6 ed (2017).

⁷⁴⁸ Hereafter SABS.

⁷⁴⁹ Hereafter referred to as the Standards.

⁷⁵⁰ Standards, s1.

⁷⁵¹ Wilson A.P (2019) 42.

⁷⁵² Wilson A.P (2019) 43.

compliance in these standards together with the fact that they are difficult to access and need to be purchased, and where copyright laws restrict the circulation of standards. The result is a self-regulated industry and where the independence of the industry 'provides a false sense that there is sufficient regulation', where actual animal protection is slim.⁷⁵³

These standards are founded upon the principles of the five freedoms and are described as developing to align with advancements in ostrich knowledge, modifications in husbandry practices, and the evolving understanding of the relationship with ostrich welfare.⁷⁵⁴

A controlled disease is defined as a disease on WOAHs list of a-diseases. ⁷⁵⁵ The issue with this is the Standard refers to the OIE and not the WOAH. This shows the ostrich standards have not been updated to reflect that of the WOAH.

Throughout the standard, sections lack detail to the and are vague in nature and noticeably makes referees to other pieces of legislation throughout. This vagueness raises questions about how these standards can be effectively implemented in practice. As an illustrative example, the forward states that where reference is made to a holding facility that must provide appropriate shelter for the birds in accordance with national legislation, the national legislation referred to is the APA. Of issue here is the fact that the APA does not prescribe detailed definitions on what constitutes an 'appropriate shelter for the birds'. Measures must be made by the farmer for the proper management and husbandry practices of ostriches to prevent stress. ⁷⁵⁶

Abnormal behaviour patterns must be monitored as an indication of stress which can affect ostrich health, these sources of stress must be managed, the ostriches must not be kept alone or grouped in high stocking densities, the birds must be allowed to exhibit natural behaviours and the holding facility must allow freedom of movement. Farmers are required to minimise stress to the birds.⁷⁵⁷ 'Natural behaviour' is used twice throughout the standards, yet the standards specifically for the commercial farming of ostriches, does not prescribed or mention the natural behaviours akin to ostriches. Therefore, it is unsure how farmers are to identify the natural behaviours and to meet their needs in the demanding production system space.

⁷⁵⁶ Standards, s4.1.4.

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⁷⁵³ Wilson A.P (2019) 43.

⁷⁵⁴ Standards, introduction.

⁷⁵⁵ Standards, s3.1.

⁷⁵⁷ Standards, s4.1.5.(c).

The use of natural veld must be considered where ostriches are not to deteriorate the natural resources due to continuous or excessive grazing and farmers must comply with national legislation, being the Conservation of Agricultural Resources Act. This act was enacted in 1983 and is extremely outdated and once again, vague. It's prescribed that grazing on natural land is permitted, granted the natural veld is not degraded. Natural veld destruction is known to take place in the COI. Routine inspections are required to ensure the conservation conditions of the veld is not compromised. No reference is given as to who is responsible for these inspections, how often these inspections must take place, record keeping of these inspections or even the steps to take if the inspection finds degradation of veld and soil. The cross-referencing of the Standards to vague national legislation almost makes these standards redundant.

The holding facilities for ostriches designated for various purposes vary. Ostriches intended for export and eventual slaughter should not be raised on natural veld. 762 50 birds are allowed per hectare, equating to 124 acres. NAMC recommends 12.36 acres for one ostrich. 763 If the NAMC model is followed, the standards 50 birds would actually require 618 acres of land, as opposed to prescribed 124. This decision is arguably primarily driven by economic considerations, as it is more cost-effective to rear ostriches in such a manner. By minimizing expenses related to living conditions and management, greater profits can be gained from exports. Holding facilities for breeder birds are different where breeding pairs or trios who are to be kept in camps not less than 0.62 acres.

Looking at this in accordance with the Standard, the Standard overstocks the carrying capacity of the veld. Large camps have been identified in the Standard⁷⁶⁴ to create large dusty areas which are prone to water and wind erosion. These establishment of these camps is said to be planned in conjunction with the Department under the national legislation, which is DFFE as obligated under NEMA. The DFFE does not have a mandate to ensure the welfare of commercially farmed ostriches under NEMA, as ostriches are incorrectly classified as

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⁷⁵⁸ Section 4.3.1.2. This national legislation is the Conservation of Agricultural Resources Act 43 of 1983.

⁷⁵⁹ Conservation of Agricultural Resources Act 43 of 1983, s1.

⁷⁶⁰ Refer to Chapter 2, 2.5.2.3 Biodiversity Loss of this thesis for a full discussion on the effects the COI has on natural veld.

⁷⁶¹ Standards, s4.3.1.5.

⁷⁶² Standards, s4.3.2.1.

⁷⁶³ NAMC (2010) 7.

⁷⁶⁴ Standard, s4.3.2.3.

livestock. Agricultural dust is known to cause stress to farmed animals⁷⁶⁵ which negatively affects their welfare, compromising their well-being. Contributing further to this is the fact that the Standards prescribe that birds for exportation must be quarantined for two weeks, where these quarantine camps are acknowledged to create erosion. This defeats the purpose of cross-referencing to the Conservation of Agricultural Resources if erosion is permitted.

Section 5 deals with the handling of ostriches and requires that ostriches must be handled with care to prevent suffering and injuries, the handling of ostriches must take place in low light and noise to minimise stress and where husbandry practices should be planned to ensure ostriches are handled for a little as time as possible. 767 Personnel handling the birds must also be trained there are no guidelines as to how personnel should be trained or where resources can be accessed.

Farms that are registered for exportation must have a biosecurity plan put in place including a hygiene programme. It is only a recommendation that farms who are not registered for export have a bio-security plan. 768 This is concerning given the effects non-exporting farms could have on exporting farms' ostriches' welfare and health due to AF breakouts. The standards allow for the nails of the ostrich to be cut. 769

Some provisions in the standard are self-conflicting, for example, the requirement that the access to plants, grasses, twigs, sticks, amongst others, must be minimized in holding facilities to prevent possible impaction in chicks. ⁷⁷⁰ This deprives the ostriches from the ability to graze, one of their normal behaviors which is required to be allowed by this Standard. Another example, care must be taken when ripe feathers are harvested to ensure no discomfort to the ostrich. 771 However, only ripe feathers may be harvested after the death of the ostrich, 772 so the question is, how does a dead ostrich feel discomfort?

The above reflects that although the standards do speak to the welfare and care of handling, raising and breeding ostriches and chicks, the standards only apply to registered farms that

⁷⁶⁵ Refer above to 4.2.3.6 National Environmental Management: Air Quality Act 39 of 2004 of this thesis for a discussion on the stress agricultural dust has on animals welfare and well-being.

⁷⁶⁶ Standards, s4.3.2.6.

⁷⁶⁷ Standards, s5.

⁷⁶⁸ Standards, s6.1.1.

⁷⁶⁹ Standards, s6.1.3.

⁷⁷⁰ Standards, s 6.4.1.

⁷⁷¹ Standards, s6.8.2.3.

⁷⁷² Standards s6.8.2.3.

intend to export ostriches or ostrich products. This means farmers are able to choose to adhere to these standards or not. Further no fines or penalties are included in the standards to ensure compliance and enforcement. Further, despite the Standards being published in 2022, the sources relied upon date back 1999 and 2003 and are outdated. The concern raised is about the relevancy and currency of the information used to revise the standards, especially since these are the current industry standards. It is alarming as these standards are outdated and unenforceable which has the ability to undermine ostrich welfare and in turn their well-being.

4.2.4.3 South African Ostrich Business Chamber Code of Conduct

The South African Ostrich Code of Conduct⁷⁷³ was created to address commercial ostrich farming by the South African Ostrich Business Chamber (SAOBC), a non-profit organisation. The SAOBC represents registered ostrich farms, all approved export tanneries and abattoirs.

Although the soft law seems idyllic, in reality the SAOBC was essentially founded to represent the producers and processors of ostrich products and ostriches, not for the improvement of ostrich welfare. Despite the fact that the humane treatment of ostriches, biodiversity protection and sustainable farming practices are required by the Code, this is implemented to ensure the continuous improvement of volume, quality and production of ostrich products and processes.⁷⁷⁴ Commercial gain is the bottom line as the goal is to increase production, awareness and the consumption of ostriches and their products.⁷⁷⁵

The Code concerns the welfare of ostriches throughout their life cycle. These standards were developed by the SAOBC with input from ostrich farmers, consumers, non-governmental organisations and animal welfare and environmental management experts. ⁷⁷⁶ Due to this being soft law, this Code has not been incorporated into South African national law and therefore only applies to the registered farms and tanneries, is not enforceable and there are no penalties for non-compliance.

⁷⁷³ Hereafter the Code.

^{774 &#}x27;South African Ostrich Business Chamber' *South Africa* available at https://southafrica.co.za/south-african-ostrich-business-chamber.html (accessed on 5 May 2023).

⁷⁷⁵ South African Ostrich Business Chamber' *South Africa* available at https://southafrica.co.za/south-african-ostrich-business-chamber.html (accessed on 5 May 2023).

⁷⁷⁶ South African Ostrich Business Chamber 'Ostrich Production – Requirements' (2019) SAOBC 1001:2019 available at http://lwcc.org.za/wp-content/uploads/2021/05/SAOBC-1001-2019-Ostrich-Production-Requirements-Version-1-0-20191112.pdf.

The introduction makes mention of ensuring that standards are constantly developed to improve animal welfare and environmental factors. Environmental management is also addressed in the Code. When ostrich farms are established, environmental impacts need to be assessed in terms of resource availability, changes to land, water, air and waste treatment which must be managed and monitored.⁷⁷⁷ These environmental practices must be cognisant of biodiversity and conservation.⁷⁷⁸

Coupled with environmental factors that will affect the ostrich and the environment, the Code recognises physical and psychological harm. ⁷⁷⁹ Husbandry practices such as toenail declawing, used to prevent any damage to the ostrich skin, is outlawed from December 2022.

The Code requires that the handling of ostriches needs to be in manner where no pain or suffering is experienced. This is throughout the entire lifecycle of the ostrich from the incubation process to the stunning and slaughter process. 780 Concern is even given to the welfare of the ostrich once the ostrich leaves the farm, ensuring good welfare practices for ostriches. The hatchery process for the incubation and hatching of eggs is proficient. Optimal conditions are addressed where incubated eggs must be watched closely to turn, remove infertile, dead or rotten eggs, not force the hatching of eggs, etc. 781 Toenail cutting is prohibited on ostriches of any age, but only as of 31 December 2022. The LWCC released a document 782 where Englebrecht recognised that toenail cutting is painful as ostriches are withdrawn during clipping. Toenail cutting causes nerve and tissue damage, as their claw and a portion of their joint is removed, sometimes causing behavioural changes. 783 This practice is carried out to reduce skin damage, resulting in economic gain as leather is sold at better price. Ostriches' toes can heal abnormally causing sensitivity and possible phantom limb pain. 784 The locomotion of ostriches is compromised as they walk on their toes and the removal of such could cause them to slip. Although the Code does prohibit this, it is only a voluntary standard and therefore not

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⁷⁷⁷ The Code, clause 13.

⁷⁷⁸ The Code, clause 13.4

⁷⁷⁹ Code, clause 6.2.1.

⁷⁸⁰ Refer to Chapter 2, 2.4.1 Welfare and Well-Being Challenges in the Ostrich Industry of this thesis for a discussion on the welfare challenges present in the COI.

⁷⁸¹ Code, clause 7.

⁷⁸² LWCC available at http://lwcc.org.za/wp-content/uploads/2014/08/Toe-nail-clipping.pdf (accessed. on 5 May 2023).

⁷⁸³ Animal Liberation 'Emu and Ostrich Farming' available at https://www.al.org.aw/ostrich-emu-farming (accessed on 6 May 2023).

⁷⁸⁴ Animal Liberation.

legally enforceable. Therefore, commercially farmed ostriches' welfare can be and has been compromised by this common practice.

Sufficient space is required with access to food, water, allows for normal behaviour, the control of diseases, prevention of escape, etc. Aspects such as 'sufficient space' and 'normal behaviour' are not clearly defined resulting in uncertainty in husbandry practices. Feathers are not to be plucked on live ostriches. However, when feathers are removed, this must not result in tissue damage or pain. Read together, these requirements then raise the question: how would an ostrich that is not alive feel pain?

The appearance of these humane provisions, without clear guidelines and standards set, coupled with the fact that there is no oversight over this code could result in 'humane washing'. Companies have observed a growing consumer preference for meat products sourced from animals that have received humane treatment and have been produced in a sustainable manner. This is relevant in the ostrich industry as there is a trend amongst consumers, who are buying meat that is more cost effective, sustainable and where welfare of the animal is a concern, the importance of such and the reduction in meat consumption. ⁷⁸⁵ Companies essentially take notice of this and 'adapt' their practices to appear to be more caring and sustainable.

This is prevalent in the South African context, seen by the advertising appeals case that concerned Fair Cape Dairies and their dairy cows. Fair Cape used '#HappyCows' and 'humane' to describe its dairy farming practices on the bottles of milk where they claimed that because their practices were humane, the cows were happy. ⁷⁸⁶ This was declared as misleading advertisement. The Advertising Regulatory Boards Appeals Committee ⁷⁸⁷ found that humane treatment goes beyond the five freedoms, where rather the attitude behind the treatment needs to be tender, compassionate and show sympathy. ⁷⁸⁸ The Committee found that the forceful impregnation of dairy cows by human fists and arms, the removal of babies once birthed, the promotion of the veal industry through the dairy industry (male calves are slaughtered as veal)

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⁷⁸⁵ GN 2293 GG 47024 of 18 July 2022, 45.

⁷⁸⁶ Isaacs L 'Happy Cows' advert ruled misleading' 8 May 2020 *IOL* available at https://www.iol.co.za/capetimes/news/happy-cows-advert-ruled-misleading-47711159 (accessed on 6 May 2023).

⁷⁸⁷ Hereafter the Committee.

⁷⁸⁸ Isaacs L (2020).

and the fact that the dairy cows are ultimately slaughtered would have an obvious negative effect on the mood of the cow and therefore the cows could not be described as happy. ⁷⁸⁹

This case is an example of the practices of humane and green-washing in the South African agricultural space, where consumers and official committees have called out humane washing by industries, yet this falls on deaf ears. The industries motive is to appeal as if they are for example, humane, sustainable, etc in order to appeal to consumers, ultimately selling more products resulting in economic gain for the industry. A form of reverse psychology on consumers for economic gain at the expense of these animals.

4.2.5 Law/Policy in Development

4.2.5.1 Preservation and Development of Agricultural Land Bill

The Preservation and Development of Agricultural Land Bill⁷⁹⁰ will if enacted, apply to all agricultural land, ensures the sustainable development and preservation of agricultural land for present and future generations to enhance human life. 791

Commercially farming ostriches can have a detrimental effect on land, where strict guidelines are needed to ensure effective farming and welfare practices regarding land use and damage. Ostriches are known for the large amount of space they require when commercially farmed. Ostriches are consumed by a small portion of the South African population 792 and therefore it is unsure how the development of commercial ostrich farming would preserve agricultural land for present and future generations. This is because ostriches are known to degrade land, seen in the Klein Karoo.⁷⁹³ Ostrich farmers often grow their own ostrich feed which is lucerne.⁷⁹⁴ Large amounts of land and water is used to grow this lucerne or is imported. 795 Due to high exportations of ostrich products, this would mean that large, monocrop, unsustainable land will be used to feed ostriches, where South Africa bears the brunt of this unsustainable agricultural practice.

⁷⁹⁰ Hereafter referred to as the Agricultural Bill.

⁷⁸⁹ Isaacs L (2020).

⁷⁹¹ *GG* 43723 of 18 September 2020.

⁷⁹³ Refer to Chapter 2, 2.5 Environmental Issues Prevalent in the Commercial Ostrich Industry of this thesis for a full discussion on the ecological degradation caused by the COI.

⁷⁹⁴ Barends-Jones & Pienaar (2020) 28.

⁷⁹⁵ Barends-Jones & Pienaar (2020) 28.

4.2.5.2 Climate Change Bill (B9-2022) B List

The Climate Change Bill (B9-2022) B List, ⁷⁹⁶ was approved by the National Assembly on the 24th of October 2023. ⁷⁹⁷ The Climate Change Bill aims to ensure that there is an adequate climate change response, a just transition to a low-carbon and climate-resilient economy in the context of sustainable development. ⁷⁹⁸ Climate change is a global phenomenon known to affect animals, humans and the environment in totality.

Animals and the agricultural industry have not been given careful consideration in terms of the impact's climate change would affect their welfare and in turn their well-being. This is highlighted by the fact that animals are included in the broad term 'environment' Although the Climate Change Bill has been enacted to mitigate and adapt the total effects of climate change, it seems that this is only done to ensure a comfortable human existence. ⁷⁹⁹

Food production, the processing of, distribution, consumption and waste as a by-product is responsible for up to nearly a third of greenhouse gas emission. Real The Climate Change Bill requires the Minister of the DFFE to establish an institutional arrangement that will help facilitate a system to collect data by creating the National GHG Inventory. The Minister may, either through publication in the Gazette or in writing, to defy a list of activities and thresholds with measurements or estimations of GHG emissions and carbon sinks from agriculture, land use and waste sources, amongst other sources. Agriculture has also been identified as functions that is relevant to the development of Sectoral Emissions Targets under Schedule 1. The DALRRD has also been mandated under Schedule 2 to develop a Sector Adaption Strategy and Plan. The developments made to the Climate Change Bill is seen a positive step as agriculture is now a part of the climate change framework illuminating the link between animal agriculture and climate change. The Bill would ensure that emission targets are set for agricultural industries such as the COI, which is responsible for contributing large

⁷⁹⁶ Hereafter the Climate Change Bill.

⁷⁹⁷ DFFE 'Minister Barbara Creecy: National Assembly debate on Climate Change Bill' 25 October 2023 available at https://www.gov.za/speeches/national-assembly-debate-climate-change-bill-24-october-2023-address-minister-forestry (accessed on 21 November 2023).

⁷⁹⁸ GN 1026 *GG* 45299 of 11 October 2021.

⁷⁹⁹ GN 1026 *GG* 45299 of 11 October 2021, preamble.

⁸⁰⁰ ALRSA (27 May 2022), 6.

⁸⁰¹ Climate Change Bill, section 26.

⁸⁰² Climate Change Bill, s26(3).

⁸⁰³ Climate Change Bill, schedule 1.

amounts of GHG emissions due to high amounts of exportation and feed transportation, ⁸⁰⁴ among other impacts. It is important to acknowledge that the Climate Change Bill lacks provisions that address the mitigation of anthropocentric impact of animals in the context of climate change disasters. The omission of such may result in a watered-down effect of the Climate Change Bill. ⁸⁰⁵

4.3 CONCLUDING REMARKS

Overall, the importance of legislation that directly entrenches animal welfare, animal well-being and animals' intrinsic value is vital. The COI is unsustainable, largely unregulated and arguably goes against the purpose of several provisions within the South African legislative framework. While some regulation does exist for the regulation of certain matters applicable to the COI, these contain major lacunas where many wild animals are excluded from animal welfare legislation. Standards need to be instituted for the entire lifespan of the ostrich, especially where they are commercially farmed for meat. The lack of regulations has resulted in adverse COI husbandry practices. The environment, animal health and well-being and human health is compromised by this as seen by the loss of biodiversity, increase in zoonotic diseases, painful husbandry practices, pollution, etc.

Further environmental legislation in South Africa is insular and fragmented, governing different 'sectors' which do not necessarily communicate to each other. There has been no integration of animal-centric or eco-centric problems prevalent between these pieces of legislation. The result is the intrinsic value of individual animals is not legally recognised.

This is evident in the government's efforts to expand the GMI, despite the absence of safeguards. The intended purposes and objectives of legislation is undermined by exemptions from important safety legislation proposed by the DALRRD. Crimes against animals are phrased in a manner that the animals in question are not unnecessarily suffering. In reality, these crimes largely unprosecuted or do not even make it to prosecution.

Animal health and well-being is not seen as a priority, reflected by the absence of national legislation that directly calls for the improvement of animal health and well-being, for the

⁸⁰⁴ GN 1026 GG 45299 of 11 October 2021, section 3(b).

⁸⁰⁵ Refer to Chapter 2 of this thesis for effects of climate change on animals.

intrinsic worth of the animals. The current phrasing used in national legislation does not address the implications of the aforementioned, where animals are predominately seen as resources.

Clear guidelines, definitions and husbandry practices need to be set to ensure the best welfare and well-being practices of ostriches is nationally recognised and implemented. Legislation needs to reflect a more caring attitude towards animals in order to fulfil section 24 of the Constitution. As shortcomings in South African law have permitted the exploitation of wild animals for commercial gain, there is a pressing need for legislative reformation that reflects a more compassionate attitude towards animals, aligning with the principles of Section 24 of the Constitution. Certain provisions in the existing legal framework can be utilised in order to achieve this. Further there are also non-legal actions that can be implemented to achieve these clear guidelines, definition and husbandry practices will be given.



CHAPTER FIVE: RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The commercial farming of wild animals has reached an unprecedented level of pervasiveness. Shortcomings in South African law have allowed wild animals to be exploited for commercial gain. The concepts of animal sentience and the recognition of the intrinsic value of the individual animal, are concepts that are gaining traction with increased support by other jurisdictions but not yet in the South African context.

To address these multifaceted and interdisciplinary issues, this research has set out to answer the following question: to what extent does South Africa's legislative framework protect the welfare and well-being of ostriches against the impacts of commercial farming? What can be concluded by this research is that South Africa does not have adequate measures in place to protect both the welfare and well-being of ostriches from the impacts the ostriches experience from commercial farming.

Specific ostrich husbandry practices that promote good welfare has not been legally implemented. The existing husbandry practices weakens ostrich welfare and well-being. Practices such as toenail declawing 806 known to undermine ostrich welfare, has not been legally prohibited. Ostriches straddle the line between domesticated farmed animals and wild animals, often leaving ostriches falling within lacunas. The ostrich industry was deregulated in 1993, 807 which caused a lack of legal enforcement and implementation in the COI leading to lacuna filled, outdated legislation. Further, adequate research has not been conducted in the industry.

The lack of research has resulted in the COI failing to see the intrinsic value of the ostrich, where many practices only focus on the economic value of the ostrich. The protection of the environment, 808 ostrich welfare and well-being and human health and well-being 809 have been

⁸⁰⁷ Refer to Chapter 1, 1.1 Background of this thesis, for a discussion on the deregulated ostrich industry and the effects this has on the ostriches and consumers.

⁸⁰⁶ Refer to Chapter 2, 2.4.1 Welfare and Well-Being Challenges in the Ostrich Industry of this thesis for a full discussion on toenail declawing.

⁸⁰⁸ Refer to Chapter 2, 2.5 Environmental Issues Prevalent in the Commercial Ostrich Industry (Enviro-Centric) of this thesis for a full discussion on all of the environemtal challenges prevalent in the industry.

⁸⁰⁹ Refer to Chapter 2, 2.6 Additional Issues of Commercial Ostrich Farming of this thesis for a discussion on zoonotic diseases and human health and consumer protection issues.

hindered by the COI. Examples of such is the 50% in land degradation to the Klein Karoo's succulent biodiversity as a result of intensively farming ostriches. AF is a pressing issue in the COI, 810 especially in the light of COVID-19 and the most recent outbreaks of two different strains of AF in poultry in South Africa since April 2023.811

The intrinsic value of the individual wild animal has only been recognised in constitutional jurisprudence but not yet in legislation. Jurisprudence has shown that a more wholesome and caring attitude needs been put forward by the courts in response to animal welfare travesties. The IA⁸¹² has been used by the courts to interpret section 24 of the Constitution to link conservation and animal welfare as intertwined values. South Africa is a member of the WOAH, however, has not domestically incorporated the TAHC.

South Africa's legislative framework does not provide adequate proactive measures needed to protect animal welfare. Legislation is only concerned with positive animal welfare and welf-being standards when certain animals are slaughtered and is human-centric. The Constitution is a tool that can be used to foster transformation to the legislative framework providing a more caring attitude towards animals and recognising their intrinsic value.

Building on the shortfalls this thesis has identified in previous chapters, chapter 5 consists of two sections. The first section consists of both legal and non-legal recommendations that can be applied to the COI and the South African legislative framework. These recommendations encompass legally acknowledging the intrinsic value of animals, improving cooperative governance, prohibiting maiming provisions and legally enforcing positive welfare standards. The second section consists of a conclusion with comments on animal sentience, welfare, intrinsic value, the need for updated multifaceted legislation to address the effects of commercial faming wild animals on the animal, humans and the environment. This research has argued for the intrinsic value of all animals as individual's to be incorporated into

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⁸¹⁰ Refer to Chapter 1, 1.1 Background and Chapter 2, 2.4.1 Welfare and Well-being Challenges in the Ostrich Industry and 2.6.1 Zoonotic Diseases and Human Health of this thesis for a discussion.

⁸¹¹ National Institute for Communicable Diseases (accessed on 17 October 2023).

⁸¹² Refer to Chapter 2, 2.2.1 The Intrinsic Value and Worth of Ostriches and Chapter 3, 3.2 Constitution of the Republic of South Africa, 1996, of this thesis for a discussion on the IA.

⁸¹³ Refer to Chapter 3, 3.2 Constitution of the Republic of South Africa, 1996, of this thesis for a full discussion on the interpretation of section 24 and the development in case law.

appropriate legislation that affects them.⁸¹⁴ The COI has been used as an illustrative example of the dangers and harms of not affording commercially farmed wild animals' intrinsic value.⁸¹⁵

5.2 LEGAL RECOMMENDATIONS TOWARDS A LEGISLATIVE FRAMEWORK THAT SUPPORTS OSTRICH WELFARE AND WELL-BEING

5.2.1 Recommendation 1: Elevating Ostriches: The Legal Recognition of Sentience and of Ostriches' Intrinsic Value and Worth

Jurisprudence has indicated a shift in animal welfare perceptions. Animal welfare is a greater concern than previously based on animals' sentience and their ability to experience pain and suffering. The intrinsic value of animals has been recognised by the Constitutional Court in *NSPCA* (2016) and several other courts since. As a result, constitutional jurisprudence is a tool to use to interpret relevant legislation to ensure that animal welfare is improved.

The values of the ostrich have been a thread of discussion throughout this research. ⁸¹⁶ Although intrinsic value has been referenced in recent jurisprudence, the intrinsic value of animals needs to be legally entrenched in law. Ideally, a new piece of legislation would be enacted not only acknowledging that animals have sentience, but that animals possess intrinsic value. Once legal recognition of intrinsic value is achieved, legislation must be enacted that regulates animal welfare and well-being.

Due to the sluggish pace of the legal system, the progression from Bill to Act is notably slow and may not adequality be efficient enough to address the issue at hand. As a result, if legislation cannot be timeously enacted, legislation that is currently in force can be utilised to include the legal recognition of animal's intrinsic value. The new Animal Welfare bill needs to legally entrench the intrinsic value of all animals. Until the development and enactment of the

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⁸¹⁴ Refer to Chapter 2, 2.2.1 The Intrinsic Value and Worth of Ostriches of this thesis for a discussion on ostriches' intrinsic value.

⁸¹⁵ Refer to Chapter 2, 2.5 Environmental Issues Prevalent in the Commercial Ostrich Industry (Enviro-Centric) of this thesis for a full discussion on the effects of the COI on animals, humans and the environment.

⁸¹⁶ Refer to Chapter 2, 2.2 THE 'VALUE' OF OSTRICHES of this thesis for a discussion on all the different values of the ostrich.

new Animal Welfare Bill, Section 10 of the APA, 817 can be utilised where the Minister should promulgate regulations recognising the intrinsic value of all animals.

5.2.2 Recommendation 2: The Adoption of the 'One Welfare' Approach

The 'One Welfare' approach⁸¹⁸ is recommended to be legally implemented to fully achieve section 24 of the Constitution and reform the human-centric approach towards laws. This could also aid in sustainability as all factors of health need to consider and weighed. The One Welfare approach is ultimately still human-centric in nature, however the application of laws to humans, animals and the environment, equally, is an encouraging starting point.

Section 90(1)(j) of the NHA allows the Minister of Health to enact regulations regarding communicable diseases. The Minister therefore could enact regulations relating to AF that recognises that the individual bird's health, in terms of this research, ostriches, humans' health and the health of the environment needs to be equally weighed when considered. The Minister could also adopt the TAHC and WOAH standards (South Africa is already a member of such 819) through section 90(1)(j) and (q) 820 as the TAHC addresses both communicable and non-communicable diseases.

An example is the spread of AF in birds⁸²¹ which spreads rapidly and fatally for both the farmed and the wild bird population, affecting biodiversity and the environment. As of April 2023, South Africa is currently struggling with two different strains of AF breakouts affecting the poultry sector, leading to the culling of chickens and the shortage of eggs and chicken in the industry.⁸²² The largest and latest breakout of AF in the poultry industry in South Africa, illuminates the failures of the current animal agriculture system and the widespread implications. The One Welfare approach can be used to mitigate the cumulative effect of the AF, improve animal welfare.

⁸¹⁷ APA, s10.

⁸¹⁸ Refer to Chapter 2, 2.6.2 Consumer Protection Issues of this thesis for a discussion on the 'One Welfare' approach and the possibility of this approach aiding in regulating animal welfare holistically.

⁸¹⁹ Refer to Chapter 3, 3.3.1 Terrestrial Animal Health Code.

⁸²⁰ Section 90(1)(q) allows the Minister of Health to enact regulations concerning non-communicable diseases.

⁸²¹ Refer to Chapter 2, 2.6.1 Zoonotic diseases and Human Health and 2.4.1 Welfare and Well-Being Challenges in the Ostrich Industry of this thesis for a full discussion on the impacts on AF on the COI.

⁸²² De Lange R; Eggless bacon and eggs breakfasts are on the horizon, as bird flu threatens supply 17 September 2023 *City Press* available at https://www.news24.com/citypress/business/bacon-and-eggs-for-breakfast-but-without-the-eggs-20230917 (accessed on 18 October 2023).

5.2.3 Recommendation 3: A Comprehensive Assessment of the Sustainability of Commercially Farming Wild Animals

The state must hold the environment in a public trust 823 and must do so in the public interest. The COI in South Africa is the largest globally and is deregulated. The void in regulations allows the industry to work in a vacuum that harms ostriches, other animals, humans and the environment. 824 The state aims to grow the GMI, reflected in the final GMS. This is unsustainable, as stressed throughout this research, small local population consumes ostrich meat. 825 It is also argued that the terms 'ecologically sustainable use and development' used in section 24 of the Constitution, can be used to solidify the need for the government to hold the environment in a public trust and for the interests of the public, which includes animals. The research advocates for the government to enact detailed regulations 826 addressing welfare and well-being of ostriches for the public trust. 827

Additionally, Schedule 4, Part A of the Constitution, 828 can be used to hold the national and provincial legislatures accountable to enact regulations that affects the COI in terms of animal control and diseases, the environment, nature conservation and soil conservation. 829 This is because the COI is affected by animal control and diseases, affects the environment, nature conservation and soil conservation. This in turn affects the public and their interest, along with the ostriches. This is especially due to section 24 of the Constitution permitting the implementation of 'legislative and other measures' to protect ecologically sustainable use and development. The implementation of regulations that would further entrench that the environment should be held in a public trust.

⁸²³ NEMA, s2(4)(o).

⁸²⁴ Refer to Chapter 2, 2.5 Environmental Issue Prevalent in the Commercial Ostrich Industry (Environ-centric) of this thesis.

⁸²⁵ GMS.

⁸²⁶ In accordance with s44 of NEMA.

⁸²⁷ Refer to Chapter 2 Environmental Issue Prevalent in the Commercial Ostrich Industry (Environ-centric) of this thesis for the negative holistic effects the COI has on South Africa.

⁸²⁸ Refer to Chapter 3, 3.2 Constitution of the Republic of South Africa, 1996 of this thesis for a discussion on the Schedules in the Constitution.

⁸²⁹ Refer to Chapter 2, 2.5 Environmental Issues of this thesis for a discussion.

Further, the commercial farming of wild animals needs to be assessed for its long-term viability and sustainability against environmental legislation considering the harm to ostrich's, other animals (such as predators), humans and the environment. 830 The long-term assessment of commercially farming game animals can be done through section 24 of NEMA which provides for environmental authorisations, read with the Listing Notices 831 published in the Government Gazette. Under NEMA, any activity which may affect the environment significantly must be considered, investigated and assessed before their implementation and must be reported to the organ of state responsible for this. 832 In light of the goal to grow the, GMI, the Minister of the DFFE ought to enact regulations under section 44(1)(b) of NEMA, to investigate and assess the effects commercially farming wild animals would have on the environment, the public and animals.

Section 44 of NEMA⁸³³ allows the Minister of the DFFE to make regulations that deals with any matter under NEMA⁸³⁴, generally to carry out the purpose of the Act⁸³⁵ and may make different regulations under NEMA, in respect of different activities, provinces, geographical areas and owners or classes of owners of land.⁸³⁶ The failure to recognise animals' intrinsic value, especially ostriches, has implicated the bottom line as economic gain, contributing to environmental degradation⁸³⁷ caused by the COI. Further, it has been shown above⁸³⁸ that the COI is an unsustainable industry that has negatively affected the environment, where only a small percentage of the population consumes ostrich meat. The unsustainability of the COI causes environmental injustices to South Africans, the animals and the environment.⁸³⁹ The COI is known to contribute to environmental injustices given the high contribution to GHG

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⁸³⁰ Refer to Chapter 2, 2.5 Environmental Issue Prevalent in the Commercial Ostrich Industry (Environ-centric) of this thesis

⁸³¹ Refer to Chapter 4, 4.2.3.1 National Environmental Management Act 107 of 1998 of this thesis for a discussion on the applicable Listing Notices to the COI.

⁸³² NEMA, s24(1).

⁸³³ NEMA, s44.

⁸³⁴ NEMA, s44(1)(a).

⁸³⁵ NEMA, s44(1)(b).

⁸³⁶ NEMA, s44(2).

⁸³⁷ Refer to Chapter 2, 2.5 Environmental Issues Prevalent in the Commercial Ostrich Industry (Enviro-Centric) of this thesis for a full discussion of the impacts on the environment caused by the COI.

⁸³⁸ Refer to Chapter 2, 2.5 Environmental Issues Prevalent in the Commercial Ostrich Industry (Enviro-Centric), Chapter 3, 3.2 Constitution of the Republic of South Africa, 1996 and Chapter 4, 4.2.2.3 Game Meat Strategy for South Africa, 2023 of this thesis for a full discussion on the ecological sustainability (or rather lack thereof) of the COI.

⁸³⁹ Refer to Chapter 4, 4.2.3.1 National Environmental Management Act 107 of 1998 of this thesis for a discussion on the principle of environental justice in relation to the COI.

emissions through the exportation of ostrich products, the importation of ostrich feed, amongst others. Such a Further, animals are explicitly included in the definition of 'environment' in NEMA. Such a Minister should enact regulations under such a such a such as the intrinsic value of animals.

Further, s44(1)(b) of NEMA can also be used in conjunction, as the purpose of NEMA is to facilitate ecological sustainable development and to curb environmental injustices. In addition, section 44(2) of NEMA can also be applied to the COI specifically. The Minister can enact regulations for classes of owners of land, meaning the Minister could enact regulations for the owners of land, used for commercial ostrich farming specifically. The regulation that should be entrenched, is that all ostriches, regardless of what purpose they are used for, are sentient beings who have intrinsic value. The adoption of such regulations would ensure that economic gain is no longer the driving force of the COI and allows for a situation where ostrich welfare and well-being can be prioritised. Further, this would advance the achievement of the purpose of NEMA.

5.2.4 Recommendation 4: An inclusive and progressive Animal Welfare Act

A pivotal recommendation from this research is the development of a comprehensive animal welfare act, 842 the drafting of which is already in progress, to properly consider animal interests. This research recommends certain aspects be included in the proposed legislation, such as the Act must apply universally to all animals, regardless of whether they are in captivity, free-roaming, wild, or domesticated. The primary objectives ought to recognise animal sentience, intrinsic value and require that animal welfare and well-being is legally enforceable. This animal welfare bill should entail a joint commitment by both the DFFE and the DALRRD recognising the importance of animal welfare and well-being, where both departments have the goal of animal welfare and well-being and not economic exploitation. 843 Mandating both government departments to collaborate would necessitate a harmonious

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⁸⁴⁰ Refer to Chapter 4, 4.2.3.1 National Environmental Management Act 107 of 1998 of this thesis for a discussion on the principle of environmental justice in relation to the COI.

⁸⁴¹ NEMA, s1.

 $^{^{842}}$ Due to the limited scope of this research, an animal rights-based approach has not been focused on and is an area that should be more researched.

⁸⁴³ Makonese M, Muchadeyi F & Wilson A.P 'Working Paper: Barriers to the Transformation of South Africa's Food System: Can the Law be a Lever for Change?' (2022) Animal Law Reform South Africa, Available at: http://www.animallawreform.org/wp-content/uploads/2022/07/Working-Paper-Food-Systems.pdf (accessed on 25 September 2023).

approach to enhance holistic animal welfare and well-being and remove any uncertainties and gaps regarding mandates and responsibilities. In turn this would sustain transparency, enabling each department to hold the other accountable. In doing so, it would eliminate the potential for disjointed mandates and regulatory gaps, to serve as a defence for any violations of animal welfare standards and would require the departments to be transparent.

5.2.5 Recommendation 5: Provision of Positive and Negative Duties: Prohibiting Practices and Requirements for Welfare

Due to the long legal process of enacting bills into national legislation, this research recommends that the APA be updated and amended. Although this is also a longer process, it may be easier to amend an existing piece of legislation rather than enact a new piece. This is in light of the fact that the APA arguably does not apply to all animals. He definition of 'animal' in the APA must be updated to clearly include all animals, regardless of whether they are captive, free-roaming, wild, domesticated or any combination of these. The APA must be updated to include (or new Animal Welfare Bill must provide for) positive obligations to meet animals psychological needs and welfare. Terms and definitions throughout the APA need to be bolstered particularly where these are confusing and vague. It is essential to provide precise parameters for terms such as 'basic food, water, and shelter.' In addition, negative obligations need to be instilled that negates all forms of animal cruelty and abuse towards all animals.

The COI is known to partake in a husbandry practice known as toenail declawing, where the ostriches nail and part of their toe-joint removed to reduce scarring to the ostrich's leather as the nail does not grow back. The incentive for this is economic gain as the leather can be sold at a greater value as it has less scarring. Negative legal obligations compromise of laws that require the state to legally negate one from partaking in an activity or can include the phasing out of an activity. An example is the banning of cruel or inhumane practices, or the phasing out of these. It is recommended that husbandry practices that cause mutilation and damage, be legally prohibited and outlawed. This is in accordance with section 2(a) of the APA which holds any person who ill-treats, infuriates, terrifies, tortures or maims any animal guilty of an

⁸⁴⁴ Refer to Chapter 4, 4.2.1.1 Animals Protection Act 71 of 1962 of this thesis for a discussion on the dangers of the limited definition of 'animal'.

offence.⁸⁴⁵ Section 10(1)(d) of the APA⁸⁴⁶ can be used to expressly prohibit husbandry practices that impact on ostrich welfare and their well-being. The definition of 'animal well-being' in NEMLAA⁸⁴⁷ and the GMS⁸⁴⁸ can also be utilised to achieve such. This is because practices such as toenail declawing affects the locomotive abilities of the ostrich, affecting their welfare and their ability to adapt to environment, therefore their well-being as well.

The legal recognition of animal intrinsic value and sentience would have a positive impact on laws that consider ostrich welfare for economic gain. These laws include the MSA and the ostrich regulations under the MSA. The legal recognition of intrinsic value would necessitate that the MSA enact welfare regulations that take into account the intrinsic value of ostriches intended for commercial slaughter. This research puts forward that 'welfare' needs to be defined in the MSA in order for one to be guided on what welfare is throughout their lives, including at slaughter.

Due to the lengthy procedure of amending acts, Section 22(1)(i) of the MSA permits the Minister of the DALRRD to enact regulations regarding matters that are necessary to achieve or promote the objectives of the act. Two of these objectives is to maintain national standards in respect of abattoirs and to promote meat safety and the safety of animal products. Bad welfare conditions are known to jeopardise meat safety. ⁸⁴⁹ One of these requirements is that slaughter needs to be humane, including the treatment of the animal prior to slaughter. The Minister should enact regulations under section 22(1)(i) of the MSA to define welfare and well-being, recognise the intrinsic value of animals and promulgate negative obligations banning any cruel treatment of animals going for slaughter. ⁸⁵⁰

This research finds that the exemptions to section 11(1)(i) of the MSA, called for by the DALRRD, 851 must be rejected as the killing of a wild animal outside of abattoir would defeat the purpose of the MSA requiring *inter alia* a humane slaughter, transportation, and off-

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⁸⁴⁵ APA, s2.

⁸⁴⁶ APA, s10(1)(d).

⁸⁴⁷ NEMLAA, s1.

⁸⁴⁸ GMS, 13.

⁸⁴⁹ MSA, objectives.

⁸⁵⁰ Refer to Chapter 4, 4.2.1.1 Animals Protection Act 71 of 1962 of this thesis for a full discussion on an undercover investigation of poor ostrich treatment in abattoirs.

⁸⁵¹ Refer to Chapter 4, 4.2.2.2 Meat Safety Act 40 of 2000 of this thesis for a discussion.

loading, of animals within the abattoir facilities. The MSA strictly requires the animals listed in schedule 1 to be slaughtered in the abattoir, where this exemption would be contradictory.

The current ostrich regulations are from 2007 and are human-centric in nature. Additionally, the regulations require a more animal-centric approach.

5.2.6 Recommendation 6: Enforcement, Inspections and Reporting

Stemming from this, regular inspections of the COI are needed to identify ostriches welfare and well-being needs and whether these needs are met. In accordance with section 38(b) of NEMLAA, 852 the Minister of the DFFE has the authority to enact regulations in relation to the monitorisation and compliance with and enforcement of norms and standards. 853

This research recommends that animal well-being be regulated for all farmed animals, coupled with clear guidelines with the enactment of norms and standards by the Minister, under section 50. The Minister can further enact norms and standards for the COI, essentially updating the 2007 ostrich regulations. These norms and standards can require transparency, with regular reports and inspections. The inspections should be conducted by 'societies' defined in the APA as well as in the SPCAA which includes the NSPCA and/or veterinarians or personnel trained specifically in ostrich welfare needs as well as other animal welfare organisations. Abattoirs facilities should be legally required by norms and standards to report on ostrich welfare and the possible practices within the specific industry that may compromise on ostrich welfare and in turn jeopardise ostrich well-being. 854 The inspections must be required to be conducted by a party that understands ostrich welfare is a top priority, where there are no economic incentives influencing the inspections and where the person is independent from the abattoir facility.

This research advocates that the MSA should mandate the creation of a publicly available database where these inspections can be tracked and reports collected and published. The ostrich regulations can then specifically mandate how this database of inspections and reports can best be used in the context of the COI. The submissions into the database would allow regular inspections to take place where notices, warnings, etc can be reported, logged and

⁸⁵² Section 38(b) of NEMLAA amended section 50A of NEMA.

⁸⁵³ NEMLAA, s50

⁸⁵⁴ ALRSA 'Laying Down the Facts' August 2023 Available at <u>www.animallawreformsouthafrica.org</u> (accessed on 25 September 2023), 260.

monitored for changes in the COI and ostrich welfare and well-being. The logging of ostrich welfare deficiencies would allow the tracking, identification and improvement of these welfare needs and ultimately improve ostrich well-being. These reports must be published publicly, so that all, including consumers, are aware about the true impact of the COI on ostrich welfare, the environment and people. ⁸⁵⁵. This research proposes that the regulations should also mandate that the COI be transparent when it comes to sourcing as well as the identifying role-players in their supply chains. ⁸⁵⁶ Corporations ought be mandated to ensure their suppliers follow animal welfare and well-being and sustainability practices.

5.2.7 Recommendation 7: Co-operative Actions Required by the Government

Role players in industries such as the COI, need to be held accountable. Role players, specifically government which promotes these industries and are responsible for enforcing the law, particularly in light of their mandate for animal welfare. Animal welfare and animal use, although interconnected, need to be regulated by different departments. This research suggests that the departments mandate is distinct from the incentives that motivate the department. Departments such as the DALRRD are mandated to enforce farmed animal welfare and ensure the humane handling of animals for slaughter under the MSA. DALRRD also has incentives to benefit from the growing meat industry (including the GMI). This is clear from DALRRDs request that game meat be exempt from section 11 of the MSA, compromising the welfare and well-being of wild animals. On the other hand, the DFFE has a mandate to regulate wild animals and their well-being and consider animal welfare. However, the regulation of wild animals is through biodiversity mechanisms. Although similar, these mandates can be seen to not work in conjunction, where rather wild animals are not afforded welfare and farmed wild animals are not necessarily afforded well-being.

NEMA calls for intergovernmental co-operation⁸⁶¹ in light of biodiversity, conservation and sustainability. The DFFE and the DALRRD aim to grow the GMI, although they are charged

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⁸⁵⁵ ALRSA (August 2023), 263.

⁸⁵⁶ ALRSA (August 2023), 260.

⁸⁵⁷ Makonese M, Muchadeyi F & Wilson A.P (2022), 226.

⁸⁵⁸ Refer to Chapter 4, 4.2.2.2 Meat Safety Act 40 of 2000 of this thesis for a discussion on this exemption and the effects of the exemption if passed.

⁸⁵⁹ Refer to Chapter 1, 1.1 Background of this thesis for a discussion on the regulation of wildlife though biodiversity mechanisms.

⁸⁶⁰ This is in terms of NEMLAA and more recently NEMBA.

 $^{^{861}}$ NEMA, s2(4)(1) – this section requires intergovernmental co-operation.

with different, distinct mandates. The DALRRD is primarily responsible for farmed animals, although it is evident that the request that game meat be exempt from section 11 of the MSA, compromising the welfare and well-being of wild animals, highlights the DALRRDs intention to grow the GMI. The other department, the DFFE, with wild animals and well-being (although the DFFE must at least consider section and welfare where relevant). Both departments need to consider both categories of animals and have a mandate to ensure animal welfare and well-being for all animals. This is in light of the contribution animals have to conservation and biodiversity and the improper management of these same animals can be detrimental to such. Considering the different mandates mandated on different departments, the commercially farmed ostrich falls into a lacuna in terms of s2(4)(1) of NEMA, as they are farmed wild animals.

This research recommends that a policy guideline be adopted for decision making on animal welfare and well-being. Given that some wild animals are farmed, there is an inherent overlap in the mandates between the DALRRD and the DFFE. Farmed wild animals should be given special attention in terms of the husbandry practices used, as they have the potential to detrimentally affect other animals' welfare and well-being as well as human health. 863

NEMA empowers the Minister to make regulations in terms of co-operation agreements in accordance with section 45(1), which includes the procedure for the conclusion of environmental management. 864 Section 11(1) of NEMA 865 can be used in conjunction with section 45(1) to ensure the procedures for co-operative governance is implemented and followed.

In addition, to the above, all government departments should be considered to be constitutionally bound to uphold and promote animal welfare and well-being through the lens of conservation, as enshrined in section 24 of the Constitution (NSPCA case as read with the *Lion bones* case statements) and therefore it can be argued that every government department

⁸⁶² *Lionbones* (2019), para 67.

⁸⁶³ Refer to Chapter 2, 2.4.1 Welfare and Well-Being Challenges in the Ostrich Industry and 2.6.1 Zoonotic Diseases and Human Health of this thesis for a discussion on the effects AF can have on humans and the spread of AF between different bird populations.

⁸⁶⁴ NEMA, s45(1).

⁸⁶⁵ NEMA, s11(1) – this section states that every national department, listed in schedule 1 (the then Department of Agriculture, now the DALRRD and the Department of Environmental Affairs and Tourism, the now DFFE) is mandated to submit an environmental implementation and management plan within one year of the promulgation of NEMA and every four years thereafter.

shares responsibility in this regard. Departments needs to work in conjunction with one another, rather than shifting the onus and responsibility to another department as seen in the Lion bones866 case.

5.3 NON-LEGAL RECOMMENDATIONS FOR THE COMMERCIAL OSTRICH **INDUSTRY**

The COI is deregulated and has resulted in a lack of research on the commercial farming of ostriches. Rather ostriches are intensively farmed akin to as if they are chickens and cows.

Humane treatment of farmed animals has been determined to go beyond the five freedoms, where the attitude behind the treatment needs to be compassionate, show sympathy and be tenderly. 867 Consumers are more aware of animal welfare, the true sustainability of their meat humane and green-washing, 868 than ever before. Corporations and stakeholders adapt policies to meet this to seem more sustainable and aware of animal welfare practices.

To combat humane-washing⁸⁶⁹ prevalent in the farmed animal sector, it is recommended that corporations and stakeholders should commit to greater transparency when it comes to the sourcing and processing of products, their animal welfare practices and any cruel practices that may take place. This could take place using internal policies or commitments to agendas. A commitment to transparency would guarantee that animal's welfare and well-being is truly a concern, rather than the sole objective to boost product sales. The Consumer Protection Act 870 has an objective to establish norms and standards relating to consumer protection. Section 120(1)(e)(ii) of the Consumer Protection Act⁸⁷¹ allows the Minister of Trade and Industry to enact regulations that concerns the proper implementation of the CPA. It is imperative that the Minster to counteract human-washing, creating a framework that dissuades deceptive practices and enforce consequences where corporations engage in humane washing.

⁸⁶⁶ *Lionbones* (2019).

⁸⁶⁷ Isaacs L (2020).

⁸⁶⁸ Refer to Chapter 4, 4.2.4.3 South African Ostrich Business Chamber Code of Conduct, of this thesis for a discussion on humane and green-washing.

⁸⁶⁹ Refer to Chapter 4, 4.2.4.3 South African Ostrich Business Chamber Code of Conduct of this thesis for a full discussion on humane-washing in the dairy industry and the implications this has on advertising and the welfare of the dairy cows in question.

⁸⁷⁰ Act 68 of 2008 (hereafter the CPA).

⁸⁷¹ CPA, s120(1)(e)(ii).

As ostriches currently fall under DALRRD's mandate in terms of the APA and the MSA, it is encouraged that the relevant departments invest in research concerning ostrich welfare and well-being, how to improve such as well as commit to practices that fosters a better relationship between the environment, animals and humans. The departments need to understand how animal welfare and well-being implicates their mandates.

Coupled with this, it is recommended that research needs to take place to facilitate more sustainable and welfare intensive husbandry practices, especially in light of commercially farmed wild animals. Section 4(b) of NEMA can be used to help achieve such as this provision calls for environmental management that takes into account all aspects of the environment and people where the best practicable environmental option is followed. In order to meet this principle, the best practicable environmental option would need to be explored in terms of the COI as there are a number of areas still lacking data. Specific husbandry practices, that promotes good welfare and well-being, must be explored. This research should extend to determining the accurate number of CFOs in South Africa, accompanied by surveys addressing the environmental impact. Additionally, examining the long-term effects of the COI farming coupled with an understanding and research into local consumption patterns, particularly collecting data among impoverished families, will provide valuable insights into the sustainability of growing the GMI and consequently the COI.

5.4 CONCLUSION

What this dissertation has demonstrated, is that South Africa does not have adequate proactive measures to legally entrench animal welfare and well-being, particularly for farmed wild animals such as ostriches. With the exception of anti-cruelty laws and some legal standards that surround slaughter, positive welfare legislation can only be applied in certain instances and is not adequately enforced. A major concern is the absence of a legal definition of 'welfare'. This dissertation has highlighted and shown that perceptions in animal welfare have shifted, including from the courts and the public, however laws have not shifted with this change in perception.

The commercially farming of wild animals is a common farming practice in South Africa. This dissertation uses the ostrich as a lens for this research, but its application, goes beyond the ostrich – reaching to farmed animals, to other wild animals and to other commercially farmed wild animals. This is with the view that there is no animal welfare act that demands animal

welfare, for all animals, throughout their lifespan. The legal recognition of sentience in legislation or standards that affect animals, would bring greater awareness to the individual animal's intrinsic value, this is specifically true in the case of ostriches. The recognition of the intrinsic value of animals, although present in jurisprudence, has not been legislatively entrenched to apply to all animals and is not contained in legislation. The legal entrenchment of ostrich (and animal) sentience and intrinsic value would result in enhanced welfare and well-being legislation and husbandry practices.

Animal welfare including wild animal welfare has been entrenched in section 24 of the Constitution through constitutional jurisprudence, however legislation needs to be promulgated in order to fully achieve this. When assessing environmental legislation, or rather the majority of legislation which applies to animals, it is anthropocentrically charged, prioritising human interests over animal welfare.

Ostriches, as expressed throughout, have the inability to conform to commercial farming practices. The significance of this dissertation is that the there is a lack of concern regarding the commercially farmed ostrich's welfare and well-being and rather concern is given to the possible economic gain and mass production of ostrich products. A consistent theme throughout this dissertation is that regulations relating to animal welfare are mainly put in place when the ostrich is presented for slaughter (for purposes of preserving the meat) and not necessarily for their entire lifespan or to protect ostriches' own interests. Ostrich welfare and well-being is compromised by various practices such toe-declawing, affecting the ostriches' locomotive abilities which in turn affects their ability to access nutrition. The ostrich industry is known to affect the environment in South Africa. In order for the COI to be sustainable, positive husbandry practices, developed for ostriches, need to be implemented, with ostrich welfare and well-being at the forefront.

South Africa's legal frameworks needs to reflect a collaboration between international law, constitutional principles and the challenges of reconciling humans' interest with the environmental and animal welfare and well-being and health concerns. This collaboration would ensure not only ostrich welfare and well-being but also greater environmental and human protection.

Given the constraints inherent in this thesis, such as word limitations and the fact that no empirical data was conducted, numerous areas warrant further research in this field. This includes updated insights into the consequences of a deregulated COI, comprehensive surveys

surrounding the local consumption and perceptions of ostrich meat, an examination of the potential reach of the animal welfare bill in addressing farmed wild animals and the long termeffects of commercially farming wild animals, amongst many other fields.



BIBLIOGRAPHY

Literature

Adriano L, Chalhoub E & Uwishema O, et al 'Bird flu outbreak amidst COVID-19 pandemic in South Africa: Efforts and challenges at hand' (2021) 93 *J Med Vitol*, 1-4.

Amador-Cruz F, Figueroa-Rangel B & Olvera-Vargas M, et al 'A systematic review on the definition, criteria, indicators, methods and applications behind the Ecological Value term' (2021) 129 *Ecological Indicators*, 1-14, 1.

Barends-Jones V & Pienaar *The South Africa Ostrich Industry Footprint* (2020) Western Cape Department of Agriculture: Western Cape.

Beaver B & Bayne K 'Animal Welfare Assessment Considerations' in Bayne K & Turner P.V, In *Laboratory Animal Welfare*, (2014) 29-38.

Benson T, Bieg C, Harwatt H, et al *Food system impacts on biodiversity loss* (2021) Chatham House, 2.

Bilchitz D 'Does Transformative Constitutionalism Require the Recognition of Animal Rights?' (2010) 1-43.

Bilchitz D 'Exploring the Relationship between the Environmental Right in the South African Constitution and Protection for the Interest of Animals' (2017) 137 *SALJ*, 740-777.

Bilchitz D & Wilson A.P 'Key Animal Law in South Africa' *in Routledge Handbook of Animal Welfare* (ed) 2022 Taylor & Francis Group.

Bonato M, Cherry M & Cloete S 'Mate choice, maternal investment and implications for ostrich welfare in a farming environment' (2015) 171 Applied Animal Behaviour Science, 1-7.

Caporale V, Alessandrini B, & Dalla Villa P, et al. 'Global perspectives on animal welfare: Europe.' (2005) 24 *Rev Sci Tech*, 567-577.

Centre for Environmental Rights *Climate impacts in Southern Africa during the 21st Century* (2021).

Centre for Environmental Rights Fair Game: Improving the well-being of South African wildlife (2018).

Centre for Environmental Rights *Legal and practical regulation of the welfare of wild animals in South Africa* (2019).

Copenhagen: WHO Regional Office for Europe *A health perspective on the role of the environment in One Health* (2022) Copenhagen: WHO Regional Office for Europe: Copenhagen.

D'Eath R, Tolkamp B, & Kyriazakis I, et al 'Freedom from hunger and pre-venting obesity: The animal welfare implications of reducing food quantity or quality (2009) *Animal Behaviour*, 275-288.

Department of Agriculture, Land Reform and Rural Development A Profile of the South African Ostrich Market Value Chain (2021) Department of Agriculture: Pretoria.

Department of Forestry, Fisheries and the Environment *Chapter 10: Air Quality* Department of Forestry, Fisheries and the Environment: Pretoria.

Duminy L A system dynamics approach to understanding the ostrich industry of South Africa (unpublished LLM theses, Stellenbosch University, 2016).

Duncan I 'The changing concept of animal sentience' (2006) 100, *Applied Animal Behaviour Science*, 11-19.

Du Pisanie K 'Notifiable and controlled animal diseases in South Africa' (2021) Stockfarm 47.

Du Plessis A 'South Africa's Constitutional Environmental Right (Generously) Interpreted: What is in it for Poverty?' (2011) 27 *SAJHR*, 1-18.

Glatz P 'Ratite Toe-trimming – For Ostriches and Emus-Training manual' (2008) 1.

Green J, Jakins C, Waal, L, et al 'Ending Commercial Lion Farming in South Africa: A Gap Analysis Approach.' (2021) 11 *Animals* 2021.

Government Communications and Information Systems *Official Guide to South Africa* 2021/22 (2021) Department of Government Connections and Information Systems: Pretoria.

Huchzermeyer, F 'Public health risks of ostrich and crocodile meat' (1997) 16 *Rev Sci Tech* 599-604.

Jones D, Litwak K 'The Critical Relationship between Farm Animal Health and Welfare' (2018) *The Animal Welfare Institute*, 1–24.

Kidd M 'Sentencing Environmental Crimes' (2004) 11 SAJELP Cape Town: JUTA.

Kidd M Environmental Law 2 ed (2011) Cape Town: JUTA.

Lan T, Sinhababu N & Carrasco L 'Recognition of intrinsic values of sentient beings explains the sense of moral duty towards global nature conservation' (2022) 17 *PLoS One*, 1-13.

Madzingira, O 'Animal Welfare Considerations in Food-Producing Animals' in Abubakar M & Manzoor S *Animal Welfare* (2018) 99-122.

Murcott M 'Transformative Environmental Constitutionalism's Response to the Setting Aside of South Africa's Moratorium on Rhino horn Trade' (2017) 6 *Humanities*, 1-15.

Muvhali P 'Improving ostrich welfare by developing positive human-animal interactions' (unpublished MSc Agric thesis, Stellenbosch University, 2018).

National Agriculture Marketing Council (NAMC) The South African Ostrich Value Chain; Opportunities for black participation and Development of a programme to link Farmers to Markets (2010).

National Academy of Sciences '2 Agriculture's Impacts on Biodiversity, the Environment, and Climate.' in *The Challenge of Feeding the World Sustainably: Summary of the US-UK Scientific Forum on Sustainable Agriculture* (2021).

NSPCA National Council of SPCAs Annual Report 2022 (2022).

Ni J, Erasmus M & CD Mroney C, et al 'A critical review of advancement in scientific research on food animal welfare-related air pollution' (2021) 408 Journal of Hazardous Materials 1-13.

Papini M, Penagos-Corzo J & Pérez-Acosta A 'Avian Emotions: Comparative Perspectives on Fear and Frustration' (2019) 9 *Front Psychol*, 1-14.

Pinillos R, Appleby M & Manteca X, et al 'One Welfare – a platform for improving human and animal welfare' (2016) *Veterinary Record* 412-413.

Preston B 'Ecologically Sustainable Development in the Courts in Australia and Asia' A paper presented to a seminar on environmental law organised by Buddle Findlay, Lawyers, Wellington, New Zealand, 28 August 2006, 6.

Rahman M, Sobur M, & Islam M, et al 'Zoonotic Diseases: Etiology, Impact, and Control' (2020) 8 *Microorganisms*, 1-34.

Robertson I & Goldsworthy D 'Recognising and Defining Animal Sentience in Legislation: A Framework for Importing Positive Animal Welfare Through the Five Domains Model' (2022) 48 *Monash University Law Review*, 1-28.

Scholtz W 'Introduction' in Scholtz W Animal Welfare and International Environmental Law: From Conservation to Compassion (2017) 1-8.

Scholtz W 'Ethical and human use', intrinsic value and the Convention of Biological Diversity: Towards the reconfiguration of sustainable development and use' (2020) *Wiley*.

Snyders M *Perceptions about commercial ostrich farming: views of consumers, farmers and secondary stakeholders* (unpublished MSc Agric thesis, Stellenbosch University, 2020).

Thekiso M Psychological Well-Being, Health and the Quality of Life of Farm Workers in South Africa (unpublished Ph. D thesis, North-West University, 2008).

Tshehla C, Wright CY '15 Years after the *National Environmental Management Air Quality Act*: Is legislation failing to reduce air pollution in South Africa?' (2019) 115 S *Afr J Sci*, 1-4.

United Nations Environment Programme (UNEP) UN Frontiers 2016 Report: Chapter 2; Zoonotic Diseases (2016).

van der Berg A Municipal Planning Law and Policy for Sustainable Cities in South Africa (LLD, Tilburg University, Netherlands and North West University, South Africa, 2020).

Wheeler A, Knight AT & Difford M, et al 'Ostrich farmer characteristics predict conservation opportunity.' (2019) 115 *S Afr J Sci* 1-8.

Whelan C, Wenny D & Marquis R 'Ecosystem services provided by birds' (2008) 1134 *Ann N Y Acad Sci* 25.

Wilson, A.P '(Non) Human(imal) Rights: Dismantling the Separateness in Law and Policy' (2019) 3 *Society Register* 39-65.

Verwoerd D, Deeming D & Angel C, et al. 'Rearing Environments Around the World' in Deeming D *The ostrich: Biology, Production and Health. The Ostrich: Biology, Production and Health.* (1999) New York: CABI Publishing.

Western Cape Department of Agriculture *Ostrich Manual* South African Ostrich Business Chamber (2014) Department of Agriculture: Western Cape.

Domestic Law and policy (South African only)

Constitution of the Republic of South Africa, 1996.

Animal Diseases Act 35 of 1984.

Animals Improvement Act 62 of 1998.

Animals Protection Act 71 of 1962.

Consumer Protection Act 68 of 2008.

Game Meat Strategy for South Africa, 2023 in GN 4042 GG 49620 of 8 November 2023.

Revised South Africa's National Biodiversity Framework for 2019-2024, GN 2423 GG 46798 of 26 August 2022.

White Paper on Conservation and Sustainable Use of South Africa's Biodiversity in GN 3537 *GG* 48785 of 14 June 2023.

Environmental Impact Assessment Regulations Listing Notice 1, GNR 983 of 4 December 2014.

Meat Safety Act 40 of 2000.

National Environmental Management Act 107 of 1998.

National Environmental Management: Air Quality Act 39 of 2004

National Environmental Management: Biodiversity Act 10 of 2004.

National Environmental Management Laws Amendment Act 02 of 2022.

National Environmental Management: Waste Act 59 of 2008.

National Health Act 61 of 2003.

National Water Act 36 of 1998.

Ostrich Regulations in GN 8622 GG 29559 of 2 February 2007.

Societies for the Prevention of Cruelty to Animals Act 169 of 1993.

International instruments

The Human Right to a Clean, Healthy and Sustainable Environment: resolution / adopted by the General Assembly, A/RES/76/300.

Brundtland, G.H. (1987) Our Common Future: Report of the World Commission on Environment and Development. Geneva, UN-Dokument A/42/427.

Post 2020 Global Biodiversity Framework, CBD/WG2020/5/L.2 5 December 2022.

Convention on Biological Diversity of 5 June 1992 (1760 U.N.T.S. 69).

Convention on International Trade in Endangered Species of Wild Fauna and Flora) 3 March 1973, 993 U.N.T.S. 243.

World Organisation for Animal Health, Terrestrial Animal Health Code (2023).

UN General Assembly, Entry into force of the constitution of the World Health Organization, 17 November 1947, A/RES/131.

UN General Assembly, United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly, 20 January 1994; Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 162; Paris

Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.

Case Law

BP Southern Africa (Pty) Limited v MEC for Agriculture, Conservation, Environment & Land Affair (03/16337) [2004] ZAGPHC 18 (31 March 2004).

Endangered Wildlife Trust v Minister of Agriculture, Land Reform and Rural Development and Others; SA Hunters and Game Conservation v Minister of Agriculture, Land Reform and Rural Development and Others (1138/2022;94568/2019) [2023] ZAGPPHC 163.

Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others (CCT67/06) [2007] ZACC 13; 2007 (10) BCLR 1059 (CC); 2007 (6) SA 4 (CC).

Government of the Republic of South Africa and Others v Grootboom and Others (CCT11/00) [2000] ZACC 19; 2001 (1) SA 46; 2000 (11) BCLR 1169 (4 October 2000).

Hichange Investments (Pty) Ltd v Cape Produce Co (Pty) Ltd t/a Pelts Products 2004 (2) SA 393 (E).

HTF Developers v Minister of Environmental Affairs and Tourism and Others 2006 5 SA 512 (T).

HTF Developers v Minister of Environmental Affairs and Tourism and Others (337/06) [2007] ZASCA 37; [2007] 4 All SA 1108 (SCA); 2007 (11) BCLR 1230 (SCA); 2007 (5) SA 438 (SCA).

Lemthongthai v S (849/2013) [2014] ZASCA 131; 2015 (1) SACR 353 (SCA).

National Council of the Society for Prevention of Cruelty to Animals v Minister of Environmental Affairs and Others (86515/2017) [2019] ZAGPPHC 337; 2020 (1) SA 249 (GP).

National Council of Societies for the Prevention of Cruelty to Animals v Openshaw [2008] ZASCA 78.

National Society for the Prevention of Cruelty to Animals v Minister of Justice and Constitutional Development and Another (CCT1/16) [2016] ZACC 46; 2017 (1) SACR 284 (CC); 2017 (4) BCLR 517 (CC).

S v Makwanyane 1995 (3) SA 391 (CC).

Standards and Soft Law

South African Bureau of Standards, Ratite Farming, Part 1: Ostriches, SANS 994-1: 2022 Edition 1.1.

South African Ostrich Business Chamber 'Ostrich Production – Requirements' (2019) SAOBC 1001:2019 available at http://lwcc.org.za/wp-content/uploads/2021/05/SAOBC-1001-2019-0strich-Production-Requirements-Version-1-0-20191112.pdf.

Electronic/Internet sources

Animal Liberation 'Emu and Ostrich Farming' available at https://www.al.org.au/ostrich-emu-farming (accessed on 6 May 2023).

ALRSA 'Laying Down the Facts' August 2023 Available at https://www.animallawreform.org/ourwork/#:~:text=In%20recognition%20of%20Women%27s%20Month,animal%20industries%20including%20but%20not (accessed on 25 September 2023), 260.

ALRSA 'Revised Draft White Paper Submission' 11 November 2022 available at https://www.animallawreform.org/our-work/ (accessed on 8 May 2023).

Balter M 'Engraved Eggs Suggest Early Symbolism' 1 March 2010 Science available at https://www.science.org/content/article/engraved-eggs-suggest-early-symbolism (accessed on 24 February 2023).

Berkhout N 'Challenges mount for ostrich farmers in South Africa' 11 September 2020 *Poultry World* available at https://www.poultryworld.net/poultry/challenges-mount-for-ostrich-farmers-in-south-africa/ accessed on (2 March 2023).

Cape Point Ostrich Farm available *at http://capepointostrichfarm.com/* (accessed on 24 February 2023).

Center for Disease Control and Prevention (CDC) 'Zoonotic Diseases (2021) available at https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html (accessed on 2 March 2023).

Cohen S 'The Dangers of Deregulation' 2 December 2019 *State of the Plant* available at https://news.climate.columbia.edu/2019/12/02/the-dangers-of-deregulation/ (accessed on 13 October 2022).

Cruywagen V 'Karoo ostrich farmers and workers fear avian flu outbreak after Gauteng cases' 20 April 2021 *Daily Maverick* available at https://www.dailymaverick.co.za/article/2021-04-20-karoo-ostrich-farmers-and-workers-fear-avian-flu-outbreak-after-gauteng-cases/ (accessed on 11 October 2022).

Datiles J 'Myths in the Museum: The Iron-Eater and the Ostrich Egg' 4 July 2019 *UCL* available at https://blogs.ucl.ac.uk/researchers-in-museums/2019/07/04/myths-in-the-museum-the-iron-eater-and-the-ostrich-egg/ (accessed on 24 February 2023).

Diekman D & Orffer M 'The Tale of the Ostrich Egg Shell' 4 June 2021 *The Narrative Namibia* available at https://narrativenamibia.com/blogs/news/the-tale-of-the-ostrich-egg-shell (accessed on 24 February 2022).

DFFE 'Bulk of the provisions contained in the National Environmental Management Laws Amendment Act, 2022, proclaimed' 30 June 2023) available at https://www.dffe.gov.za/mediarelease/nationalenvironmentalmanagement_lawsamendmentac tproclaimed (accessed on 21 July 2023).

DFFE 'Minister Barbara Creecy: National Assembly debate on Climate Change Bill' 25 October 2023 available at https://www.gov.za/speeches/national-assembly-debate-climate-change-bill-24-october-2023-address-minister-forestry (accessed on 21 November 2023).

DFFE 'Publication of the Game Meat Strategy for South Africa for Implementation' 10 November 2023 available at https://www.dffe.gov.za/mediareleases/creecy_gamemeatstrategy2023publication (accessed on 19 November 2023).

DTE Staff 'H5N1 bird flu could wipe out thousands of penguins across Antarctica' 28 October 2021 Down to Earth available at https://www.downtoearth.org.in/video/wildlife-

<u>biodiversity/h5n1-bird-flu-could-wipe-out-thousands-of-penguins-across-antarctica-92520</u> (accessed on 29 October 2023).

Engel K 'Highly Pathogenic Avian Influenza hits African penguins at SANCCOB in Cape Town' 1 December 2022 *IOL* available on https://www.iol.co.za/capeargus/news/highly-pathogenic-avian-influenza-hits-african-penguins-at-sanccob-in-cape-town-17c761ba-9313-41fa-a48f-ddca31abc8af (accessed on 29 October 2023).

Fihlani P 'Bird flu empty's South Africa's ostrich farms' 13 January 2021 BBC News available at *https://www.bbc.com/news/world-africa-16275280* (accessed on 3 November 2022).

International Union for Conservation of Nature (IUCN) 'Issues Brief; Species and climate change' October 2021 available at https://www.iucn.org/resources/issues-brief/species-and-climate-change (accessed on 1 March 2023).

Isaacs L 'Happy Cows' advert ruled misleading' 8 May 2020 *IOL* available at https://www.iol.co.za/capetimes/news/happy-cows-advert-ruled-misleading-47711159 (accessed on 6 May 2023).

KwaZulu-Natal Department of Health 'Avian Flu: Frequently asked questions' available at http://www.kznhealth.gov.za/cdc/avianfaq.htm (accessed on 2 November 2022).

Louw M 'Ostrich Farming in South Africa' available at https://southafrica.co.za/ostrich-farming-south-africa.html (accessed on 30 January 2023).

Loura J 'Principle of Intergenerational and Intra- generational Equity under International Environmental Law (2017) available at http://data.conferenceworld.in/SGTB/P01-06.pdf (accessed on 20 April 2023).

Livestock Welfare Coordinating Committee Standards available at https://lwcc.org.za/approved-codes/other-codes/.

LWCC 'Species' available at http://lwcc.org.za/approved-codes/species/ (accessed on 5 May 2023).

Mwaipopo R 'Significant Social and Economic Aspects of Biodiversity Conservation' UNEP (2016) available at

https://wedocs.unep.org/bitstream/handle/20.500.11822/11349/rsocr_printedition.compresse

d_Part11.pdf?sequence=12&isAllowed=y (accessed on 8 September 2023).

National Geographic 'Ostrich' available at https://www.nationalgeographic.com/animals/birds/facts/ostrich (accessed on 2 November 2022).

National Geographic Kids 'Ostrich Facts!' available at https://www.natgeokids.com/za/discover/animals/birds/ostrich-facts/ (accessed on 30 January 2023).

News24 'A fight for life and Death: Ostrich farmers battle as drought cripples Karoo' 23 January 2019 *News24* available at https://www.news24.com/news24/a-fight-for-life-and-death-ostrich-farmers-battle-as-drought-cripples-karoo-20190123 (accessed on 2 March 2022).

NSPCA available at https://nspca.co.za/units/ (accessed on 22 April 2023).

South African Government News Agency 'Cabinet approves revised game meat strategy for South Africa' 28 September 2023 *SAnews.gov.za* available at https://www.sanews.gov.za/south-africa/cabinet-approves-revised-game-meat-strategy-south-africa#:~:text="Ultimately%2C%20the%20strategy%20seeks%20to,.dffe.gov.za">https://www.sanews.gov.za/south-africa/cabinet-approves-revised-game-meat-strategy-south-africa#:~:text="Ultimately%2C%20the%20strategy%20seeks%20to,.dffe.gov.za">https://www.sanews.gov.za/south-africa/cabinet-approves-revised-game-meat-strategy-south-africa#:~:text="Ultimately%2C%20the%20strategy%20seeks%20to,.dffe.gov.za">https://www.sanews.gov.za/south-africa/cabinet-approves-revised-game-meat-strategy-south-africa#:~:text="Ultimately%2C%20the%20strategy%20seeks%20to,.dffe.gov.za">https://www.sanews.gov.za/south-africa/cabinet-approves-revised-game-meat-strategy-south-africa#:~:text="Ultimately%2C%20the%20strategy%20seeks%20to,.dffe.gov.za">https://www.sanews.gov.za/south-africa/cabinet-approves-revised-game-meat-strategy-south-africa#:~:text="Ultimately%2C%20the%20strategy%20seeks%20to,.dffe.gov.za">https://www.sanews.gov.za (accessed on 26 October 2023).

WOAH 'Members' Available at https://www.woah.org/en/who-we-are/members/ (accessed on 4 September 2023).

Oudtshoorn & De Rust Tourism 'Oudtshoorn: *Heart of the Ostrich Industry*' available at https://www.oudtshoorn.com/project/heart-of-the-ostrich-industry/ (accessed on 24 February 2023).

PETA Investigates 'Hermès and Prada Suppliers Exposed: Young Ostriches Butchered for 'Luxury' Bags' available at https://investigations.peta.org/ostriches-butchered-hermes-luxury/ (accessed on 15 August 2022).

Safari Ostrich Tours https://www.safariostrich.co.za/ostrich-farm-tours/ (accessed on 24 February 2023).

'South African Ostrich Business Chamber' *South Africa* available at https://southafrica.co.za/south-african-ostrich-business-chamber.html (accessed on 5 May 2023).

Staff reporter 'Ostrich culling continues – in secret' 11 august 2004 *Mail & Guardian* available at https://mg.co.za/article/2004-08-11-ostrich-culling-continues-in-secret/ (accessed on 11 October 2022).

Thukwana N 'South Africa reported 145 outbreaks of avian flu and culled 3.7 million birds in 12 months' 21 June 2022 *News24* available at https://www.news24.com/news24/bi-archive/south-africa-has-145-avian-influenza-cases-between-april-2021-and-march-2022-37-million-birds-killed-2022-6# (accessed on 2 May 2023).

UNEP 'Intragenerational Equity' available at https://leap.unep.org/knowledge/glossary/intragenerational-equity (accessed on 20 April 2023).

Wild Welfare 'Care For Us Common Ostrich (Struthiocamelus) Wild Welfare available at https://wildwelfare.org/wp-content/uploads/Common-Ostrich.pdf (accessed on 14 October 2022).

WOAH 'Animal Health and Welfare' available at https://www.woah.org/en/what-we-do/animalhealthandwelfare/#:~:text=Animal%20health%20is%20a%20key,or%20even%20 whole%20animal%20populations (accessed on 4 August 2023).

WOAH 'Avian Influenza' available at https://www.woah.org/en/disease/avian-influenza/ (accessed on 1 May 2023).

World Health Organization 'Avian Influenza (H3N8) China' available at https://www.who.int/emergencies/disease-outbreak-news/item/2023DON456#:~:text=On%2027%20March%202023%2C%20the,have%20been %20reported%20from%20China (accessed on 2 May 2023).

World Health Organization 'Influenza (Avian and other zoonotic)' 13 November 2018 available at https://www.who.int/news-room/fact-sheets/detail/influenza-(avian-and-other-zoonotic) (accessed on 7 March 2023).

World Health Organization 'WHO Coronavirus (COVID-19) Dashboard' available at https://covid19.who.int/ (accessed on 2 October 2023).

