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PROJECT DONOR

This Project is generously funded by Food System Research Fund of Humane America Animal Foundation (HAAF).

ANIMAL LAW REFORM SOUTH AFRICA

Animal Law Reform South Africa ("ALRSA") is South Africa’s first and only dedicated animal law non-profit organisation. ALRSA’s vision is a society whose laws and policies recognise and protect the interests of humans, nonhuman animals and the environment.

ALRSA operates through three key Pillars being: Animal Wellbeing; Social Justice; the Law.

ALRSA undertakes its work through three main Mechanisms, namely: Education & Research; Legislative & Policy Reform; Litigation & Legal services.

Through these Mechanisms, ALRSA aims to contribute to the development of a robust animal law ecosystem in South Africa which recognises the intrinsic worth of non-human animals as sentient beings. Our work is grounded in our understanding that it is critical for a context-sensitive approach to be taken to the furtherance of animal protection in South Africa, and that the impact of our work is enhanced through an intersectional approach to animal wellbeing, social justice and environmental protection.

ALRSA would like to acknowledge the institutional funding provided by the EMS Foundation which contributed to making this Project possible.

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For enquiries, comments, suggestions on and proposed amendments to this Working Paper, please email: foodsystems@animallawreform.org
*WORKING PAPER* AS AT 18 JULY 2022

The South African food system is broken.
Not only is it unsustainably, and uneconomical, but it actively infringes on guaranteed Constitutional Rights.

An urgent transformation is needed – One that is Ethical, Just and Sustainable.

South Africa is widely regarded as having the most, or one of the most progressive Constitutions in the entire world.

Section 27 of the Constitution\(^1\) states that “Everyone has the right to have access to…sufficient food and water”.\(^2\) The State is required to take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.\(^3\)

Yet, according to the most recent report on the State of Food Security and Nutrition in the World 2021,\(^4\) between 2018 and 2020, the prevalence of moderate or severe food insecurity in the total South African population was 44.9% equating to 26.3 million people while the number of severely food insecure people was 11.3 million. Furthermore, the prevalence of stunting in children (under 5 years of age) was 23.2%.

This should be contrasted with the fact that in 2016 the number of adults (18 years and older) who were obese was 10.4 million.\(^5\) In 2020 the prevalence of anaemia among women of reproductive age (15–49) was 30.5%\(^6\) and studies show that South African women have the highest rate of obesity in the Sub-Saharan Africa region, being 42%.

South Africa raises and kills over 1 billion sentient animals for food every year.

The date of the publication of this paper is **18 July 2022**. This date coincides with Nelson Mandela Day each year. The theme for Nelson Mandela Day this year is:

**“An intersection between food security and climate change.”**

This is a vital time to highlight these links, and particularly, with regard to intensive animal agriculture.

It is clear that the Right to Food, guaranteed to all South Africans is not being met.

The State, which is required to take reasonable legislative and other measures to achieve this right, is actively promoting industries which are harmful to people, animals and the planet and which infringe on other guaranteed constitutional rights.

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\(^2\) Ibid at Section 27(1)(b)

\(^3\) Ibid at Section 27(2)


\(^5\) Ibid page 133.

\(^6\) Ibid page 133.
Section 24 of the Constitution guarantees everyone the right to have the environment protected for the benefit of both current and future generations and again, that the state must take reasonable legislative and other measures to achieve the progressive realisation of that right. Intensive animal agriculture has innumerable negative impacts on the environment which are further detailed in this Working Paper.

While government continues to promote animal agriculture as a solution to many of the country’s socio-economic problems, recently, it has taken an apparently antagonistic approach towards alternatives to animal products. During the compilation of this Working Paper, the South African Department of Agriculture Land Reform and Rural Development (“DALRRD”) issued a Communique7 about the “illicit use” of product names in respect of names exclusively prescribed for processed meat products, such as “vegan or veggie biltong”, “mushroom biltong”, “plant-based meatballs”, “vegan nuggets”, “vegan BBQ ribs”, “plant-based bratwurst”, “chorizo & red pepper vegetarian sausages” and “plant-based chicken-style strips”, etc. (the “Communique”). This document states that it is an offence to use product names prescribed or reserved for processed meat in the sale of analogues and further indicates that the Food Safety Agency (Pty) Ltd will seize any meat analogue products using the product names prescribed for processed meat products.

The Communique is discussed in further detail below. As at the date of this Working Paper, meat analogue companies were already being issued with “Directions” and other communications from the Food Safety Agency about the Communique and their products, and certain retailers were also directed to remove products from shelves. This Communique and resulting actions will have major implications on the meat analogues industry as well as current and future potential consumers who purchase these products.

Accordingly, this Working Paper comes at an opportune and critical moment in the development of meat analogues and alternatives and a shift away from animal proteins.

Much of the discourse around food in South Africa is centred around “Food Security”. There is less discourse around “Food Justice” and “Food Sovereignty”. Both of these concepts represent important issues in discussions around transforming food systems and warrant further research and consideration.

“Food justice is a holistic and structural view of the food system that sees healthy food as a human right and addresses structural barriers to that right. The movement draws in part on environmental justice, which emerged in the 1980s as a critique of how environmentalism became more mainstream as it became more elite, more white, and more focused on wilderness and scenery than on human

7 https://www.foodfocus.co.za/assets/documents/Communique%20to%20the%20stakeholders%20of%20meat%20analogue%20%20%20%20%20June%202022.pdf
communities vulnerable to pollution (the effects of which are at once disparate and racialized).”

Given the use of food as a weapon previously in South Africa’s history and the current realities for the vast majority of the population, food systems must incorporate this concept.

In addition to food justice, “Food sovereignty is the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations.” Similarly, this concept should form one of the foundations of work around food systems in South Africa.

While there are no easy solutions, it is apparent that the current system is not working. The continuous promotion of unsustainable, harmful, unequal and unethical systems is to the detriment of the country and all of its inhabitants.

South Africa’s pervasive food insecurity as well as its supreme Constitution, require government to rethink current systems and act strategically and decisively to build resilient food systems. The Republic must properly include the concepts of Food Justice and Food Sovereignty into the discourse and policy around food systems and create and promote innovative solutions.

This Working Paper aims to assist in the process of redefining and transforming the South African food system by contextualising the interdependence of the major role players in the food industry, highlighting challenges with its current regulation, and offer potential legal and policy interventions that mitigate the harmful social, environmental, health-related, economic and ethical effects of South Africa’s current system of intensive animal agriculture.

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9 Declaration of Nyéléni, the first global forum on food sovereignty, Mali, 2007
“IT IS IN YOUR HANDS, TO MAKE A BETTER WORLD FOR ALL WHO LIVE IN IT.”

– NELSON ROLIHHLALA MANDELA
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EXECUTIVE SUMMARY

This Working Paper seeks to highlight some of the key challenges prevailing in South Africa’s food system with a view to providing recommendations for improvement. It was produced using literature review, key informant interviews and a survey as research methods. Particular challenges identified relate to the country’s overreliance on animal-based protein and products and the barriers in advocating for a shift towards alternatives to animal meats and products. Solutions as to how the law can be used as a lever to transition the country towards alternative products and systems are discussed.

The Working Paper identifies the impact of animal protein consumption on a number of key areas including animal welfare, human health, and social justice considerations as well as environmental and climate change concerns. The Working Paper will be used by Animal Law Reform South Africa (ALRSA) and other stakeholders as a basis for future research, discussion and engagement, including the development of a White Paper to guide law and policy reform in this area.

Tackling existing intensive animal agriculture emerged as a key consideration for South Africa if it is to emerge from its overreliance on animal protein and embrace existing and future plant-based and other alternatives. Intensive animal agriculture has major impacts on the environment as it contributes significantly to global warming through emissions of greenhouse gases of methane and nitrous oxide, and displacement of biomass carbon on the land used to support livestock. The Food and Agricultural Organisation (FAO) has reported that livestock contribute approximately 18% of greenhouse gas (GHG) emissions. A study by Tongwane and Moeletsi observed that cattle in South Africa produced a total of 35.37 million tonnes (Mt) of carbon dioxide equivalent (CO2e) emissions in 2019, from pasture, range and paddock. Methane from enteric fermentation accounts for 64.54% of the total emissions followed by emissions from pasture, range and paddock (27.66%). Manure management contributes 4.34% of nitrous oxide (N2O) to the total emissions while this source also produces 3.45% of methane (CH4) emissions. Commercial beef is responsible for 50.21% of the total emissions, followed by subsistence beef (36.72%), commercial dairy (10.52%) and feedlot cattle (2.52%). Overall, South Africa's emission factors are higher than values from other African countries. With these statistics, it is imperative to cut on intensive animal agriculture in order to reduce the country’s carbon footprint and the attendant climate change implications.

Intensive animal farming was also identified as a major cause of land, air and water pollution with devastating consequences for these environmental elements, biological diversity, human health and social justice issues. There are human rights implications for workers who may experience negative psychological impacts from witnessing violence against animals in intensive animal farming systems. Furthermore, workers’ rights to health may be violated as a result of their interactions with animals (zoonotic diseases). In many instances, polluted water and destruction of fertile soil is also a women’s rights concern as women are often in charge of smaller subsistence farming supporting household
consumption, and this directly impacts their livelihoods. Where water systems have become polluted due to intensive animal agriculture, this can extend to the reproductive rights of women and girl children. Many women and girl children do not have access to menstruation products and rely on cloths etc. which they have to wash and reuse, and when water is not clean, they then risk infection.

The practice also has immense negative implications on animal welfare and rights. The processes disregard animals’ natural life cycles and facilitate abuse of animals. Animals are often confined in small spaces where they cannot stand or move around. To minimise cannibalism and facilitate easy animal handling, beaks, tails and horns are removed in a manner that violates animal welfare and rights. Additional mutilations are done to animals for different reasons including for example castration. There is not always anaesthesia or numbing prior to such procedures. Because of the intensive form of production, ammonia and toxic products of animal excretion accumulate in the animal housing causing animal harm and distress. Animals may also not have access to clean drinking water and not have their nutritional needs met from the food they are being fed. Many other forms of animal welfare and rights violations are identified in this Working Paper.

Direct and indirect support from government allows intensive animal production facilities to systematically undercost and otherwise misprice meat and dairy products, which offers short term benefit to consumers but continues to impact negatively on the broader public interest. The status quo is reinforced by industry and government messaging asserting that food security is only possible in South Africa by expanding intensive animal production. This assertion ignores the uncosted negative externalities and is thus flawed. Government should therefore not push the intensive animal farming agenda without putting in place legislative measures to regulate how this should be done. If adequate regulatory measures are to be put in place first, then government would realise the impact of intensive agriculture on animal rights and welfare, the environment and human health and rights, leading to different policy and legislative approaches on the matter.

The Working Paper identified numerous existing laws governing animal rights and welfare and the interactions between animal production, the environment and human health and rights. It revealed further that the laws are scattered across different disciplines and mandate areas for government departments. As a result, implementation is lacking, or ineffective or public and stakeholder knowledge of the legal framework is lacking. This also leads to a lack of coordination amongst different government departments at national, provincial and local levels. A standalone law addressing the country’s food system in relation to animal production would help in addressing some of these challenges.

Promoting research into alternatives is an important way of creating understanding around them and developing acceptance by consumers, the food industry and the government. In the USA, current research projects that the global market for plant-based substitutes will increase to reach $85 billion (USD) by 2030 coupled by a reduction in demand for beef and dairy products by 80–90% by 2035. The broad acceptance of plant-based meat alternatives in South Africa as indicated in a recent survey will most likely see a similar increase in demand for plant and other alternative meats and a decrease
in animal-based meats, particularly if the regulatory framework supports such a shift. However, the results on the consumer understanding and perception of both the animal welfare issues and animal farming practices in the survey undertaken as part of the development of this Working Paper demonstrate that there is no clear consensus and understanding of the animal farming practices and animal welfare issues in South Africa. The ideal scenario will be one where the public is educated and capacitated to make informed decision on their eating habits.

Research is also needed to contextualise the extent of the 10 categories of externalized cost in the South African agricultural and food system; and consider alternative models of food production that recognize South Africa’s specific context of climate, soil suitability, population, politics and social environment. This should be supported by research into the impact of intensive animal farming on animal rights and welfare, human health, social justice, the environment and climate change in order to inform law and policy reform. The health benefits and appropriate production methods of alternatives are also important research areas to help in creating acceptance and ensuring that the same problems that are currently associated with intensive animal farming are not transplanted into the alternative food sources production sector.

The Working Paper identified a number of barriers to the adoption of alternative sources of protein in South Africa. Some of these barriers were identified as cost, accessibility, perception, awareness/knowledge, cultural considerations and efforts of the meat/animal farming industry lobby to dissuade government and consumers from adopting alternatives. Government’s tax and incentive regime was identified as a crucial aspect in lowering the cost of alternatives to ensure affordability and increasing the cost of meat and other animal-based protein to reduce demand. The survey and key informant interview results showed that there is general availability of alternatives in South Africa’s food stores, although they are allocated small spaces. Large corporations were urged to increase the number and amount of plant-based alternatives (e.g. supermarkets, fast food outlets, restaurants) and this should be promoted by Government. It was also noted that alternatives should be made available in low-income areas, and closer to where people live, including in spaza shops and in the rural areas of the country. The paper revealed that misleading messaging by the animal production and processing industry through deceptive advertising and labelling should be addressed to ensure that consumers have correct information to inform their food consumption choices.

Different perceptions emerged regarding the consumption of both animal protein and alternatives. It emerged that there is currently significant stigma that is attached to alternatives (given their association with veganism), leading to the view that they are expensive and specifically in the context of South Africa that they are for white people. Additionally in some African cultural mind-sets, beef is for example considered better than beans because it is more expensive than the latter. As such, to have meat on one’s plate is a sign of prosperity. The survey part of the research also showed that some people believe that meat consumption is integral to a good and healthy diet. Yet, the opposite may be true in light of World Health Organisation reports on the carcinogenic probability of red and processed meat and the fact that there are other communicable and non-communicable diseases that are associated with the consumption of animal-based protein.
One way to counteract stigma (which in turn would serve as a promotion for alternatives), and perceptions would be to educate people residing in poorer communities about alternatives and their associated health benefits. There is no education in schools on the impacts of climate change from industrialised farming systems and minimal, if any, education on the benefits of a primarily plant-based diet for personal and planetary health.

From a cultural and religious angle, the research revealed that the entrenched place of the “braai” in many, particularly Afrikaans households and social platforms is also a factor that will play a large role in a transition to alternatives including plant-based protein in such communities. The number of cattle and other animals that one owns in many Black communities is also a sign of wealth and the attendant respect that one gains in the community. This encourages these communities to keep many cattle and other animals and use meat, milk and other animal products for their food, cultural and religious practices and as a store of value and economic status. It was also noted that in South Africa there are deeply traditional and sacred rituals that use animals which are justified because of their cultural and spiritual significance. It is important that this is factored into the understanding of animal law and reform in the country with a view to transforming the country’s food system.

Looking ahead, the research undertaking for this Working Paper assisted in identifying a number of potential avenues to utilise the law and policy to both move away from industrial animal agriculture and to promote alternatives. These recommendations relate to different stakeholders from government to the private sector as well as the public. Among others these broadly include that the government departments need to rise to the challenge of properly and fairly regulating ASFs and alternatives in line with their respective mandates as well as giving consideration to their interconnected nature, and furthermore to properly enforce such regulation. The private sector must be held accountable to such regulation with adequate monitoring and there needs to be greater transparency. The public and consumers need to be provided with the relevant information and be better educated about their food in order to be empowered and to make informed decisions. Other systemic issues need to be dealt with relating to the economy and society which can also inform law and policy.

While some of the recommendations relate to better enforcement of existing laws, some speak to new laws which should be passed or incorporated into the existing regime, and some require litigation to be brought before courts in order that the judiciary may decide on these or interpret the law in a way that progresses past current interpretations.

These initial recommendations will be further explored and built on in the next phase of the Project and for the White Paper in October 2022. Additional items for further research and consideration where also included for the next phase or to occur outside the scope of this Project.
SECTION 0

INTRODUCTORY MATTERS
## I. List of Abbreviations and Terms

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<th>Full Name</th>
<th>Description</th>
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<tr>
<td>AAMP</td>
<td>Agriculture and Agro-processing Master Plan</td>
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<td>AFMA</td>
<td>Animal Feed Manufacturers Association</td>
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<td>ALRSA</td>
<td>Animal Law Reform South Africa</td>
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<tr>
<td>AMR</td>
<td>Antimicrobial Resistance</td>
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<tr>
<td>APA</td>
<td>Animals Protection Act 71 of 1972 as amended</td>
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<td>ARB</td>
<td>Advertising Regulatory Board</td>
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<td>ASF/s</td>
<td>Animal Sourced Foods</td>
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<tr>
<td>Cell-based meats / Cellular meat</td>
<td>Cell-based/ cellular meats also known as cultivated meat or cultured meat, is genuine animal meat (including seafood and organ meats) that is produced by cultivating animal cells directly. This production method eliminates the need to raise and farm animals for food. Cultivated meat is made of the same cell types arranged in the same or similar structure as animal tissues, thus replicating the sensory and nutritional profiles of conventional meat.</td>
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<tr>
<td>CH₄</td>
<td>Methane</td>
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<td>CRL</td>
<td>Commission for the Rights of Cultural, Religious &amp; Linguistic Communities</td>
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<td>CAFOs</td>
<td>Concentrated animal feeding operations</td>
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<td>CBOs</td>
<td>Community Based Organisations</td>
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<tr>
<td>CBD</td>
<td>Convention of Biological Diversity</td>
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<td>CBAM</td>
<td>Cross-Border Adjustment Mechanism</td>
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<td>CSOs</td>
<td>Civil Society Organisations</td>
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<tr>
<td>DALRRD</td>
<td>Department of Agriculture Land Reform and Rural Development (South Africa) – previously the Department of Agriculture, Forestrries and Fisheries (DAFF)</td>
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<td>DFFE</td>
<td>Department of Forestrries, Fisheries and Environment (South Africa) - previously the Department of Environmental Affairs (DEA)</td>
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<td>DoH</td>
<td>Department of Health (South Africa)</td>
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<td>DPP</td>
<td>Director of Public Prosecutions</td>
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<tr>
<td>DTIC</td>
<td>Department of Trade, Industry, and Competition (South Africa)</td>
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<td>DSI</td>
<td>Department of Science and Innovation</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>EMIs</td>
<td>Environmental Management Inspectorates</td>
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<tr>
<td>FAO / UN FAO</td>
<td>Food and Agricultural Organisation of the United Nations</td>
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<tr>
<td>FBOs</td>
<td>Faith Based Organisations</td>
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<tr>
<td>Abbreviation</td>
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<tr>
<td>FPMC</td>
<td>Food Price Monitoring Committee</td>
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<td>GBV</td>
<td>Gender Based Violence</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GFI</td>
<td>The Good Food Institute</td>
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<td>GHG</td>
<td>Greenhouse Gases</td>
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<td>HBA</td>
<td>Hazardous Biological Agent</td>
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<td>KII</td>
<td>Key Informant Interviews</td>
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<td>KZN</td>
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<td>LWCC</td>
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<td>MSA</td>
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<td>MPA</td>
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<td>NAMC</td>
<td>National Agricultural Marketing Council</td>
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<tr>
<td>NDP</td>
<td>National Development Plan</td>
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<td>NEMA</td>
<td>National Agricultural Marketing Council</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>National Climate Change Response Policy (NCCRP)</td>
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<td>NRMDP</td>
<td>National Red Meat Development Programme</td>
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<td>National Prosecuting Authority</td>
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<td>National Research Foundation</td>
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<td>National Council of Societies for the Prevention of Cruelty to Animals</td>
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<td>NSTPF</td>
<td>National Stock Theft Prevention Forum</td>
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<td>N₂O</td>
<td>Nitrous Oxide</td>
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<td>OIE</td>
<td>World Organisation for Animal Health</td>
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<td>OTC</td>
<td>Over the counter</td>
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<td>Promotion of Access to Information Act</td>
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<td>Red Meat Producers Organisation</td>
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<tr>
<td>Project</td>
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<tr>
<td>SABS</td>
<td>South African Bureau of Standards</td>
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**I. Purpose**

This project is entitled: “Barriers to the Transformation of the South African Food System – Can the Law be a Lever for Change” (the “Project”).

The purpose of this Project and its various components is to conduct a diagnostic analysis of barriers to the transformation of South Africa’s food system to inform advocacy for the reform of the regulatory regime to promote farmed animal welfare, human rights, health, and environmental protection and to provide for a phased shift away from dependence on intensive animal agriculture and animal-based protein and move towards alternative systems and proteins including those which are plant, fungi, and cell-based.

More specifically, this Project intends to draw attention to the regulatory gaps that exist in these areas and identify opportunities to grant greater protection to animals, humans and the planet.

The purpose of this Working Paper is to commence the process of gathering research and information on topics relating to the food systems in South Africa particularly as these relate to animal-sourced foods and alternatives. The focus is largely on the regulatory regime of the current animal sourced foods, with a primary emphasis on nonhuman animals within these systems and a secondary emphasis on critical related areas which impact on humans and nature including environmental, health and food safety, consumer protection and others.

There is a vast gap in knowledge, information, research and transparency around farmed animal agriculture in South Africa. This transcends many issues including the numbers of animals implicated; methods of production; animal welfare and treatment; environmental practices; use of antibiotics;
food safety; human health; social justice; worker safety and wellbeing; economic impacts and the true cost of such products; among many others. Accordingly, this Working Paper hopes to go some way at bringing to the surface information which can be used by those working in this sector to advocate for better regulation and practices that are more ethical, sustainable and in pursuit of social and inclusive justice.

It aims to highlight gaps, potential items for further research, debate and discussion and identify matters to be explored further for purposes of the White Paper.

II. Avenues

Based on the purpose of the Project, there are two main avenues which require analysis and action:

1. The shift away from Animal Sourced Foods (ASFs) and systems relating to animal agriculture, specifically intensive animal agriculture (hereinafter “Avenue 1”) and
2. A shift towards alternative sources of foods, with focus on plant-based and cellular alternatives (hereinafter “Avenue 2”), collectively, the “Avenues”.

III. Scope of Research and Methodological Approach

The Project entails the following elements:

A. A Legal and Regulatory Gap Analysis of the current animal and agricultural law and policy framework in South Africa and its capacity to address the harms of industrialised animal agriculture and to accommodate the growth of alternative proteins in South Africa’s food system;
B. Key Informant Interviews with stakeholders from across a spectrum of sectors who work in or interact with the food system in a variety of ways; and
C. A Public Survey of a representative group to demonstrate the extent to which the South African public is aware of the harms associated with animal agriculture in South Africa and the public perception of (i) farmed animal welfare and the health, environmental, and climate implications of our current farming systems; and (ii) alternative proteins and foods.

Based on this analysis and the barriers identified, the next step is to identify possible ways to transform South Africa’s food system through legal and policy reform pathways to improve farmed animal welfare through public and private sector regulation; promote public awareness of farmed animal welfare and the intersectional impacts of industrialised agriculture in South Africa; and prepare South Africa for a transition towards alternative proteins.
This Working Paper is the first open access phase of the Project which will culminate in a White Paper to be released in October 2022. Further information on all of these aspects is set out in further detail below.

**IV. Format**

This Working Paper is divided into six main Sections with additional Parts and Components. The main Sections are:

1. Introductory Matters
2. High Level Overview
3. Contextualising Animal-based Protein and Alternative Sources
4. Legal and Policy Framework
5. Initial Research Findings
6. Initial Recommendations
7. Items / Issues for Further Research and Next Steps

**V. Focus Areas and Exclusions**

Given the enormity of the topic of food systems and their various intersections, the research and Working Paper is limited in scope and non-exhaustive of all relevant aspects.

The focus for the Project is on the large scale, industrialised animal agricultural sector of traditionally terrestrial farmed animals in South Africa. More specifically, the Project focuses on certain key categories of animals being cows, pigs and chickens and on practices such as caging and crating.

There are many species of animals farmed in South Africa for various purposes – both wild (including lions, rhinos, ostriches, bucks, and others) and domestic (including ducks, geese, and other poultry, lambs and sheep, goats, horses, cattle, and others). There are also new and burgeoning areas – such as for example rabbit farming. Animals, their products as well as the by-products from farming them are also used in a variety of products.

The following aspects are not included for the purpose of this Working Paper and the research:

1. The farming of wild animals in South Africa including game and related products. This is a hugely complex area with massive implications for animals, the environment and people. There are important historical discussions and intricacies that warrant further research.
2. The farming of insects including bees and animals used as food and feed. This is an significant area that warrants further research and attention, specifically as it grows in other countries around the world and furthermore as insects are continuously being seen and promoted as an “alternative” to the current animal production systems. Insects are furthermore an important aspect of other animal farming such as chicken feed and aquaculture feed among others. People also eat wild insects as a protein source.
3. The farming and breeding of animals for other purposes including but not limited to clothing (including wool, hairs including mohairs, skins and furs); decoration; medicinal components; companion animals; for entertainment and sports purposes, working animals or otherwise. Each of these areas raises intricate considerations, have additional and specific regulations which apply to them, and warrant further research.

4. The farming and use of animals for consumption by other animals such as pet food. The pet food industry is relevant to the farming of animals and is an issue which warrants further research.

5. Wild caught fishing and aquaculture (although aquaculture is mentioned in one section for illustrative purposes). The South African Government has specific policies such as Operation Phakisa, which apply to these sectors. There are additional policies and laws that regulate these sectors. These areas also warrant further research and attention as they impact on the lives of millions of animals.

All of these aspects are important in the animal agricultural context but are outside the scope of this Working Paper unless specifically mentioned.

As an organisation focused primarily on animal law, this is the predominant lens through which the Working Paper has been drafted and should be considered, i.e. the centering of animals in the discussion. While social justice and environmental protection are critical components of the work of ALRSA, research has previously been done in these areas as there are already a number of important organisations focusing on these aspects. As such, this Project aims to fill a gap within food systems research to additionally include animals and their welfare, wellbeing and protection into this discussion, and the legal and policy tools which can be used to do this.

I. Project Documentation

The Project is registered on the Open Science Framework and the documentation referenced in this Working Paper can be found at the Open Science Framework Website here: https://osf.io/24wez/

11 Operation Phakisa Website: https://www.operationphakisa.gov.za/Pages/Home.aspx
SECTION 1

HIGH LEVEL OVERVIEW
I. Context

Globally, South Africa is amongst the countries with the highest rates of income inequality and absolute poverty.\(^2\) The Gini coefficient in South Africa is estimated at 0.68 and about 56% of South Africa’s population live in poverty whilst almost 28% are in extreme poverty, below the food poverty line.\(^2\) According to the Palma ratio, the top 10% of the population spent 8.6 times more than the bottom 40% in 2006; this ratio reduced to 7.9% in 2015. These figures indicate that overall inequality, measured at a national level, has declined between 2006 and 2015.\(^12\)

Whilst the country is considered food secure at a national level, large numbers of households within the country are food insecure.\(^2\) About 20% of South African households are estimated to have inadequate or severely inadequate access to food, whilst 33% are at risk of hunger. Food insecurity is linked to household income and with an average income of less than ZAR600 per month per person, the majority of the poor people in South Africa struggle to purchase enough food for families. On the other hand, the extremely rich people have adequate income to pay for adequate and quality food for consumption.

As of 2021, an individual living in South Africa with less than ZAR890 (roughly $62.8 U.S. dollars) per month was considered poor. Furthermore, individuals having ZAR624 (approximately $44 U.S. dollars) a month available for food were living below the poverty line according to South African national standards.\(^13\) The provinces with the highest headcount of adult poverty are Limpopo (67.5%), Eastern Cape (67.3%), KwaZulu-Natal (60.7%) and North West (59.6%). For these four provinces, significantly more than half of their population are living in poverty. Gauteng and Western Cape had the lowest proportion of adults living in poverty at 29.3% and 33.2%, respectively.

Knorr conducted research in 2019-2020 investigating South Africa’s eating habits and the nation’s general nutritional health.\(^14\) From this survey, it was reported that the population generally understands the main tenets of eating healthy, although a discrepancy exists between knowing healthy food and eating healthy food. The report also pointed out that South Africa is generally a meat-eating country, with meat being eaten on average 4 times per week. Poultry and red meat are the most common meats consumed. There is generally less consumption of fruits and vegetables. The same report indicated that between 1994 and 2019-20, there was > 50% consumption of processed and packaged foods, and >48% increase in consumption of processed meat. In South Africa, 70% of households source food from the informal market whilst 20% of the commercial farms provide 80% of the food in the formal retail outlet. A healthy food basket was reported to cost 65% more than junk food.\(^3\)

Agriculture including animal and crop farming contribute to food security. The South African agricultural sector is highly diversified and includes farming and processing of all the major grains,

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\(^{12}\) https://www.statssa.gov.za/?p=12930
with the exception of rice. Oil seeds, deciduous and subtropical fruits, sugar, citrus, wine, most vegetables and livestock species of cattle, dairy, pigs, sheep, broilers, ostriches and eggs are farmed and processed.\textsuperscript{15}

**Figure 1: The Goods that Drive South African Agriculture\textsuperscript{16}**


\textsuperscript{16} https://www.statssa.gov.za/wp-content/uploads/2021/05/agriPic1.jpg
In 2019, the total Gross Value of South African Agricultural Production was ZAR281 billion, with Animal production contributing 51% (ZAR143 billion), whilst field crops contributed 22% (ZAR62 billion) and horticultural crops 28% (ZAR78 billion) respectively. South Africa's agricultural sector consists of both corporate and private intensive farming as well as extensive and small-scale communal farming. The commercial farming sector is well developed and a major contributor to the agricultural economy. There are approximately 32,000 commercial farmers in South Africa, over 5,000 of which produce approximately 80 percent of agricultural output.

According to the Department of Agriculture Land Reform and Rural Development (“DALRRD”) report of 2020, South Africa has 12.8 million cattle, 19.4 million sheep, 3 million goats and 1.5 million swine. In addition is also 38.2 million poultry of which 27.6 million are layers and 10.6 million are broilers. Bovine products constitute 40% of the animal foods, poultry meat and eggs 39%, followed by ovine and caprine products constituting 10%.

II. Problem Statement: ASFs

Protein is a major and versatile constituent of food products that contributes to the nutritive value of food and gives food physicochemical and behavioural properties during processing.

Humans are increasingly consuming more animal-sourced foods (“ASFs”) as sources of proteins and other nutrients. According to Miller, mean global unprocessed red meat intake per person was 51 g/day in 23.9% of the world's population with mean national intake of at least one serving per day for processed meat (≥50 g/day) in countries representing 6.9% of the global population. Mean national intakes of cheese of ≥42 g/day and of eggs of ≥55 g/day were also reported. Driven by increasing global population and rising per capita food demand, global production of animal sourced foods (ASF) has more than tripled over the last 50 years, accompanied by a threefold increase of crops used for animal feed. Globally, a third of all cropland is used to produce feed crops whilst a quarter of free land area of the world is occupied by pastures.
Meat forms an integral part of the South African cuisine for the 60.14 million inhabitants. South Africans consume between 60 to 70 kilograms of meat per person per year and are ranked the highest meat consumer in Africa. Globally, South Africa is ranked 8th in poultry consumption per capita and 16th with regard to beef consumption per capita. South Africa and other developing countries are projected to experience further and significant increase in global meat consumption due to rapid population growth, rising income, and urbanization. Consumption of poultry and egg products is significantly higher than combined consumption of beef, pork, mutton and goat meat. South Africans consume between 150 and 159 eggs per capita each year. Consumption of milk in South Africa remains relatively low averaging 0.40kg per capita that translates to 124g/day/person.

The general trend has been an unsustainable increase in demand for food, particularly animal protein and products to feed the growing human population and increasingly demanding consumer. As such, adequate food needs to be efficiently and sustainably grown. According to Willet et al., the current global food systems and patterns of food consumption are unsustainable for both human and planetary health. Agriculture is considered the principal driver in achieving national (e.g. National Development Plan (“NDP”) 2030) and global (e.g. United Nations Sustainable Development Goals (“SDG”) goals particularly those centered on zero hunger and improved food and nutrition security, although several of the goals are implicated by agriculture.

The South African government is promoting ASFs across the board as a means to achieve certain developmental targets. One clear example is the Poultry Master Plan. Generally, the South African Poultry production sector is highly intensive and associated with mass production of chickens. The chickens are exposed to intensive selection for growth and meat yield at the expense of health and welfare. Currently on average broiler chickens reach a slaughter weight of 1.45kg in 6 weeks. The South African poultry sector master plan aims to stimulate local demand, increase production, boost exports, and protect the domestic chicken industry. Targets set within the poultry master plan include increasing broiler production by 1.7 million by 2023 which translate to 9% increase in 3 years. The

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24 StatsSA,
26 Source
7Shukla, P.R.; Skea, J.; Calvo Buendia, E.; Masson-Delmotte, V.; Pörtner, H.O.; Roberts, D.C.; Zhai, P.; Slade, R.; Connors, R.; Van Diemen, R.
plan also intends to increase the number of new and emerging commercial farmers who will be contracted by the bigger companies to supply chickens.\textsuperscript{30}

Overall, such a strategy will see massive increase in poultry coupled by decrease in the prices of poultry and poultry products, which will result in further increase in local consumption. The demand for poultry is already high in South Africa with a per capita broiler consumption $>38\text{kg/annum}$, which is presently higher than for any other meats.\textsuperscript{31} Poultry meat is presently the cheapest which explains the high demand and consumption rates. The poultry master plan is anticipated to grow the poultry industry, which would result in increased production and per capita consumption. Similarly in other livestock species, strategies are being put in place to improve local production. Examples include the KZN and National Goat Master Plans.

With increasing demand for meat and other animal sourced foods, animal farming has moved towards more intensive farming systems that compromise animal health and welfare. There are many practices that have been put in place in intensive farming systems to counteract problems that emerge as a result of intensive farm conditions that are not good for the wellbeing of animals. Such practices include but are not limited to tail docking in pigs in response to tail biting, beak trimming in hens in response to feather pecking in caged or more confined housing and dehorning in cows that is used to improve the handling of animals. All these practices are imposed to meet the constraints caused by animal production conditions as opposed to the more humane practice of the environment adapting to the animal. Intensive production systems also affect animal natural behaviours. Examples are of laying hens that fail to exhibit broody behaviour in cramped cages and often ending up exhibiting cannibalism. Further to animal welfare concerns, are major implications on food safety and human health.

In 2016, the highest court in South Africa, the Constitutional Court explicitly acknowledged both the sentience and intrinsic value of individual animals.\textsuperscript{32} In industrial animal agriculture, nonhuman animals are treated as mere commodities and units of production. This is evidenced by the use of specific terms such as “units” and statistical and other information. It is apparent that the statements by the Constitutional Court and subsequent courts have not been properly captured into the regulatory framework impacting animals, and the governmental entity responsible for welfare promotes harmful industries and practices relating to nonhuman animals.

ASFs account for the majority of the non-communicable diseases. South Africa has an adult obesity rate of 28 percent and a high burden of diet related diseases such as heart disease, Type 2 diabetes

\begin{footnotesize}
\begin{enumerate}
\item DTI, 2019. The South African Poultry Sector Master Plan.
\item https://www.agrifarming.in/poultry-farming-in-south-africa-how-to-start
\item 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) (8 December 2016) http://www.saflii.org/za/cases/ZACC/2016/46.html Para 56 and 57
\end{enumerate}
\end{footnotesize}
mellitus, stroke and some cancers. Meats produced under intensive production systems are subjected to health interventions that include use of antibiotics and vaccines that contribute to antibiotic resistance in humans who consume such by-products. According to the WHO, higher consumption of meat, particularly processed meat, leads to higher risks of several cancers.

In addition, animals share certain diseases with humans. There has been an increase in the incidences of such zoonotic disease recently. The 2017–2018 South African listeriosis outbreak was a widespread outbreak of Listeria monocytogenes food poisoning that resulted from contaminated processed meats produced by Enterprise Foods, a subsidiary of Tiger Brands, in Polokwane. There were 1,060 confirmed cases of listeriosis during the outbreak, and about 216 deaths. It was the world's worst ever listeriosis outbreak. Prior to 2017, an average of 60 to 80 listeriosis cases were confirmed in South Africa per year. Other zoonotic diseases of concern in South Africa include Rabies, Brucellosis, Tuberculosis, Anthrax and a number of other food borne diseases like Salmonella.

In addition to the animal and human impacts, intensive animal agriculture has major impacts on the environment. Globally, the food system itself accounts for 21–37% of greenhouse gas emissions. Agriculture uses 70% of freshwater. Animal agriculture contributes significantly to global warming through emissions of greenhouse gases of methane and nitrous oxide, and displacement of biomass carbon on the land used to support livestock. The Food and Agricultural Organisation (FAO) reported that livestock contribute approximately 18% of greenhouse gas (GHG) emissions. The study by Tongwane and Moeletsi observed that cattle in South Africa produced a total of 35.37 million tonnes (Mt) of carbon dioxide equivalent (CO₂e) emissions in 2019, from pasture, range and paddock. Methane from enteric fermentation accounts for 64.54% of the total emissions followed by emissions from pasture, range and paddock (27.66%). Manure management contributes 4.34% of nitrous oxide (N₂O) to the total emissions while this source also produces 3.45% of methane (CH₄) emissions. Commercial beef is responsible for 50.21% of the total emissions, followed by subsistence

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39 Eisen MB, Brown PO (2022) Rapid global phaseout of animal agriculture has the potential to stabilize greenhouse gas levels for 30 years and offset 68 percent of CO₂ emissions this century. PLOS Climate 1(2): e0000010. [https://doi.org/10.1371/journal.pclm.0000010](https://doi.org/10.1371/journal.pclm.0000010)
beef (36.72%), commercial dairy (10.52%) and feedlot cattle (2.52%). Overall, South Africa’s emission factors are higher than values from other African countries.

Agriculture has a significant water footprint with close to one-third of the total water footprint of agriculture in the world related to animal farming and product development. The water footprint of any animal product is larger than the water footprint of crop products with equivalent nutritional value. For example, the average water footprint per calorie for beef is 20 times larger than for cereals and starchy roots. The water footprint per gram of protein for milk, eggs and chicken meat is 1.5 times larger than for pulses. Animal products from industrial systems generally consume and pollute more ground and surface-water resources than animal products from grazing or mixed systems. The rising global meat consumption and the intensification of animal production systems will put further pressure on the global freshwater resources in the coming decades. Annually, 4,387 km of blue and green water is used to produce livestock feed, equating to about 41% of total agricultural water use.

According to the UN FAO, industrialized livestock production uses a significant amount of land surface with tremendous and detrimental impact on both land availability and soil health. About 26% of the Earth’s ice-free land is used for livestock grazing, and one-third of the planet’s arable (farmable) land is occupied by crops for livestock feed. According to the FAO reports, livestock grazing degraded an estimated 20–35% of the world’s permanent pastures by 2010 and the magnitude of land under similar pressure has been increasing due to increased and more intense livestock farming.

With these impacts of animal agriculture on animal welfare, food safety and human health, the environment including GHG emissions, use of resources such as land and water and pollution of water, air and soils, the anticipated overconsumption of ASFs and over-processed foods presents a number of challenges across the spectrum of animals, humans and the environment.

Importantly, the regulatory regime governing ASFs and their methods of production are severely lacking. This is particularly relevant in the context of animal welfare. There are very few regulations with regard to the welfare of animals farmed for food in South Africa. There has been a failure by the DALRRD to set specific regulations for animals used in certain contexts and this has led to a proliferation of voluntary, non-enforceable and weak and soft standards. This does not only impact on the animals but on humans and the planet. Simultaneously, the government promotes animal industries.

Law and policy have, to date, served as a barrier to transitioning towards a sustainable and just food system. It is estimated that by 2050, the South African human population will be 75.5 million people - an increase from 60.7 million in 2022. The increasing human population growth and demand for

food will impose pressure for increased production of ASFs that will further present challenges on (i) animal welfare and health; (ii) natural environment and (iii) human rights, wellbeing and health.

There is therefore an urgent need for more sustainable, efficient, and just food systems. Food systems must be properly and appropriately regulated, and such regulation must be enforced. Substituting ASFs with plant, fungi or other alternative sources of food has the capacity to substantially reduce the harmful negative impacts of food systems on the environment, humans and animals.

### III. Alternatives to ASFs

There have been major developments and new initiatives within the food industry aimed at providing alternative food sources including among others: meats, proteins, eggs, dairy products, honey and other animal products such as gelatine. These are increasingly becoming available to consumers and could circumvent the negative impacts of overdependence on ASFs. Meat alternatives are often promoted as a means of mitigating the environmental, animal welfare, and, in some cases, public health problems associated with farmed meat production and consumption while appealing to mainstream consumers through existing supply chains.\(^{45}\) Growing scientific consensus has established that substantial shifts toward plant-based diets, particularly in high meat-consuming countries, are essential for meeting climate change mitigation targets.\(^{46}\)

Such initiatives are more visible in America, Europe and generally the developed world, with less growth in the developing countries like South Africa. However, this is changing. In the US, the number of alternative protein brands has been growing. The Good Food Institute (GFI) 2021 state of the industry report reported growth in the number of companies, brands, volumes and sales of alternative meat products sold to consumers directly or through retail chains in 2021.\(^{47}\) There have been advances in applications of plant-based technology to produce new and enhanced products with products going beyond burgers to include plant-based bacon, sausages, and deli meats as well as a wide range of chicken and seafood alternatives. One of the major deterrents to consumption of alternative meats is the price parity with plant-based meats being more expensive and non-affordable to ordinary consumers. The 2021 GFI State of the Industry Reports\(^{48}\) indicated that several plant-based meat companies had moved closer to price parity, though the gap is still significant.\(^{49}\)


46 [https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/](https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/)


companies involved and the associated product type and attributes of the different plant-based meats launched between 2019-2021.

Table 1: Companies and the associated product type and attributes of the different plant-based meats launched between 2019-2021.

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A number of these companies now have a presence in South Africa. South Africa also has a number of its own plant-based and fungi-based alternatives, as well as companies undertaking the production of cell-based meats. Similar developments were made in fermented\(^50\) and cultivated meats.\(^51\) The majority of the cultivated meats companies are in the US, UK, South Korea, Singapore and Israel.

\(^50\) GFI: State of the Industry Report | Fermentation
\(^51\) GFI: State of the Industry Report | Cultivated Meat
In South Africa two companies (Mogale Meat Company\(^52\) and Mzansi MeatCo\(^53\)) are associated with cultivated meats whilst Sea stematic\(^54\) is associated with cultivated seafood.

South Africa has an opportunity to become a leader on the African continent when it comes to alternatives. If the proper legal framework is established and the development of alternatives is incentivised, these industries can flourish and lead to definitive socio-economic and other benefits including food security and food sovereignty.

Unfortunately, the South African government, particularly the Department of Agriculture, Land Reform and Rural Development have taken an aggressive stance against the so-called “meat analogues” as discussed further in this Working Paper. This is particularly concerning given the lack of regulation of animal agriculture in South Africa and particularly on animal welfare standards.

IV. Food System: Market Introduction

While the commercial South African food system is connected to international agribusiness and international finance, Research by the Centre for Development Research (ZEF) in Germany has demonstrated that foreign direct investments in the African food and agriculture sector amounted to about USD 48 billion between 2003 and 2017. The analysis also shows increased dynamism in investments for food and agriculture in Africa.\(^55\)

As of 2012, 87% of South African arable land was still owned by white, commercial farmers. This is indicative of South Africa’s dualistic agrarian structure that comprises around 32,000 large-scale, mostly white commercial farmers. These numbers are in stark contrasts with a larger number (approximately 4 million) of poorer, small-scale farmers and informal traders who operate at the margins of the formal system. With an urban population of 64%, access to food has been dependant on formal food traders upon which many informal food retailers and traders depend. The growing reliance on local stores and supermarkets has undermined the ability of households to invest in household food production and indirectly contributes to food insecurity.\(^56\)

The informal sector is made up of producers producing for subsistence and selling any surplus to their neighbours and neighbouring markets. This sector also consists of street vendors, hawkers, and those traders selling food products from their housing estates. The formal retail sector consists of supermarkets and neighbourhood stores, ‘cash and carry’ and other independent retail stores. Smaller scale growers, independent wholesalers, corner vegetable shops, and a once vibrant informal market

\(^52\) https://mogalemeat.com/
\(^53\) https://www.mzansimeat.co/
\(^54\) http://seastematic.com/
are being displaced by groups of preferred supplier-producers, and large regional distribution centres that spread across the country to supply a rapidly growing network of corporate, franchise, and voluntary trading group retailers with fresh produce.\(^{57}\)

According to South Africa’s Competition Commission’s 2019 Grocery Retail Market Inquiry Final Report,\(^{58}\) consumers’ purchasing decisions across living standards measure (LSM) categories tend to be informed by the same factors, namely price, availability, convenience and quality. Low-income households, for example, appear to rely on both spaza shops and the national supermarket chains for their grocery needs. The report found that customers from non-urban areas shop at spaza shops for day-to-day items due to the convenience of location and trading hours (approximately 40% of their budget), whilst they shop at the national supermarket chains for weekly and monthly shopping where price, variety, quality and packaging size matter.

According to the February 2022 issue of the NAMC food basket, when comparing January 2022 to January 2021 retail prices, higher price inflation (6.0% or more) was observed for the following products (in order from highest to lowest inflation): beef offal, sunflower oil, tomatoes, cabbage, margarine, beef mince, white sugar, polony, and IQF chicken portions.\(^{59}\) The Food Price Monitoring Committee (FPMC) was established by the then Department of Agriculture, Forestry and Fisheries (DAFF) to track and report food price trends in South Africa; provide explanations of the observed trends and to then advise the Department on any possible action that could be taken should national and household food security be threatened.

According to the DSI/NRF Centre of Excellence in Food Security Agro-food value chain, regulation, and formal and informal livelihoods project, food security in South Africa is undermined by access, employment and labour practice, nutrition and food safety, consumer vs corporate power, and the overlap between formal and informal food markets.\(^{60}\) In every value chain, role players have varying power driven by the free market; this affects how value is distributed within the chain. The power disparity, in food systems in particular, leads to very complex and dynamic systems that are very hard to study holistically, and the lack of appropriate policy has undermined food security in South Africa.


\(^{60}\) https://foodsecurity.ac.za/news/asking-the-right-questions-about-south-africas-food-system/
There has been an unsustainable increase in demand for food, particularly animal protein and products to feed the growing human population and increasingly demanding consumer. As such, Willet et al.\(^6\) argue the current global food systems and patterns of food consumption are unsustainable for both human and planetary health. Direct and indirect support from government allows intensive animal production facilities to systematically undercost and otherwise misprice meat and dairy products, which offers short term benefit to consumers but continues to impact negatively on the broader public interest.\(^6\)

Governmental policies and programs continue to promote and support animal agriculture without adequately considering the impact, and without sufficient regulation in place.

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\(^{63}\) [https://docs.wfp.org/api/documents/WFP-0000129529/download/?_ga=2.4068275.2036508875.1657095872-1624312932.1657095872](https://docs.wfp.org/api/documents/WFP-0000129529/download/?_ga=2.4068275.2036508875.1657095872-1624312932.1657095872)
A. Governmental Policies and Programs: Examples

**Poultry Master Plan**

South Africa does not produce near sufficient quantities of poultry products to meet demand, thus, importing it from other countries. The demand for poultry is already high in South Africa with a per capita broiler consumption > 38kg/annum, which is presently higher than for any other meats. Poultry meat is presently the cheapest which explains the high demand and consumption rates. The “Poultry Master Plan” is anticipated to grow the poultry industry, which would result in increased production and per capita consumption. Similarly in other livestock species strategies are being put in place to improve local production. (Examples include the KZN and National goat master plans).

According to South African Poultry Association (SAPA)’s 2020 Annual Report, the poultry industry continues to be the largest customer of the Animal Feed Manufacturers Association (AFMA). A total of 6.724 million tonnes of feed was sold in the period from April 2019 to March 2020. Poultry consumed 4.260 million tonnes, of which 2.710 million tonnes (63.6%) was broiler feed, 0.999 million tonnes (23.5%) was layer feed, 0.537 million tonnes (12.6%) was breeder feed and 0.014 million tonnes (0.3%) was ostrich feed. In total, 63.4% of AFMA’s animal feed sales (up from 61.1%) went to the poultry industry (including ostrich). National feed production during 2019/20 was estimated to be 11.961 million tonnes; a 3.9% annual increase. AFMA sales (6.884 million tonnes including feed derived from concentrates) therefore represented 57.6% of the national feed produced.

Commercial egg production is dominated by three producers, Eggbert, Nulaid and Highveld Cooperative (Top Lay). These three companies command around 51% of the market share while the remaining 49% is produced by the Small, Medium and Micro enterprises (SMME’s) and developing sector. According to the 2020 Profile of the South African Egg Market Value Chain, Gauteng is the largest producer of eggs in South Africa with the market share of 24%, followed by Western and Northern Cape by 22%, Free State with 15%, North West province with share of 11%, and KwaZulu-Natal with 10%. These five provinces account for 83% of the production while the remaining four provinces have a combined market share of 17%. The production of eggs follows consumption areas as eggs are perishable and cannot be transported for long distances.

**National Red Meat Development Programme**

According to the National Agricultural Marketing Council (NAMC)’s 2020-21 Annual Report, it has facilitated the implementation of the National Red Meat Development Programme (NRMDP), in collaboration with the Department of Agriculture Land Reform and Rural Development. The

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64 https://www.agrifarming.in/poultry-farming-in-south-africa-how-to-start
NRMDP is a market facilitation programme that affords developing farmers an opportunity to upscale their participation in the marketing of their livestock. Farmers are trained on the various market channels, grading, classification, pricing and other formal market details. The programme aimed to develop the desired institutional capacity in rural areas through the establishment of custom feeding infrastructure and the facilitation of livestock auctions. According to the aforementioned report, the programme resulted in a loss of ZAR25,022,387.54. Irregular expenditure disclosed in the current year relates to expenditure incurred in the current financial year 2020/21 on the NRMDP project whereby by the contract was entered into without following the delegation of authority. This also includes purchases of feed and procurement of construction materials and construction services rendered. The contract and expenses relating to this contract remains irregular until the expiry of the contract which expired on 30 September 2020.  

**AAMP**

The Agriculture and Agro-processing Master Plan (AAMP) is one of South African President Ramaphosa’s seven priority strategies for economic rebuilding and recovery during and after the Covid-19 outbreak. A number of economic enablers and focused interventions that are seen as necessary in the livestock, field crop, horticultural, and agro-processing subsectors to unlock equitable growth are included in the AAMP.

DALRRD has been working on the AAMP since 2014, when it first established the Strategic Plan for South Africa’s agriculture sector, Operation Phakisa, and the National Development Plan (NDP). DALRRD's AAMP is the conclusion of all these efforts. There are many similarities between AAMP and earlier plans, but it focuses on those parts that haven’t worked out so well in the past. In the first multi-stakeholder process and strategy plan, commodity-specific transformation targets, jobs, exports and investments and growth rates are included. As part of an effort to enhance food production, it comprises a list of targeted interventions in the livestock, field crops, horticulture and agricultural processing subsectors, as well as a larger focus on commercial land reform in rural regions.

The Master Plan Objectives are as follows:
- Promote transformation in agriculture and agro-processing sectors;
- Increase food security in South Africa;
- Accelerate the opening of markets and better access conditions;
- Enhance competitiveness and entrepreneurial opportunities through technological innovations, infrastructure development and digitalization;
- Create effective farmer support, agro-processing, food wholesale and retail incentives;

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68 https://www.name.co.za/aamp/
Based on these objectives, there are a number of potential opportunities to promote alternatives to ASFs. Alternatives including plant, fungi and cell-based alternatives should be explicitly recorded within the AAMP in pursuit of achieving these objectives.

According to the AAMP’s, the value added by South African agriculture, forestry, and fishing was ZAR129 billion in 2021 and would contribute another ZAR32 billion by 2030 thanks to the AAMP, reflecting a roughly 25% increase in the following decade.

The New Growth Path identified the agriculture sector as a priority sector for employment and job creation, especially in rural areas. South Africa’s agriculture sector contributes less than 5% to the country’s GDP and only employs about 6% of the total labour force; therefore, a key consideration for the growth of the agricultural sector is the extent to which it contributes to international trade. In 2017, export of agricultural commodities raised $8.5bn (of which $4.7bn was for horticulture) and imported $5.5bn (of which $2bn came from cereals and oilseeds).

The possibility for the provision of alternatives to promote to the South African economy and employment opportunities must be further researched and investigated.

V. Stakeholders

A. Background

In a review of the South African food system, there are a number of relevant stakeholders which all have unique and vital roles to play in its transformation. These stakeholders broadly include:

1. Government – Various Governmental Departments have a mandate and jurisdiction over matters which fall within the food system at different levels
2. Farmers (using various types of systems; of different products)

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70 https://www.namc.co.za/aamp/
3. Abattoirs
4. Producers and Processors
5. Suppliers: including Retailers
6. Workers
7. Unions
8. Restaurants including Fast Food Outlets
9. Institutions – schools, prisons, hospitals
10. Public (consumers and others)
11. Research, Scientific and Academic Institutions
12. Associations
13. Veterinarians
14. NGOs and civil society organisations
15. Financial Institutions
16. Law enforcement (such as SAPS)
17. Other stakeholders

Figure 3: Main Actors in the Food System

Selected examples of these stakeholders have been expanded on below in relation to their potential roles in transforming the food system, as well as throughout this Working Paper.

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B. EXAMPLE: GOVERNMENT

1. Introduction

Aspects of the food system are regulated by various governmental departments, across several policies, laws and regulations, standards and soft laws, as well as at different levels.\(^{75}\)

2. Department of Agriculture, Land Reform and Rural Development (DALRRD)

According to National Government: (emphasis added)

“\(\text{The vision of the Department of Agriculture, Land Reform and Rural Development (DALRRD) is to have equitable access to land, integrated rural development, sustainable agriculture and food security for all. Its mission is to accelerate land reform, catalyse rural development and improve agricultural production to stimulate economic development and food security through: transformed land ownership patterns; agrarian reform; implementation of an effective land administration system; sustainable livelihoods; innovative sustainable agriculture; promotion of access to opportunities for youth, women and other vulnerable groups; and integrated rural development.}\)\(^{76}\)

Since 1997, when it was transferred from the Department of Justice, DALRRD is also responsible for animal welfare in the country. One of the main considerations relating to animal agriculture is around the potential for conflict of interest for DALRRD in fulfilling these mandates and regulatory capture. However, if properly interpreted, certain mandates of DALRRD such as that relating to “innovative sustainable agriculture” arguably require the department to investigate and promote alternatives rather than predominantly promoting an increase of intensive animal agriculture. This is discussed in some detail later on in this Working Paper.

3. Department of Health

According to National Government: (emphasis added)

“The mission of the National Department of Health is to improve health status through the prevention of illness, disease and the promotion of healthy lifestyles, and to consistently improve the health care delivery system by focusing on access, equity, efficiency, quality and sustainability.

\(^{75}\) https://nationalgovernment.co.za/
The National Development Plan (NDP) sets out nine long-term health goals for South Africa. Five of these goals relate to improving the health and well-being of the population, and the other four deal with aspects of health systems strengthening. By 2030, South Africa should have: raised the life expectancy of South Africans to at least 70 years; progressively improved TB prevention and cure; reduced maternal, infant and child mortality; significantly reduced the prevalence of non-communicable diseases; reduced injury, accidents and violence by 50% from 2010 levels; complete health system reforms; primary health care teams to provide care to families and communities; universal health care coverage; filled posts with skilled, committed and competent individuals.”

The mission of DoH and NDP become particularly relevant in the context of food safety and health aspects related animal agricultural products as further set out in this Working Paper. For example, the high prevalence of non-communicable diseases, among other issues. These issues also relate to alternatives and ensuring the health impacts of these are properly understood and regulated.

4. Department of Forestries, Fisheries and Environment

According to National Government: (emphasis added)

“The DFFE mandated to give effect to the right of citizens to **an environment that is not harmful to their health or well-being**, and to have the environment protected for the **benefit of present and future generations**. To this end, the Department provides leadership in environmental management, conservation and protection **towards sustainability** for the benefit of South Africans and the global community. The Department's strategic objectives are to: provide leadership, strategic, centralised administration, executive support, corporate services, and facilitate effective cooperative governance, international relations, and environmental education and awareness; promote the development and implementation of an enabling legal regime and **licensing/authorisation system to ensure enforcement and compliance with environmental law**; promote, manage and provide strategic leadership on oceans and coastal conservation; **improve air and atmospheric quality**, lead and support, inform, monitor and report efficient and effective international, national and significant provincial and local **responses to climate change**; ensure the regulation and management of all **biodiversity**, heritage and conservation matters in a manner that facilitates sustainable economic growth and development; implement expanded public works and green economy projects in the environmental sector; and manage and **ensure that chemicals and waste management policies and legislation are implemented and enforced in compliance with chemicals and waste management authorisations, directives and agreements.**”

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77 https://nationalgovernment.co.za/units/view/16/department-of-health-doh
As is further detailed in this Working Paper, animal agricultural facilities have the potential to impact and harm the environment including in the areas of pollution; biodiversity; waste; climate change; resource use and otherwise. Alternatives also impact on the environment in both potentially positive and negative ways. It is essential that DFFE recognises these links and its regulatory and policy framework and enforcement mechanisms adequately provide for this. At present, a number of policies have arguably failed to effectively account for harms and impacts to the environment of industrial animal activities as further detailed in this Working Paper.

5. Department of Trade Industry and Competition

According to National Government: (emphasis added)

“The Department of Trade, Industry and Competition (the dtic) was established in June 2019 with the merger of the departments of Economic Development (EDD) and Trade and Industry (the dti). The mission of the dtic is to promote structural transformation, towards a dynamic industrial and globally competitive economy; provide a predictable, competitive, equitable and socially responsible environment conducive to investment, trade and enterprise development; broaden participation in the economy to strengthen economic development; and continually improve the skills and capabilities of the dtic to effectively deliver on its mandate and respond to the needs of South Africa’s economic citizens. The department's strategic objectives are to facilitate transformation of the economy to promote industrial development, investment, competitiveness and employment creation; build mutually beneficial regional and global relations to advance South Africa's trade, industrial policy and economic development objectives; facilitate broad-based economic participation through targeted interventions to achieve more inclusive growth; create a fair regulatory environment that enables investment, trade and enterprise development in an equitable and socially responsible manner; and promote a professional, ethical, dynamic, competitive and customer-focused working environment that ensures effective and efficient service delivery.”

As is further detailed in this Working Paper, a number of the areas within the mandate and mission of DTIC are implicated by animal agriculture and alternatives. For example, the DTIC is one of the governmental entities responsible for the Poultry Sector Master Plan, together with DALRRD.

6. Others

There are several other governmental departments and entities including at a national, provincial and local level which are relevant to the context of food systems particularly animal agriculture and alternatives, which have not been discussed in detail for purposes of this Working Paper but which should form part of discourse, research and regulatory reforms.

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C. EXAMPLE: RETAILERS

The South African retail food market is highly concentrated among the five largest companies, including Shoprite Holdings Ltd, Pick n Pay Retailers Pty Ltd, Spar Group Ltd, Massmart (Walmart-owned), and Woolworths Holdings Ltd. Together, they account for about 80 percent of all retail sales, with the remaining 20 percent coming from the informal retail sector.\(^8^0\)

South Africa remains the biggest market for food and beverage products in Southern Africa and is a gateway to other Sub-Saharan African countries.\(^8^1\) These factors should not be underestimated in the potential for South Africa to transition to alternatives.

The discussion around the composition of the retail sector is important for several reasons including the potential for anti-competitive practices, access to markets, and broader issues around economics and food justice.

D. EXAMPLE: FAST FOOD OUTLETS

The South Africa fast food market size was valued at $2.7 billion in 2018 and is expected to reach $4.9 billion by 2026.\(^8^2\) Easy availability of fast-food products is anticipated to influence the cooking practices, that is, decrease the frequency of home cooking; thereby, increasing the dependency on fast food products.

Urbanization is one of the major factors that drives the demand for fast food products in South Africa. More than 60% of South Africa’s population lives in urban areas. Out of which, more than half of the population relies on fast food products, owing to increase in rate of employment and adoption of busy lifestyles. This has resulted in an increase in the number of transactions from fast food chains in recent decades. McDonald’s Corporation, one of the key players in the fast-food industry states that South Africa was one of the most successful markets in 2014. A record was set when South Africa opened 30 restaurants in just 23 months.\(^8^3\)

This means that fast food outlets present a major opportunity to provide accessibility of alternatives to South Africans. Key players operating in South Africa fast food industry include Yum Brands Inc., Famous Brands Inc., McDonald’s Corporation, Nando’s Group Holding Ltd., Taste Holding Ltd., and others.\(^8^4\)

\(^8^2\) https://www.alliedmarketresearch.com/south-africa-fast-food-market#:~:text=Key%20players%20operating%20in%20South,Spur%20Steak%20Ranches%20and%20others
\(^8^3\) Ibid
Traditional Brands, King Pie Holdings, Burger King, Hungry Lion, Spur Steak Ranches, Subway Ip Llc Taste Holding Ltd and others.

VI. Other Important Context

As further set out in other sections of this report, there are a number of important factors to be considered in the context of food systems and the project more broadly.

A. Nutrition and Feed

A recent study by Oxfam (2014) showed that, while South Africa produces sufficient calories to feed its entire population, one in four people suffers hunger on a regular basis.\(^84\) When livestock are raised in intensive systems, they convert carbohydrates and proteins that might otherwise be eaten directly by humans and use them to produce a smaller quantity of energy and protein. In these situations, livestock can be said to reduce the food balance.\(^85\)

According to the World Wildlife Fund for Nature, “The shift to the consumption of chicken and eggs is a less efficient use of South Africa’s maize than direct human consumption. About half of South Africa’s maize is used for animal feed, and about 70% of the feed is used for poultry.”\(^86\)

The UN has identified the links between the industrialization of livestock operations and malnutrition, set out extensively in the *Interim Report of the Special Rapporteur on the Right to Food*, presented to the UN General Assembly on 5 August 2015. These include recognitions that:

1. Climate change and food policy are complicated inter-related fields. Hunger and malnutrition are a function of social and economic problems, not production.\(^87\) Food security and adaption to climate change are mutually supportive policy outcomes,\(^88\) and policy makers thus need to consider the issues together.
2. The trend towards intensive industrialised livestock production needs to be arrested and reversed, to reduce the impact of the sector on the environment generally, and on anthropogenic emissions in particular, and to improve food security, economic development, social justice and ethics. There is a need to encourage a major shift from current industrial agriculture to transformative activities such as conservation agriculture (agro ecology) that support the local food movement, protect smallholder farmers, empower women, respect food democracy, maintain environmental sustainability and facilitate a healthy diet.\(^89\)

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85 UN Food & Agriculture Organization, 2013, The State of Food Insecurity in the World
87 *Interim report of the Special Rapporteur on the right to food*, UN General Assembly, 5 August 2015
88 Ibid.
89 Ibid.
3. The pivotal roles in food production of smallholder farmers, women and indigenous and local communities must be recognized and protected and their acute vulnerability to climate change acknowledged.\textsuperscript{90}

**B. Food Loss and Food Waste**

In South Africa, 10 million tonnes of food go to waste every year. This accounts for a third of the 31 million tonnes that are produced annually in South Africa.\textsuperscript{91} Together, fruits, vegetables and cereals account for 70% of the wastage and loss. This wastage and loss primarily occur early in the food supply chain.

**C. Power and Electricity Crisis in South Africa**

The current electricity crisis facing the country has a massive impact on the food system. It impacts on many human and nonhuman lives.

For example: “Deidre Carter, CEO of Agri Limpopo, said one of the organisation’s members had reported losing about 2,000 broiler chickens in a single day due to Eskom’s unilateral load-reduction strategy, while another had decided to leave the poultry industry altogether.”\textsuperscript{92}

According to the WWF, “[t]he cost of energy embedded in this food waste is approximately R1 billion per annum. The energy wasted every year for producing food that is never consumed is estimated to be sufficient to power the city of Johannesburg for roughly 16 weeks.”\textsuperscript{93}

Energy including the use and wastage of electricity for different food systems is an additional important consideration as well as the impact of such crisis on the industry and nonhuman animals is an important consideration in light of the current energy crisis in South Africa which is expected to worsen.

It is also important to consider the food system as a whole and the different components which are relevant including the “drivers”.

\textsuperscript{90} Ibid.
\textsuperscript{91} https://www.wwf.org.za/?21962/The-truth-about-our-food-waste-problem
\textsuperscript{92} https://www.farmersweekly.co.za/agri-news/south-africa/unscheduled-power-outages-result-in-high-chicken-mortalities/
\textsuperscript{93} https://wwfafrica.awsassets.panda.org/downloads/wwf_2017_food_loss_and_waste_facts_and_futures.pdf
SECTION 2

CONTEXTUALISING ANIMAL BASED PROTEIN AND ALTERNATIVE SOURCES
PART I: ANIMAL SOURCED FOODS

I. ANIMALS

A. Defining Animal Sourced Foods & Protein

In South Africa, livestock foods contribute 27% of the consumer food basket on a weight basis.\(^{94}\) Consumption of livestock foods resembles that of developing countries with meat consumption being 50 - 90 g/capita/day, milk and dairy products 120 - 130 g/capita/day and eggs 15 - 20 g/capita/day.\(^{95}\)

Livestock are produced throughout South Africa, with numbers, breeds and species varying according to grazing, environment and production systems (commercial, small-scale or communal). Intensive production systems (feedlots, poultry, pigs) are also wide-spread owing to choices associated with optimal land use and vertical integration, but tend to congregate near metropolitan markets and feed suppliers. About 38 500 commercial farms and intensive units and an estimated 2 million small-scale/communal farmers are involved with livestock production.\(^{78}\)

Commercial agriculture occupies 38% of the total land area. Animal agriculture occupies 79% of the agricultural land and employs >21% of the agriculture workforce. Livestock farming in South Africa is a large part of the country’s agricultural sector and includes the production of cattle, dairy, pigs, sheep, goats, rabbits, and ostrich. The country has a well-developed poultry and egg industry as well as value-added activities such as slaughtering, processing and preserving of meat.\(^{96}\)

Animal agriculture in South Africa is based on a unique combination and synergy between extensive and intensive animal production systems, but concerted efforts need to be made to sustainably increase the productivity from all production systems (communal, commercial, extensive and intensive) in order to supply the demand for animal products. Overall, the livestock industry is the source of a broad spectrum of impacts ranging from environmental (such as climate change, pollution, habitat fragmentation, biodiversity loss, and resource loss and waste mainly of water and soils).\(^{97}\)

The livestock sector requires a significant amount of natural resources (soil, water, land) and has an important role in global greenhouse gas emissions.\(^{98}\) In addition, the livestock sector presents

\(^{94}\) https://www.dalrrd.gov.za/Home/aid/420


\(^{96}\) https://southafrica.co.za/livestock-production-south-africa.html


challenges that impact human health and welfare (such as human health problems, human and worker’s rights violations and animal welfare issues. The use of chemicals is another challenge in ASFs production systems with negative effects of antibiotic resistance and residual effects on human health.

B. Animals: By the Numbers

According to data from the United Nations Food and Agricultural Organisation, in 2020:

- **Chickens:** just under 1 billion chickens, nine hundred and sixty seven thousand nine hundred and sixty six (967,966,000) chickens were slaughtered for food in South Africa.
- **Cattle:** Three million two hundred and thirty six thousand (3,236,000) cattle were slaughtered
- **Pigs:** Three million five hundred and eleven thousand (3,511,000) pigs were slaughtered
- **Sheep:** Five million three hundred thousand five hundred and fifty eight (5,300,558)

And various other animals as further set out below. These numbers do not represent all animals killed for food in South Africa. They also leave out statistical information about the number of aquatic animals that are killed for food – farmed or fished.

It is important to note that the DALRRD website has been down for a substantial portion of the research for this Working Paper and therefore accurate and up to date statistical information cannot be obtained. This is a major barrier to transparency for the public and other stakeholders in understanding the scope of the issue.

Table 4: 2020 Number of Animals Slaughtered and Produced for Products in South Africa

<table>
<thead>
<tr>
<th>Animal &amp; Product</th>
<th>Number</th>
<th>Flag Description</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat, cattle</td>
<td>3,236,000</td>
<td>Official data</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, chicken</td>
<td>967,966,000</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
</tbody>
</table>

102 [Tabular representation created and adapted from data obtained from United Nations Food and Agriculture Organisation Website “South Africa Information extracted and removed certain columns from table not relevant to statistical numbers. Full data can be obtained from website.]
<table>
<thead>
<tr>
<th>Animal &amp; Product</th>
<th>Number</th>
<th>Flag Description</th>
<th>Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat, duck</td>
<td>476,000</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, goat</td>
<td>719,199</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, goose and guinea fowl</td>
<td>144,000</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, horse</td>
<td>7,057</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, pig</td>
<td>3,511,000</td>
<td>Official data</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, sheep</td>
<td>5,300,558</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Meat, turkey</td>
<td>703,000</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Milk, whole fresh cow</td>
<td>1,001,111</td>
<td>FAO data based on imputation methodology</td>
<td>Milk Animals</td>
</tr>
<tr>
<td>Offals, edible, cattle</td>
<td>3,236,000</td>
<td>Official data</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Offals, edible, goats</td>
<td>719,199</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Offals, horses</td>
<td>7,057</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Offals, pigs, edible</td>
<td>3,511,000</td>
<td>Official data</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Offals, sheep, edible</td>
<td>5,300,558</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Skins, goat, fresh</td>
<td>719,199</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Skins, sheep, fresh</td>
<td>5,300,558</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Eggs, hen, in shell</td>
<td>48,685,000</td>
<td>FAO data based on imputation methodology</td>
<td>Laying</td>
</tr>
<tr>
<td>Fat, cattle</td>
<td>3,236,000</td>
<td>Official data</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Fat, goats</td>
<td>719,199</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Fat, pigs</td>
<td>3,511,000</td>
<td>Official data</td>
<td>Producing Animals/Slaughtered</td>
</tr>
<tr>
<td>Fat, sheep</td>
<td>5,300,558</td>
<td>FAO data based on imputation methodology</td>
<td>Producing Animals/Slaughtered</td>
</tr>
</tbody>
</table>
Globally, approximately 70 billion land animals are reared as domestic animals annually, and more than 6 million animals killed for food each year. Trillions of aquatic animals and insects are also implicated in the food systems through wild-caught fishing, aquaculture, insect farming and harvesting. Future predictions see the global meat production doubling from 229 million tons in 1999 to 465 million tons by 2050 together with increased milk production from 580 to 1043 million tons per annum in order to match the human population growth and meat consumption patterns.

In South Africa, animal production increased by 5.0%, mainly as a result of increases in the production of stock slaughtered (cattle and calves, sheep and lamb, pork and goats), poultry (poultry meat and eggs) and also fresh milk for 2019/20, as compared to 2018/19. The production of slaughtered cattle and calves stock increased by 26,332 tons (3.2%), sheep and lamb by 18,476 tons (18.9%), pork by 15,829 tons (6.2%) and goats by 26 tons (1.8%) as compared to 2018/19. Furthermore, the production of poultry meat increased by 90,451 tons (5.1%), eggs by 57,532 tons (9.8%) and the production of fresh milk increased by 31,504 litres or 0.8% as compared to the previous season. Animal farming currently predominates, contributing just about 40% to the agricultural income. Beef cattle account for approximately 80% of the national herd with dairy accounting for 20 percent.

Production Systems
Three main livestock production systems are common in the country: the intensive, semi extensive, and extensive production.

1. Intensive Production System
The intensive production system ensures that specialists undertake the finishing stages of beef cattle and this is usually done in the feedlot. With clearly defined stages of production, feeding is monitored to produce the required weight in animals in the shortest period. The primary production involves grazing animals on pastures and secondary production which requires finishing off of animals in the feedlot. Similar production systems are followed for small ruminants of goats and sheep. Other livestock species of pork and chickens are more intensively farmed. South Africa is the largest

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104 Department of Agriculture Forestry and Fisheries (DAFF). (2018). Abstract of Agricultural Statistics; Department of Agriculture, Forestry and Fisheries: Pretoria, South Africa
commercial poultry-producing country on the African continent, followed by Egypt, Morocco, Nigeria and then Algeria, in that order.105

2. Semi Intensive Production System
Semi intensive livestock production systems are any farming systems in-between intensive and extensive. In South Africa this is mostly practiced by emerging commercial farmers who want to commercialise their enterprises but do not have adequate resources to fully make it intensive. Animals are expected to feed extensively from open pastures but supplemented with other commercial diets to improve productivity.

3. Extensive Production System
Extensive livestock production systems are practiced on a large land space with emphasis on production per area than on animal basis. Animals move freely almost anywhere, as the camps are not/poorly fenced, and the stocking density is low. Low input costs and less attention is paid to the animals. Extensive production systems are common with smallholder livestock production farming small stock of sheep, goat, pigs and chickens. The major risks and challenges with extensive systems of production are that animals are roaming round freely (and intermingling from different homesteads is very common), making them vulnerable to a wide spread of diseases. South Africa is common with diseases such as Brucellosis, Anthrax, Blackleg, tick-borne diseases and these are common under extensive systems as farm are highly connected and share diseases in the communal set up. In addition, the relaxed biosecurity measures under extensive production systems results in animals coming into contact with wildlife and increasing the risk of diseases like Foot and Mouth Disease or other zoonotic diseases. Ruminants raised extensively on large pieces of land are known to cause extensive damage to the environment through excessive foraging and browsing and trading of land predisposing it to erosion106

4. Consequences of Systems
There are advantages and disadvantages of each of the above-mentioned livestock production systems. Semi-intensive and intensive systems are aimed at increasing drive production efficiencies for example in feedlots cattle are fed custom feeding; dairy system combines genetic selection with specified nutrition and with improved general husbandry increases yields per unit of inputs. However much of these improved efficiencies are at the cost of animal welfare and environmental concerns. According to a review by Casey,107 intensive and semi-intensive systems have an added cost of reliance on off-farm feeds and services. Intensification has raised the stakes on animal welfare and veterinary services have increased to deal with production-related pathologies. In addition, environmental

106 https://www.leap.ox.ac.uk/environmental-impacts-intensive-and-extensive-systems
stressors in the intensive and semi-intensive systems can have debilitating and disruptive effects on the livestock’s endocrine system.

C. Animal Welfare, Health and Wellbeing

“Factory farm” is commonly used to describe an industrial facility that raises large numbers of farm animals such as pigs, chickens or cows in intensive confinement where their movements are extremely inhibited. Felix and Green, defines factory farming as an intensive livestock production system that maximizes output while minimizing cost.

The industrial revolution saw the majority of animal farming converted to factory farms to feed the growing human populations cheaply. Although factory farming was initially associated with the global North, it is gaining relevance in Africa, due to increased population growth and demand for animal protein. According to the UN-FAO, beef consumption in Africa will grow by nearly 200 percent between 2015 and 2050, while poultry consumption will increase by 211 percent and pork by 200 percent. Such an increase in demand in livestock products will see an elevation in the use of factory farming in the region. In South Africa, the majority of the meat and meat products consumed come from commercial agriculture where animals are raised intensively under “factory farming”. For example, 75% of South Africa’s beef is produced under the feedlot industry.

Under these intensive production systems, the livestock are bred with modern industrial methods, which make optimal use of space and other resources to maximise production and increase profits, and often violates animal health and wellbeing issues. Coupled to this and to maximise on profits, animal breeding programs focus on production traits at the expense of other traits that are necessary for the physical and mental well-being of animals.

There are a plethora of welfare concerns depending on the species and animal use that arise from the intensive farming of animals. Such concerns arise throughout the entirety of the animals implicated in these industries from breeding to birth, to rearing, to transportation and to slaughter.

1. Breeding

Welfare issues that arise in the context of breeding may include in collection of genetic materials; genetic manipulation; insemination; birth; post-birth; care of young; weaning; and early maternal separation among others.

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108 https://www.aspca.org/protecting-farm-animals/problem-factory-farming
2. Rearing
Welfare issues that arise in the context of rearing may be in relation to nutrition (food, water); space; veterinary care; antibiotic use; environmental factors (shelter, ventilation, air, water, conditions of confinement, enrichment); natural behaviours; mutilations; unnatural growth and injuries; among others.

3. Transportation
Welfare issues that arise in the context of transportation may include rest; access to food and water; shelter and access to shade; space; length of time; temperature (hot / cold / rain); cleanliness and ventilation, among others.

4. Slaughter
Welfare issues that arise in the context of slaughter may include in relation to stunning; rendering the animal unconscious prior to slaughter; the methods and tools used for slaughter; timing and length of slaughter process, among others.

5. Consequences and Specific Practices
These issues depend on many factors including species, facility, use and various other factors. Not all farms, facilities and abattoirs can be classified in the same way.
For example, the main welfare issues associated with broilers (i.e. chickens used for meat) include fast early growth rate, high susceptibility to metabolic disorders and low physical activity due to commercial breeders selecting for robust increased productivity at the expense of animal health traits.111

In the egg industry, caging chickens has been associated with increased food safety risk in addition to impaired acquisition of normal gut flora, compromised gastrointestinal function and physiological stressors.112 In addition, the disposal of male chicks, considered to be useless to the industry, is problematic.

For example, certain practices in the farming industry can include the following for these animals:
1. **Pigs:** Pregnant pigs are often packed into small gestation crates where they do not have free movement.
2. **Chickens:** Egg-laying hens are placed in stacked cages (also known as battery cages)
3. **Cows:** Dairy cows are raised on feedlots rather than the grass pastures.113 Dairy cows to produce more milk at the expense of udder health and leg problems. The separation of babies

from their mothers soon after birth, either to move into the veal industry if they are male or potentially to become meat or dairy cows. “Factory farming” processes disregard animals’ natural life cycles and facilitate abuse of animals. Animals are often confined in small spaces where they cannot stand or move around. To minimise cannibalism and facilitate easy animal handling, beaks, tails and horns are removed in a manner that violates animal welfare and rights. Additional mutilations are done to animals for different reasons including for example castration. There is not always anaesthesia or numbing prior to such procedures. Because of the intensive form of production, ammonia and toxic products of animal excretion accumulate in the animal housing causing animal harm and distress. Animals could also not have access to clean drinking water and not have their nutritional needs met from the food they are being fed.

There is much literature on the practices which cause harms to animals in industrialised facilities and this has not been repeated for purposes of this Working Paper as it is now well-established. Further research needs to be done in the South African context and there needs to be more transparency as to the practices. The South African public is generally unaware of the production methods of ASFs and detached from the food products they buy in stores. This is different in rural and farming communities or for workers in these industries. Such detachment is a major barrier to transitioning people away from ASFs and only with the requisite transparency of information and educational and awareness strategies can South Africans make informed decisions about their food choices and the producers and suppliers thereof be held to account. The regulatory framework does not properly account for the welfare needs of animals used in these facilities, this will be further elaborated on in Section III of this Working Paper.

A shift towards plant-based and other alternative meats may significantly reduce dependence on livestock to be raised and slaughtered for meat production which will overcome some of the animal health and welfare challenges associated with the current intensive livestock production systems. In the USA, current research projects that the global market for plant-based substitutes will increase to reach $85 billion (USD) by 2030 coupled by a reduction in demand for beef and dairy products by 80–90% by 2035.\textsuperscript{114} The broad acceptance of plant-based meat alternatives in South Africa as indicated in a recent survey,\textsuperscript{115} will most likely see a similar increase in demand for plant and other alternative meats and a decrease in animal-based meats, particularly if the regulatory framework supports such a shift.

Animal welfare is generally associated with the “Five Freedoms” which are:

1. Freedom from Hunger and Thirst
2. Freedom from Discomfort


3. Freedom from Pain, Injury or Disease
4. Freedom to Express Normal Behavior
5. Freedom from Fear and Distress

Five Freedoms are used as basis in writing animal care protocols and expectations for many professional groups, incl. veterinarians (American Veterinary Medical Association website). They are adopted by representative groups internationally (including the World Organization for Animal Health (OIE) and the Royal Society for the Prevention of Cruelty to Animals (RSPCA). Despite often referencing these Five Freedoms, animals in industrial animal agriculture are not guaranteed such freedoms. There are also criticisms including for example that they are too vague (with no specifics on how to measure whether or not animals are getting the amount of food, space and with no positive obligations and standards); they are open to interpretation (for example what is “sufficient”? what is “inadequate”?); they can promote humane washing; they are phrased in a negative way; among others.

Accordingly, the more modern animal welfare concept of the “Five Domains” considers nutrition, environment, health, and behavior as governing inputs that result in a range of mental states from negative to positive.¹¹⁶

**II. HUMANS**

Although ASFs contain high and bioavailable contents of important nutrients required for optimal human health, their consumption is also associated with important adverse effects on human health. Overconsumption of ASFs for example is linked to Non-Communicable Diseases (“NCDs”) such as cardiovascular disease, diabetes, and cancer. South Africa has an adult obesity rate of 28% and a high burden of heart disease.¹¹⁷ ¹¹⁸ The World Health Organisation (WHO) has linked the consumption of red meat and processed meat to carcinogenicity.¹¹⁹

South Africa is one of the countries associated with high risks to cancers with the 2010 indicators of lifetime risk for developing colorectal cancer among South African (SA) males and females at 1:114 and 1:182 respectively. Whilst a number of epidemiological studies are being conducted to confirm association of different types of cancers with consumption of red meat in South Africa, data from

¹¹⁶ https://www.worldanimalprotection.us/blogs/five-domains-vs-five-freedoms-animal-welfare
other countries suggest that a shift towards non-meat and unprocessed foods would minimise susceptibility to cancers.\(^{120}\)

Animals raised under intensive production systems are associated with overuse of antibiotics resulting in antibiotic resistance in both animals and the humans that consume them. The misuse, overuse and inappropriate use of antimicrobials in animal agriculture is one of the major challenges in South Africa that results in increased prevalence of antimicrobial resistance in the country. Antibiotic resistance is a major health concern globally and the overuse of antimicrobials in food animals and the subsequent contamination of the environment have been associated with development and spread of antimicrobial resistance. Antimicrobial resistance is a major problem in South Africa and the country has been cited as failing to respond to the antibiotic resistance challenge, due to a number of reasons including ineffective surveillance of bacterial resistance in food-producing animals countrywide.

In addition, animals share certain diseases with humans and these zoonotic diseases can easily be spread to humans on consumption. According to the Center for Disease Control and Prevention a number of zoonotic diseases are of concern in South Africa and include viral diseases such as Rabies, bat and rodent borne viruses, Rift Valley Fever and Avian Influenza amongst other diseases. South Africa is prone to outbreaks of Rift Valley Fever and Avian Influenza. Bacterial Zoonotic diseases prevalent in South Africa include Brucellosis, Rickettsial diseases; Anthrax; bovine tuberculosis and foodborne pathogens such as Salmonella. In 2017-2018, South Africa experienced the worst food borne pathogen pandemic of listeriosis in the world that was attributed to consumption of processed meats.\(^{121}\)

There are several social justice issues which arise and are applicable to the use of animals for food which have been elaborated on further in Section III below.

### III. THE ENVIRONMENT

**Environmental Impacts, Sustainability and Climate Change**

According to the FAO’s Livestock’s Long Shadow Report, livestock activities have significant impact on virtually all aspects of the environment. The increased global demand for meat, milk and eggs, driven by rising incomes, growing populations and urbanization will see an increase in the damage done by livestock production to the environment. Globally, a meat-based diet that depends on industrialised livestock grazing and growing livestock feed (primarily grain, soy, and pasture) uses more

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land than a plant-based diet. Globally, the increasing demand for animal products and the lack of land has caused the livestock industry to become the main cause for clearing forests and turning them into pasture.

According to the South African DFFE report large areas of South Africa have soil parent materials (geology) that produce soils inherently vulnerable to various forms of soil degradation, such as crustung, compaction, and water and wind erosion and with very low recovery potential. Sixty percent (60%) of South Africa’s land is degraded and 91% prone to desertification. According to the UNEP report of 2021, farming grazing cattle and other human activities have damaged the fragile savannah and grasslands of Thukela River basin in KwaZulu-Natal South Africa, hampering the land’s ability to sustain livelihoods and to maintain essential ecosystem services, such as supplying water and trapping carbon. Livestock overstocking in both communal and commercial areas has been associated with soil erosion and land degradation. Livestock production through grazing accelerates soil erosion that occurs when grasslands are subject to extensive grazing without sufficient recovery periods. Soils are damaged by the animal hooves when they graze on the same land area. In addition, the removal of vegetation for livestock activity exposes the soils to water and wind making it more vulnerable to erosion.

Animal agriculture is the greatest agricultural cause of water pollution and associated negative impacts on ecosystems and water sources. Animal excreta, antibiotics and hormones, fertilizers and pesticides used in forage production, and rainfall runoff from pasture all contribute to water pollution.

Animal agriculture contributes more to climate through agriculture’s emissions that come from conversion of forests and prairies to pasture and cropland, production of animal feed, and animal digestion and waste decomposition.

Animal agriculture has a major impact on biodiversity as well as wild animals. It is connected to ocean deadzones, biodiversity loss, animal extinctions, and habitat fragmentation among others. A large number of predators are killed for attempting to eat animals farmed for food including but not limited to jackals, caracals and leopards.

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123 https://www.fao.org/3/a0701e/a0701e00.htm
124 https://www.dffe.gov.za›files›docs›part2_land
129 https://www.farmersweekly.co.za/bottomline/taking-action-on-predator-control/
IV. THE COSTS: EXTERNALITIES AND THE TRUE COST OF ANIMAL AGRICULTURE

The current system of intensive animal agriculture is unsustainable. Ten major uncosted externalities are typically excluded from true cost accounting of products produced by the industry. Direct and indirect support from government allows intensive animal production facilities to systematically undercost and otherwise misprice meat and dairy products, which offers short term benefit to consumers but continues to impact negatively on the broader public interest. The status quo is reinforced by industry and government messaging asserting that food security is only possible in South Africa by expanding intensive animal production. This assertion ignores the uncosted negative externalities and is thus flawed.

International studies are increasingly recognising that intensive animal production is unsustainable for environmental, health, social and ethical reasons. There is little data in South Africa that measures the actual scale of the 10 externalities.

Modern industrialised livestock systems differ materially from traditional farming methods. Production processes are undergoing structural shifts, from rural to peri-urban areas, from extensive grazing to intensive confinement grain-fed operations, from smaller scale privately owned farms to large corporatised operations, as well as a move towards monogastric species (mainly pigs and chickens), away from ruminants (cows and sheep).

Externalities are impacts on society that are not reflected in the price of a product or service. Negative externalities are costs to society, flowing from production or supply of a service not borne by the producer or supplier. KPMG International describes this externalization of cost as the ‘disappearing disconnect’ between corporate and societal value creation. Their report, *A New Vision of Value*, highlights just how much of the true cost of corporate operations is not reflected in their costing models, and instead are carried by entities whose interests are not considered in the corporate income statement. Figure 4 (below) shows unsurprisingly that food production has by far the highest proportion of costs carried elsewhere – externalized environmental costs constitute 224% of the EBITDA of food producers globally.

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130 Externalities document
131 IPCC, UNFAO, WWF etc
133 Ibid.
These negative externalities largely result directly and indirectly from the intensification of livestock operations, which may have the following impacts:

- Diseases and other health threats
- Environmental destruction
- Over-use of resources
- Hunger and increase in food costs

Research is urgently required to
1. contextualise the extent of the 10 categories of externalized cost in the South African agricultural and food system; and
2. consider alternative models of food production that recognize South Africa’s specific context of climate, soil suitability, population, politics and social environment.
V. TRANSITIONING AWAY FROM ANIMAL AGRICULTURE TOWARDS ALTERNATIVES

A. Potential Benefits

A shift towards plant-based and other alternative meats might help overcome challenges of animal agriculture on environmental sustainability. According to the GFI report, plant-based meat allows consumers to enjoy the taste and nutritional benefit of meat at a fraction of the environmental cost through reduction in land use, water use, greenhouse gas emissions and eutrophication.135

Agriculture uses more than three-quarters of the world’s agricultural land. The use of alternative meat sources can address several issues posed by animal agriculture and factory farming. These include environmental issues, such as air, soil and water pollution posed by traditional agriculture and the risks of emerging infectious diseases, which are principally associated with the production and consumption of animal food. The adoption of alternative meats will eliminate challenges of zoonotic diseases spread from animal farming and animal products. In addition, increased production and consumption of alternative meats will reduce reliance on animal agriculture which is associated with the exploitation and slaughter of animals with strong moral and ethical implications. Lastly, alternative meats present alternative sources of food and minimise reliance on traditional farming that is involved with intense use of limited natural resources under unfavorable external conditions. The promotion of alternative meat sources may thus lower global food insecurity.

Shifting diets from animal sourced foods to plant and fungi-based diets might be a strategy to minimise risk of the population to such diseases.

In Europe and other developing countries, more people are shifting towards plant-based diets due to health reasons, ethical considerations about climate change and animal welfare and often religious and cultural affiliations.

In South Africa, change towards plant-based diets is a new and slow concept often affiliated with the elite as such products are relatively still expensive and unaffordable to the masses. Health and climate concerns accelerated the growth of plant-based diets which were once prevalent on the continent. Conditions136 such as heart disease and cancer have now overtaken infectious diseases such as cholera and measles to become the biggest drain on Africa’s economies, according to the World Health Organisation.

Much of the continent is already feeling the effects of the climate crisis – a common reason for reducing meat intake – as more regular and unpredictable droughts and floods wreak havoc for

farmers and regularly claim lives. There is a name for this: nutrition transition. This explains a shift in dietary consumption that coincides with economic development. It's most often used to talk about a shift away from more grain and fibre-rich diets toward processed meat-heavy Western dietary patterns.

There is therefore a need for more sustainable and efficient food systems. Substituting ASFs with plant, fungi or other alternative meat sources of food can substantially reduce harmful negative impacts of food systems on the environment, humans and animals.

**B. Barriers to Transitioning Away from ASFs**

Based on observations from the research of this Working Paper, the main barriers to transitioning away from ASFs in South Africa include:

A. Culture and religion: identify ASFs as part of culture and heritage as well as a symbol of wealth
B. Taste: enjoyment and pleasure of consuming ASFs
C. Economic circumstances: low cost of ASFs and purchasing power of consumers
D. Convenience, accessibility and wide availability of ASFs
E. Perceived nutritional benefits of ASFs
F. Entrenchment in lives and habits or as part of livelihoods
G. Unawareness of various harms associated with production of ASFs including impacts on animal welfare, environment, health, food safety and other rights

Part II below contains additional barriers relating to the transition towards alternatives in South Africa.

Section 3 will explore the regulation of animal agriculture in South Africa as well as potential legal and policy tools and reform that could assist with a transition away from ASFs towards alternatives. These will be further expanded on for purposes of the White Paper.

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137 [https://www.hsph.harvard.edu/obesity-prevention-source/nutrition-transition/]
PART II: ALTERNATIVE SOURCES

I. Defining Alternatives

Alternatives encompass everything from algae, fungi, to re-engineered plant-based legumes and a variety of meat substitutes. It further encompasses cell-based meats, plant-based meat, single-cell proteins from yeast or algae. In addition to the types of alternatives, are the different methods of producing these such as through 3D-printing, and fermentation, where the filamentous fungus *Fusarium venenatum* is used as a basis for the production of meat analogues that are marketed under the brand name Quorn.138


“meat analogue” is defined as:139

“‘meat analogue’ (also known as meat substitute, mock meat, faux meat or imitation meat) means products that –

(a) approximates the aesthetic qualities (primary texture, flavour and appearance) and/or chemical characteristics of specific type of meat; and

(b) are made from non-meat ingredients, sometimes without dairy products and are available in different forms (coarse ground-meat analogues, emulsified meat analogues and loose fill, etc.)”

For purposes of this Working Paper, alternatives are broadly defined to include:

- meat analogues (those made from both plants as well as fungi);
- cellular / cell-based / cultivated meats;
- alternative systems to industrialised animal agriculture, such as on a smaller scale or using less harmful methods; and
- protein and food sources that are not ASFs.

The focus is predominantly on the former two, with the latter two being vital aspects within the broader discussion but only mentioned briefly in this Working Paper.

Plants and Fungi have since time immemorial been used as protein sources, both on their own as well as complementing meat sources. Sources of the former include legumes, soya and sugar beans, lentils,

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139 Regulation 1283, 4 October 2019:
wheat protein and mushrooms amongst other protein sources. It needs to be acknowledged at this stage that whilst these provide required protein sources that can substitute and complement animal foods, they are different from the plant or fungi-based “meats” (i.e. meat analogues) which are specifically designed to mimic animal meats in taste, texture and appearance with the intention to substitute animal sourced meats. Such plant and fungi-based meats will appeal to consumers who do not consume ASFs due to different reasons including health, religion, animal welfare and ethics and environmental concerns but who still wish to consume products similar to ASFs.

The development of such plant-based, fungi-based and other alternative meats will reduce the reliance and burden placed on animal agriculture as a source of food protein and other nutrients and assist in overcoming challenges associated with animal farming as described in sections above and throughout this Working Paper.

Producing meat substitutes from plants is considered sustainable because it has a much smaller environmental impact compared to conventional meat. In addition, the human health concerns of nutrition-based diseases, zoonosis and antibiotic resistance are minimal.  

An additional source of alternative meats that will meet such a demand are cultivated meats. Cultivated meats are meats from animals that are not reared under the conventional farming systems but rather grown from cells in a “laboratory” set up. Cultivated meats are known by a variety of names including cell-based meats, cultured meats or even lab / laboratory grown meats. In many instances, the animal components are mixed with plant and/or fungi components which means they are not exactly the same structure as meat, although they do contain genuine animal cells.

Because they are produced off farm, cultivated meats are not associated with the burdens animal agriculture exerts on natural resources of land, air, water and soils, with minimal contribution to climate change, animal welfare and human health concerns as described in sections above. They do however raise other important issues which warrant further examination and scrutiny.

The sections below provide detailed information on the different sources of alternative meats.

II. Plant-based “Alternatives”

Plant-based diets constitute a diverse range of dietary patterns that emphasize foods derived from plant sources coupled with lower consumption or exclusion of animal products. Plant-based alternative sources of meat are made entirely from plants or other sources and replicate the sensory experience of conventional meat. The most common sources of plant-based alternative sources of meat include soy, wheat, or pea protein isolates.

140 https://www.rd.com/article/plant-based-meats/#:~:text=%E2%80%9CThe%20most%20popular%20plant%2Dbased,also%20generate%20no%20manure%20pollution%E2%80%9D
In Europe and other developed countries, an increasing number of people are shifting towards plant-based diets due to health reasons, ethical considerations about climate change and animal welfare and often religious and cultural affiliations. While it is gaining traction, in South Africa, change towards plant-based diets is a new and slow concept often affiliated with the elite as such products are relatively still expensive and unaffordable to the masses.

However historically South African diets were predominantly based on carbohydrates and vegetables. A study by Ross and co-authors, indicate that food consumption shifts in South Africa have been towards an overall increase in daily kilojoules consumed, a diet of sugar-sweetened beverages, an increase in the proportion of processed and packaged food including edible vegetable oils, increased intake of animal sourced foods, and a shift away from vegetables. Such a shift is associated with nutritional consequences contributing to increased obesity and other non-communicable diseases and an over reliance on animal agriculture and factory farming. The last 2-3 years have seen an introduction and shift towards plant-based proteins including plant-based meats as substitutes to animal sourced meats.

Globally, plant-based meats continue to expand across foodservice channels, with chains from McDonald’s to KFC to Burger King to Starbucks adding plant-based options to their menus both in the United States and around the world.

According to Google Trends data, in 2019 South Africa was among the top 30 countries world-wide where veganism was most popular over the 12 months measured. It was the only African country with a sizable vegan following. Terms such as “Afri-vegan” to describe those making or who have made the transition towards veganism or who are reducing their animal-based product intake.

Plant-based meats can now be sourced in almost all the major grocery retailers of South Africa of Pick ’n Pay, Shoprite Checkers, SPAR and Woolworths. South Africa is currently producing and promoting its own plant-based meat and companies. Local suppliers include Frys Family Foods, On the Green

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146 https://fryfamilyfood.com/za/
Side, Herbivore, Urban Vegan, Veggiwors, Earthshine, Vegan Butcherie, ProVeg and VeganProtein. In 2018, The Kind Kitchen, became Africa’s first vegan butchery. Now in 2021, the company offers two plant-based ranges: KindaMeat and KindaDeli products, “with the goal to continuously innovate & ethically produce, healthy and deliciously affordable plant-based ’Meat’ Alternatives and food products for the good of all.” Johannesburg-based Infinite Foods, which has brought popular vegan brands like Oatly and Beyond Meat to South Africa, recently confirmed its partnership with Eat Just. The distributor already supplies plant-based foods to more than 800 outlets in South Africa, Mauritius, and Botswana.

Veggie product substitutes include egg replacement products, meat alternatives/analogue products (e.g., Impossible, Herbivore), and Fungi-based products (e.g., Denny’s Plant-based Mushroom Crisps). The JUST Egg Folded product is currently listed on Infinite Foods' e-commerce platform at a cost of ZAR479.00 for 24 folded plant eggs. This equates to ZAR19.95 a piece when buying directly from Infinite Foods – but is likely to cost more at retailers and restaurants. The products are free from gluten, soy, tree nuts, peanuts, and wheat and each folded plant egg is packed with 7 grams of protein – roughly the same as a single chicken egg – and 3 grams of carbohydrates. Eat Just’s move into the African continent coincides with its global expansion plans, assisted by a $200 million (almost ZAR3 billion) investment in March.

Meat alternatives are sold at a wide price range in South Africa. For example, Beyond Burger plant-based patties sells for 40 Patties x 113g, at ZAR1,499.00, while soya mice/chucks can be found at around ZAR24.99/400g at any major South African retailer. According to Stephanie Feldstein, director of the population and sustainability program at the Center for Biological Diversity, the most popular plant-based alternatives, Beyond Meat and Impossible Burgers, produce about 90 percent fewer greenhouse gas emissions, reduce land use by at least 93 percent, and water use by 87 - 99

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147 https://onthegreenside.com/our-story-1
148 https://www.herbivore.co.za/
149 https://www.urbanvegan.co.za/
150 https://veggiewors.co.za/
151 https://earthshine.co.za/
152 https://veganbutchery.weebly.com/
154 Vegan Proteins: https://www.veganprotein.co.za/
155 https://thekindkitchen.co.za/pages/about
157 https://denny.co.za/product_categories/plant-based/
161 https://www.checkers.co.za/c-54006/All-Departments/Food/Food-Cupboard/Cooking-Ingredients/Soya-Mince

NPC Number 2017/330930/08 | NPO Number 208-234 NPO
www.animallawreform.org
percent in comparison with beef. An added benefit of plant-based alternatives is that they generate no manure pollution.\(^\text{162}\)

Other easily accessible South African plant-based ranges include: Fry’s Family Food Company, that sources non-GM proteins from ethical sources, preservative free, and certified free from pesticides,\(^\text{163}\) Future Foods,\(^\text{164}\) Checkers’ Simply Truth, and Woolworths’ Plant Powered range.\(^\text{165}\)

The South African plant-based market share is expanding. Earlier this year, Tiger Brands bought Herbivore EarthFoods. The company noted that the African plant protein market, of which South Africa represents 57\%, is estimated to grow at a compound annual growth of 6.5\% to $560 million (roughly ZAR6 billion) by 2030.\(^\text{166}\) In 2021 Fry Family Food Company became an official global sponsor of Veganuary along with their sister brand Oumph! which partnered with Pick n Pay to offer a new limited edition range of meat alternatives in South Africa from Oumph! and LikeMeat. Both brands are part of a portfolio of plant-based brands owned by the LIVEKINDLY Collective. At the time of product launch, these brands were exclusively available in 27 Pick n Pay stores nationwide.\(^\text{167}\) In addition to retailers, plant-based alternatives can now be found at many restaurants and fast-food outlets including but not limited to Burger King, Nandos, Wimpy, McDonalds, Spur, etc.\(^\text{168}\)

<table>
<thead>
<tr>
<th>Fast food restaurant</th>
<th>Rank</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kauai</td>
<td>1</td>
<td>10.5</td>
</tr>
<tr>
<td>Spur</td>
<td>2</td>
<td>8.5</td>
</tr>
<tr>
<td>Panarotti</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Burger King</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Simply Asia</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Steers</td>
<td>6</td>
<td>5.25</td>
</tr>
</tbody>
</table>

Table 5: List of 2022 plant-based fast food franchise and ranking results\(^\text{169}\)

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\(^\text{162}\) [https://www.rd.com/article/plant-based-meats/#:~:text=%E2%80%9CThe%20most%20popular%2Dbased,also%20generate%20no%20manure%20pollution.%E2%80%9D](https://www.rd.com/article/plant-based-meats/#:~:text=%E2%80%9CThe%20most%20popular%2Dbased,also%20generate%20no%20manure%20pollution.%E2%80%9D)

\(^\text{163}\) [https://fryfamilyfood.com/za/](https://fryfamilyfood.com/za/)

\(^\text{164}\) [https://futurefood.co.za/](https://futurefood.co.za/)

\(^\text{165}\) [https://www.woolworths.co.za/cat?Ntt=plant%20powered&Dy=1](https://www.woolworths.co.za/cat?Ntt=plant%20powered&Dy=1)


According to Hancock\textsuperscript{170}, the initial demand for the plant-based protein produced by South Africa is from the export market, with domestic demand expected to grow in time. The US and China are currently the largest importers of SA plant-based proteins. Producing meat substitutes from plants is considered sustainable because it has a much smaller environmental impact compared to conventional meat\textsuperscript{171}. In addition, the human health concerns of nutrition-based diseases, zoonosis and antibiotic resistance are minimal.


### Fast food restaurant

<table>
<thead>
<tr>
<th>Fast food restaurant</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Mcdonalds</td>
<td>7</td>
<td>4.5</td>
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<tr>
<td>Wimpy</td>
<td>8</td>
<td>4.5</td>
</tr>
<tr>
<td>Barcelos</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Galito’s</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Nandos</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Mochachos</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Fishaways</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Sausage saloon</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Pizza hut</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Chicken Licken</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Ocean Basket</td>
<td>17</td>
<td>1.5</td>
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<tr>
<td>The Fish and chip co</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Hungry Lion</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Rocomamas</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>KFC</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Romans Pizza</td>
<td>22</td>
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<tr>
<td>Debonairs</td>
<td>23</td>
<td>0</td>
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</tbody>
</table>
Images: Examples of Plant-based (and some Fungi-Based) Alternative Companies and Products in South Africa ¹⁷²

III. Plant-based Proteins

Plant-based diets constitute a diverse range of dietary patterns that emphasize foods derived from plant sources coupled with lower consumption or exclusion of animal products. Plant-based alternative sources of meat are made entirely from plants or other sources and replicates the sensory experience of conventional meat. Common sources of plant-based alternative sources of meat include: legumes/pulses, ancient grains, soy-based alternatives (Tofu, tempeh), wheat-based alternatives (e.g., seitan), beans, pea protein isolates, in addition to fungi, like mushrooms. Textured Vegetable Protein (TVP), provides a good source of protein that is readily digestible. In adults, protein digestibility and nitrogen balance (g N/day) was 66.1% and 1.16 for textured vegetable protein from defatted soy flour and 63.4% and 1.31 g N/day in TVP from soy protein concentrate in comparison to beef that possessed 73.2% protein digestibility and 0.42 g N/day.

The Healthy Lifestyle in Europe by Nutrition in Adolescence (HELENA) study, a cross-sectional study of European adolescents found that adolescents consuming higher levels of plant protein exhibited lower body fat percentages and BMI compared with those adolescents with higher animal protein intake. The study suggested increasing plant protein in adolescent diets as a substitution for animal protein to help control obesity and for its potential positive benefits for cardio-metabolic factors.

(Source: Langyan et al.)


NPC Number 2017/330930/08 | NPO Number 208-234 NPO
www.animallawreform.org
IV. Fungi-Based Alternatives

Similar to plant-based meats, Fungi-based meat alternatives, or microbial proteins also mimic animal sourced meats in looks, taste and texture and nutrient composition. These can be made from mushrooms or from microbial cultures that live on sugar at a steady temperature. 3F Bio is a Scottish company that developed a method to produce a fungi-based alternative for animal protein by taking sugars from food crops such as maize and wheat, and feeding them to an undisclosed species of fungi to grow a protein-rich ingredient called Abunda mycoprotein. Such a process, according to 3F BIO, uses less feed and water than conventional beef or other animal production.177 Meati steaks, a product range produced by Emergy Company of Colorado, contains a small amount of plant ingredients, and are mostly made from filamentous fungi. The fungi-based meats from products from this company were the first on the market that mimicked whole animal muscles (i.e. drumsticks, steaks etc."). 178 Innomy, a startup in Spain, is using fungal tissue cultures to create complex structures that replicate the fibrous and tender consistency of meat.179 The Mushroom & Lentil Burger by Naked Leaf has similar fungi-based alternatives available in South Africa.

In South Africa, there is one major supplier of fungi-based meat-analogues. There are smaller suppliers of other fungi products such as mushroom biltong. For purposes of this Working Paper fungi-based alternatives have not been further differentiated from plant-based alternatives as they are largely included within the same context.

Images: Examples of Fungi-based Alternatives in South Africa180

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177 https://www.labiotech.eu/startup-scout/3fbio-meat-substitutes/
180 Denny: https://denny.co.za/product_categories/plant-based/
V. Cell-based Alternatives

Other alternative sources of meat include cultivated/cell-cultured/ cellular (or sometimes referred to as “lab grown”) meat. There has been much debate around these products – including the naming and labelling of such products. This is animal meat produced without raising and slaughtering animals, by growing animal cells in the laboratory set up.

The GFI\(^{181}\) defines cultivated meats / cultured meat, as “genuine animal meat (including seafood and organ meats) that is produced by cultivating animal cells directly”. The production of cultivated meats eliminates the need to raise and farm animals for food that provides a solution to the challenges of animal factory farming to feed the growing human population as discussed in earlier sections. Cultivated meat is made of the same cell types arranged in the same or similar structure as animal tissues, thus replicating the sensory and nutritional profiles of conventional meat.

\(^{181}\) Good Food Institute: [https://gfi.org/](https://gfi.org/)
Cultivated meat uses fewer resources including environmental resources and poses less public health risks, among other benefits. Cell-based meat can be cultivated in such a way that it contains all the other required nutrients that are often missing in conventionally produced meat. Such nutrients include omega fatty acids and other vitamins and minerals. In addition, it can exclude many of the harmful substances and residues found in animal farmed meats such as faecal matter, antibiotics, and chemical residues.

Cultivated meat is a very new concept in South Africa and even the developed world. Singapore was the first country to legally approve cell-based foods. There is no determined or specific regulatory framework pertaining to cultivated meat in South Africa. While the products are not on market, this constitutes a regulatory gap which must be rectified.

Companies such as Mogale Meat and Mzansi Meat are leading the introductions in South Africa. In the seafood cellular sector, Sea-stematic is Africa’s first producer of cellular seafood. In April 2022, Mogale Meat, a South African based company, produced its first cultivated chicken breast composed of real chicken muscle and fat cells blended with a mushroom matrix. Mogale Meat intends to feed a billion people with cultivated chicken meat.

Recent research conducted by animal advocacy group Credence Institute indicates that as of 2021, over half of the population sampled were willing to try both plant-based and cultivated meat alternatives. The research sampled 1087 participants, aged 18-61 and was ‘nationally representative’ of age, gender, income, and race.

The purpose of this study was to assess the likelihood of consumer adoption of plant-based and cultivated meat in South Africa as a pathway to a healthy, sustainable, and equitable food supply. The study findings suggest that both plant-based and cultivated meat could be viable market-based options for improving the food system in South Africa, as consumers across all segments of society, and especially amongst the younger population, indicated broad acceptance.

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Figure 5: Examples of Logos and Graphics of Cultivated Meat Companies in South Africa

Mzansi Meat Co

[Image of Mzansi Meat Co logo]

Sea-Stematic

[Image of Sea-Stematic logo]

Mogale Meat Co

[Image of Mogale Meat Co logo]

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188 https://www.mzansimeat.co/
189 http://seastematic.com/
190 https://mogalemeat.com/
191 https://mogalemeat.com/
VI. “ALTERNATIVES”

As aforementioned, while much of the focus of this Working Paper is around “alternatives” in respect of plant-based meat; fungi-based meat and cultivated meat as well as other animal products (including both meat analogues and other alternatives to animal products such as milk, dairy products and eggs) it is essential to note that there are other alternatives and alternative approaches to transforming the food system.

These include in terms of alternatives to methods of production through systems such as agro-ecology and permaculture; alternatives to intensive industrialised systems through methods such as small holder farms and free-roaming animals and many others. A full analysis of such alternatives is critical to transforming the food system in South Africa and may hold the answer or at least intermediary or additional solutions to many of the problems with industrialised animal agriculture.

Importantly, however, is that “alternatives” to industrialised terrestrial animal farming are not considered for purposes of this Project nor ALRSA to include:

1. A shift towards wild-caught fishing, collecting or other harvesting of aquatic species;
2. Farming of aquatic species through aquaculture;
3. Collecting and harvesting of wild-caught insects; or

Existing systems can be transformed in a plethora of ways, some of which can act as interim measures as South Africa works towards more sustainable and just food systems. Some of these have been highlighted below:

Substantial research has been done in this area by leading organisations and experts including the International Panel of Experts on Sustainable Food Systems, including their report entitled: “From Uniformity to Diversity”. Proposals and recommendations within this report should be properly reviewed by South African law and policy makers in working towards transforming food systems particularly as these relate to industrial animal agriculture through for example feed for animals, among other issues.

Another key consideration at the core of food systems work should be soil health. The first U.N. Food Systems Summit brought stakeholders together to strategize about bringing positive change to the world’s food systems. Soil health was acknowledged as the foundation of our food systems and being critical for the achievement of the Sustainable Development Goals.

Soil health should be recognised as the critical foundation of a sustainable food system. Every ‘sustainable solution’ should have at its basis in the protection and regeneration of soil health.

Dr. Rattan Lal – Soil scientist, professor of soil science, director of the Carbon Management and Sequestration Center at Ohio State University, and recipient of the 2020 World Food Prize:

“Famines, which are increasing, are in fact manmade tragedies. We must make famine and mass starvation politically intolerable, morally toxic, ethically unthinkable, and humanly unacceptable through restoration of soil health.

Soil stewardship and care must be embedded in every fruit and vegetable eaten, in each grain ground into the bread consumed, in every cup of water used, in every breath of air inhaled, in every scenic landscape cherished. Therefore, it is time to take positive action by endorsing a coalition for action on soil health. To promote the mantra that ‘good soil = good food = good human health = good ecosystem = good planetary processes’. The time to take action is now.”

Recommendations for transformative food system changes need to be grounded in authenticity and transparency and also need to be integrated to ensure a consistent message is given to consumers, and to avoid any unintended consequences of an action in one area to the detriment of another area.

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193 https://www.ipes-food.org/_img/upload/files/UniformityToDiversity_FULL.pdf
194 See for example the Coalition of Action for Soil Health: https://foodsystems.community/commitment_to_action/coalition-of-action-4-soil-health-ca4sh/
195 Key Informant Interview with Sonia Mountford of Eategrity
196 Ibid.
VI. CRITICISMS OF ALTERNATIVES

While the focus of this Working Paper is on alternatives (specifically plant, fungi and cell-based), it must be noted that in light of the current challenges and vast scope of issues within the food system there is no golden bullet that will deal with all

When advocating for alternatives it is crucial to not only consider some of the potential benefits and positive aspects, but to also consider harmful and negative aspects and impacts. These will act as barriers to transitioning towards alternatives and there is still much research and work to be done in these areas. While a full discussion is outside this Working Paper, a few of these issues have been included at a high level below. Further research needs to be done, particularly in the South African context, with input from relevant stakeholders.

According to a Report by Food Print197 there are a number of criticisms of alternative meats ranging from health to nutrition, to environmental to economic. Specifically, in relation to what is termed “ultra-processed meat alternatives”.

In many instances meat analogues can be highly processed which could have nutritional and health implications. While the positive benefits of alternatives are often highlighted, they may also have negative environmental impacts.

The negative impacts must be considered in the broader context of ASFs but also to try and avoid and minimise these while there is opportunity.

According to Eategrity, it is important to dig deeply into the technocratic fixes vs systemic change, particularly on the funding side of cultivated meats. Much of the funding is also from the same groups and think tanks that advocated or funded the Green Revolution which has been hugely problematic in certain African countries and in some instances has had devastating results for small-scale farmers and food security. These products must be interrogated as they are not authentically being marketed and are not the solution that they claim to be. The problem with techno-fixes is that they are only being viewed from one lens and the brokenness of our food system needs a holistic view and combined solutions. Particularly in South Africa where we have to tread cautiously to not repeat the mistakes of our apartheid past and ignore the issues of food sovereignty and the impact on rural communities.198

A practical example of “tecnو-fixes” in respect of animal agriculture for example, relates to the altering of DNA of animals used in farming operations.

“Livestock breeders are chomping at the bit to apply new gene-editing tools like CRISPR-Cas9 to farm animals claiming they can improve animal welfare, create disease resistant livestock and heat-tolerant animals that can withstand planetary warming. Gene-editing proponents insist that tools like CRISPR-Cas9 are cheap, precise and predictable methods for adding, deleting or re-arranging an

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197 https://foodprint.org/reports/the-foodprint-of-fake-meat/
198 Key Informant Interview with Sonia Mountford of Eategrity.
animal’s existing DNA – without the use of foreign DNA, and therefore government regulation is not. British scientists, for example, aim to engineer chickens to be resistant to flu, which would create a bird “buffer” that could prevent a flu pandemic in humans. Using CRISPR, the birds’ DNA is altered by removing parts of a protein that the virus would normally depend on to infect a host.”

It is vital that there is an understanding of the social justice concerns around these issues before embarking on endorsing another techno-fix and techno-lens for Africa. A few examples of important considerations relate to accessibility of these products, and ownership rights such as patents which could prevent entry into the market for more potential suppliers.

It is further important to ensure that consumers are not mislead by naming, labelling and marketing of these products. They must be properly regulated including across the spectrum of food safety, health, consumer protection, environmental and other aspects if they are to be true alternatives to the current systems. They should not perpetuate the harms of the current system and must promote food security, food justice and food sovereignty.

VII. Barriers to Transitioning Towards Alternatives

The barriers to transitioning away from ASFs can be found above and some are relevant to the transition towards alternatives. While these are dealt with elsewhere in this Working Paper, in summation these include:

1. Culture and Religion: around consumption and identity associated with ASFs
2. Accessibility and availability: lack of availability and accessibility across different areas including to purchase in different settings (this also includes access to the market for new entrants)
3. Perceptions / uncertainty/ lack of knowledge of products (including how they are made; their contents; how to prepare and cook them)
4. Nutrition – including in relation to processed products
5. Cost: high cost of alternatives compared with ASFs
6. Taste: alternatives not providing same satisfaction and flavour as ASFs
7. Health: including in relation to “naturalness”
8. Legal: including lack of proper regulation and regulations which are prohibitory.

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SECTION 3

LEGAL AND POLICY FRAMEWORK
PART I: LEGAL CONTEXT AND CONSTITUTION

I. Introduction

There are numerous policies, pieces of legislation and other standards addressing the issue of food systems, animal agriculture and alternatives in South Africa. Due to the anthropocentric nature of the legal system, animals and animal issues in particularly are covered under aspects of environmental law, food law, animal welfare and protection, human health, animal health and disease control, amongst others. There are a few animal-centric pieces of legislation which are highlighted briefly below. However, there is increasing acknowledgment that animals require special, specific and comprehensive protection and recognition in law.202 The available laws, disparate and scattered as they may be, offer a good starting point for a legal and constitutional reform agenda that provides better protection for animals, humans and the environment, provided a holistic approach is taken. This section aims to illustrate the interconnected nature of issues which are relevant to this Project as well as how these areas can be utilised together to achieve positive outcomes.

Notably, much of the focus of this section relates to the existing regulation of ASFs. This is due to the fact that there is minimal regulation in respect of alternatives. As per the Communique, the Processed Meat Regulations do not apply to meat analogues. There is no specific piece of legislation regulating meat analogues specifically. While there are aspects which are regulated under existing laws, and existing laws which can be applied to them, the lack of a definitive regulatory scheme constitutes a major gap. It is also concerning as many of these products are on market and some have been on market for decades (particularly plant-based alternatives). There should be specific regulations in respect of these foods in order to create certainty, accountability, trust and good governance. Accordingly, government must prioritise drafting legislation which applies to this sector which takes into account relevant factors as highlighted in this Working Paper.

In the cultivated meats and products area, there is currently no specific regulation. While none of these products are on market in South Africa, they have been eaten by a handful of members of the public and are believed to be on market soon.

While the cultivated meat and products companies are engaging with government in this regard, there is negligible information in the public domain. Responses for requests for information for this Project, where either nil or no response about the specifics of the regulatory framework was provided. Understandably, this is likely due to negotiations ongoing with government.

202 Wilson, Amy P, Animal Law in South Africa: ‘Until the Lions Have Their Own Lawyers, the Law Will Continue to Protect the Hunter’ (December 1, 2018). WILSON A.P., Animal Law in South Africa: “Until the lions have their own lawyers, the law will continue to protect the hunter”dA. Derecho Animal (Forum of Animal Law Studies) 10/1 (2019) - DOI:10.5565/rev/da.399, Available at SSRN: https://ssrn.com/abstract=3542042
For purposes of this Section III, the regulatory analysis has been divided according to the following areas although there is overlap among these areas:

i. The Constitution
ii. Animal Welfare, Industry Related Regulation, Standards and Soft Law
iii. Food Safety and Health
iv. Environmental Law
v. Consumer Protection
vi. Other Legal Areas

II. The Constitution of South Africa: An Introduction

The Constitution of the Republic of South Africa states that the country is one, sovereign, democratic state that is founded on the principles of human dignity, equality and the advancement of human rights and freedoms, amongst others. It also recognises the principle of constitutional supremacy, and therefore any law or conduct that is inconsistent with the constitution is invalid and cannot be enforced.

The Constitution has an extensive Bill of Rights that addresses human rights issues that are relevant to the Project and food systems including but not limited to:

- The right to human dignity;
- The right to life;
- The right to an environment that is not harmful to one’s health and wellbeing;
- The right to healthcare, food and water;
- Life;
- Freedom of religion, belief and opinion;
- Freedom of trade, occupation and profession;
- Labour rights, amongst others.

All of these rights are human / anthropocentric and not from an animal rights perspective. They do however provide an important starting point in addressing both human and animal rights and interests.

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203 Constitution of South Africa, Section 1.
204 Constitution of South Africa, Section 2
205 Constitution of South Africa, Section 10
206 Constitution of South Africa, Section 11
207 Constitution of South Africa, Section 24
208 Constitution of South Africa, Section 27
209 Constitution of South Africa, section 11
210 Constitution of South Africa, Section 15
211 Constitution of South Africa, section 22
212 Constitution of South Africa, section 23
including by addressing anthropogenic activities which are harmful or impact on various stakeholders. This is because the human centred approach in the Bill of Rights has largely influenced law and policy development in the country. The result is that laws and policies have been developed for the protection of human and peoples’ rights and their well-being in line with the constitutional framework and not necessarily applying the same rights-based approach to animals.

Animal welfare and not animal rights is the focus of the country’s legal and jurisprudential framework. The animal welfare approach is not necessarily a negative viewpoint, but it should progressively be reviewed with a view to develop an animal rights approach so as to provide stronger and better protections for animals in the country. This is because, as it stands, the animal welfare approach neither historically nor currently provides adequate protection to animals, as it reinforces cultural, religious and social beliefs that view animals as resources or property available for the use, benefit and exploitation by humans. Animal welfare efforts therefore look at sanctioning the use and abuse of animals provided certain minimal criteria are met. For example, terms such as the “humane” killing of animals, compared to an approach where the presumption is not in favour of use but rather an is premised on an understanding of an animal having intrinsic worth as an individual, a right to be free from commercial exploitation by humans and for them to exist for their sake and not only for the benefit of human beings.

Academics such as Professor David Bilchitz argue that the Constitution of South Africa can in fact be interpreted to protect animal rights. He argues that the principle that “there be no arbitrary discrimination against any particular group without a justifiable reason” should apply to both human and non-human species. He also argues that the logic underlying human rights provides the foundation for the protection of animal rights. These include ideals such as equality, autonomy, dignity amongst others, principles that should apply to animal beings as much as they should apply to human beings. Others highlight the intersection of interests between human and nonhuman animals.

The animal agricultural and food industry has an impact on the health and well-being of humans. The animal food industry should be viewed using this lens, and specifically in light of the provisions of Section 24 of the Constitution which provides for the right to an environment that is not harmful to one’s health and well-being. Animal products provide food to humans and this food has a bearing on

human health. Intensive industrial animal production also has a negative bearing on the environment and the attendant impacts on human health and well-being. As such the harm that emanates from this industry and its practices cannot be divorced from the negative impacts on humans’ constitutional environmental and health rights. Research shows that “Factory farms are designed to maximise food production, often at the expense of environmental concerns, as well as concerns relating to animal welfare and human health and well-being.” It is therefore an area that needs to be addressed in animal law reform from an animal, human rights and constitutional perspective.

The South African Constitutional Court has explicitly recognised that the human right to environment as contained in section 24 includes animal welfare. In 2016, the Constitutional Court recognised the importance of the NSPCA and upheld their right under statute to institute private prosecutions in cases involving animal cruelty. The Constitutional Court held in this case that “Animals have shifted from being “mere brutes or beasts” to “fellow beasts, fellow mortals or fellow creatures” and finally to “companions, friends and brothers”. This ruling was important in elevating the standing of non-human animals vis a vis human animals, and is an important building block in the fight for better and improved rights for animals in South Africa.

Examples of some of the far-reaching statements by the court are included below and present numerous opportunities to challenge the current paradigm to achieve greater protection for animals:

“More recently, Cameron JA’s minority judgment in Openshaw recognised that animals are worthy of protection not only because of the reflection that this has on human values, but because animals “are sentient beings that are capable of suffering and of experiencing pain”. The High Court in South African Predator Breeders Association championed this view. A unanimous Full Bench found that canned hunting of lions is “abhorrent and repulsive” due to the animals’ suffering. On appeal, the Supreme Court of Appeal did not dispute this finding.” [para 56]

“The Supreme Court of Appeal in Lemthongthai explained in the context of rhino poaching, that “[c]onstitutional values dictate a more caring attitude towards fellow humans, animals and the environment in general”. The Court concluded further that this obligation was especially pertinent because of our history. Therefore, the rationale behind protecting animal welfare has shifted from merely safeguarding the moral status of humans to placing intrinsic value on animals as individuals. [para 57]
“Lemthongthai is also notable because it relates animal welfare to questions of biodiversity. Animal welfare is connected with the constitutional right to have the “environment protected . . . through legislative and other means”. This integrative approach correctly links the suffering of individual animals to conservation, and illustrates the extent to which showing respect and concern for individual animals reinforces broader environmental protection efforts. Animal welfare and animal conservation together reflect two intertwined values.”
I. Introduction

As with other jurisdictions in the world, nonhuman animals are categorized and considered as property. This legal status has been detrimental to ensuring their protection and consideration as sentient beings with intrinsic worth.

The regulatory framework is largely old and outdated and does not reflect the changing circumstances, new thoughts and developments. For example, the rise of factory farming and technological developments, climate change and other scientific developments. It fails to properly account for the converging Crises - environmental, social, ecological, climate, pandemic. It does not reflect the recent Constitutional Court judgments including the 2016 case which linked the environmental right to animal welfare. Because most the animal-centric legislation was promulgated decades before South Africa became a constitutional democracy, it does not factor the Constitution and rights granted to humans, and the impact of animal activities and usage on such rights.

In many ways the animal regulatory framework is inadequate and South Africa has largely been left behind the international and foreign developments which has taken place. There are very few specific practices banned, which is particularly important in the farmed animal context where other jurisdictions have taken active measures to ban and phase out cruel practices based on evidence such as sow stalls, veal crates and caged hens. The current framework does not adequately protect all animals, either explicitly excluding some from the legislation or by virtue of societal and other factors, certain animals receiving unequal and less attention and consideration.

The enforcement of animal welfare is largely left up to a non-profit organisation (the NSPCA) which receives no governmental funding and is severely overburdened and under-resourced. At a governmental level, different departments continuously pass the buck on responsibility for cruel practices or actively promote industries which are harmful. Departments do not view issues holistically leading to a fragmented framework which does not properly account for issues outside of their direct mandate, and which leads to major gaps in legislation and policy and their enforcement.

The main legislation (the Animals Protection Act) is a criminal statute, and this brings with it multiple problems relating to the criminal justice system generally as well as high burdens of proof and a lack of will to prosecute these issues with the prevalence of human-based crimes. This criminal nature further means that there are no proper legal standards with positive duties, and which set out clear and definable obligations towards animals in specific circumstances. While the DALRRD has the
power to make specific regulations including positive standards, it has failed to do so which has led to a proliferation of soft laws and standards which are deficient in content, voluntary and unenforceable.

Government has historically engaged with industry but not with civil society organisations representing animal protection, animal rights or animal welfare. Animal use is seen as the norm and there is no discourse around alternatives to such systems. As referred to above, recently DALRRD has taken aggressive action against alternatives instead of properly regulating these products and properly engaging with stakeholders. They do not consider the potential of such products or alternative systems to uplift the country, achieve social and economic targets or other benefits they might bring – including in terms of international exports.

Accordingly, and at present, government – specifically those departments promoting intensive and increased animal agriculture including the DALRRD, DFFE and DTIC can be considered to be barriers to transitioning the food system away animal agriculture and towards alternatives.

These are just a few examples of issues and challenges with the current regulatory framework and which issues need to be properly considered in the context of reforming food systems.

Below are specific examples of regulation in this area which are non-exhaustive.

COMPONENT 1: DOMESTIC GOVERNMENTAL REGULATION

II. Animals Protection Act (Act 71 of 1962)

A. Introduction

The Animals Protection Act, 71 of 1962 and its amendments (the “APA”) is the main legal framework on animal protection in South Africa. This piece of legislation creates crimes in relation to the improper handling and management of animals and therefore the relevant considerations in respect of criminal law apply including but not limited to the onus of proof, evidence, criminal procedure and other matters.

The act defines animals as: “… any equine, bovine, sheep, goat, pig, fowl, ostrich, dog, cat, or other domestic animal or bird, or any wild animal, wild animal, wild bird or reptile which is in captivity or under control of any person.”

The act therefore explicitly applies to a number of animals farmed for food in South Africa as well as others through the broader inclusions of “other domestic” animal. This is in contract to some other jurisdictions such as the USA which explicitly excludes farmed animals from its Animal Welfare Act.

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220 Exports are critical to South Africa [https://agbiz.co.za/content/open/15-february-2021-agri-market-viewpoint](https://agbiz.co.za/content/open/15-february-2021-agri-market-viewpoint)

221 Animals Protection Act, Section 1 (i)
in the definition. However, the US Animal Welfare Act contains specific standards for the animals to which it applies, unlike the APA.

B. Offences

Section 2 creates an array of offences and relevant penalties. These provisions apply to farmed animals, including those that are farmed under intensive farming systems. However, in practice, there are innumerable actions against farmed animals which would constitute cruelty in terms of the APA, if properly applied.

One of the major issues with the act is the qualifications of certain of the offences using words such as “unnecessary suffering”, or “reasonable”. There are other major criticisms of the APA in terms of its content as well as its enforcement, which is largely left up to the statutory non-profit organisation, the NSPCA, discussed further below.

Certain offences from section 2 of the APA have been set out below as well as examples of certain animal agricultural practices (in the context of industrialised animal agriculture) which arguably have the potential to correlate to such offences, provided all the relevant criteria and burdens of proof are met and other relevant requirements based on criminal law and the statute.

As illustrated in Table 6, these offences include any person who:

Table 6: APA offences

<table>
<thead>
<tr>
<th>APA Offence</th>
<th>Potential Application to Animal Agricultural Practice/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>overload, overdrives, overrides, ill-treats, neglects, infuriates, tortures or maims or cruelly beats, kicks, goads or terrifies any animal</td>
<td>Due to the broadness of this provision a number of practices could be considered offences particularly under the terms: “ill treats” “maims” or “terrifies” Many practices in animal agriculture maim animals such as tail docking, beak trimming, de-horning and others. 223</td>
</tr>
<tr>
<td>confines, chains, tethers or secures any animal unnecessarily or under such conditions or in such a manner or position as to cause that animal unnecessary suffering or in any place which affords</td>
<td>Sow stalls, veal crates (particularly where chains are used and no bedding or other materials required); live export of animals; battery cages</td>
</tr>
</tbody>
</table>


223 See for example a case on this issue when it came to bird dubbing; and see: [https://nspca.co.za/dubbing-chickens-not-permitted/](https://nspca.co.za/dubbing-chickens-not-permitted/)
<table>
<thead>
<tr>
<th>APA Offence</th>
<th>Potential Application to Animal Agricultural Practice/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>inadequate space, ventilation, light protection or shelter from heat, cold or weather</td>
<td></td>
</tr>
<tr>
<td>unnecessarily starves or underfeeds or denies water or food to any animal being the owner of any animal, deliberately or negligently keeps such animal in a dirty or parasitic condition or allows it to become infected with external parasites or fails to render or procure veterinary or other medical treatment or attention which he is able to render or procure for any such animal in need of such treatment or attention, whether through disease, injury, delivery of young or any other cause, or fails to destroy or cause to be destroyed any such animal which is so seriously injured or diseased or in such a physical condition that to prolong its life would be cruel and would cause such animal unnecessary suffering</td>
<td>Any conditions where animals are kept in dirty or parasitic conditions or fails to provide adequate veterinary or medical treatment</td>
</tr>
<tr>
<td>uses on or attaches to any animal any equipment, appliance or vehicle which causes or will cause injury to such animal or which is loaded, used or attached in such a manner as will cause such animal to be injured or become diseased or to suffer unnecessarily</td>
<td>Mechanical / machinery used in animal agriculture – for example for milking cows</td>
</tr>
<tr>
<td>drives or uses any animal which is so diseased or so injured or in such a physical condition that it is unfit to be driven or to do any work</td>
<td>Non-ambulatory animals being presented for slaughter</td>
</tr>
<tr>
<td>under such conditions or in such a manner or position or for such a period of time or over such a distance as to cause that animal unnecessary suffering</td>
<td>Live export of animals by sea; sow stalls</td>
</tr>
<tr>
<td>in conditions affording inadequate shelter, light or ventilation or in which such animal is excessively exposed to heat, cold, weather, sun, rain, dust exhaust gases or noxious fumes;</td>
<td>Live export of animals by sea</td>
</tr>
<tr>
<td>without making adequate provision for suitable food, potable water and rest for such animal in circumstances where it is necessary</td>
<td>Live export of animals by sea</td>
</tr>
<tr>
<td>causes, procures or assists in the commission or omission of any of the aforesaid acts or, being the</td>
<td>Any of the examples above in relation to the owner</td>
</tr>
</tbody>
</table>
APA Offence | Potential Application to Animal Agricultural Practice/s
--- | ---
owner of any animal, permits the commission or omission of any such act | Any of the above, including negligence
by wantonly or unreasonably or negligently doing or omitting to do any act or causing or procuring the commission or omission of any act, causes any unnecessary suffering to any animal |
 kills any animal in contravention of a prohibition in terms of a notice published in the Gazette under subsection (3) of this section |

The APA also contains an exception for farmers in section 2(l) in respect of the purchasing of traps or devices “except under the authority of a permit issued by the magistrate of the district concerned, sells any trap or other device intended for the capture of any animal, including any wild animal (not being a rodent) or wild bird, to any person who is not a bona fide farmer”.

At this juncture it is important to acknowledge the vast number of wild animals which are impacted by animal agriculture. This includes for example the trapping and killing of predators.

The Act also provides for the procedure for the destruction of animals that are considered to be so seriously diseased and/or injured that keeping them alive would amount to cruelty to the animals.

C. Enforcement

NSPCA has a dedicated farm animal protection unit. According to their website, “[t]he Farm Animal Protection Unit undertakes the monitoring and protection of the following species: – sheep, pigs, goats, cattle including dairy cows, poultry, ostriches, emus, crocodiles, rabbits, equine, alpacas plus farmed fish and other aquatic species raised for food production.”

Their focus areas include: Broilers, Crocodile Farms, Dairy Farms, Hatcheries, Export of Live Animals by Sea, Labelling of Animal Products, Prison Farms, Transport of Live Animals by Land, Animal Slaughter and Animal Saleyards.

Prosecutions
Successful prosecutions for cruelty and neglect towards farmed animals are negligible at best in South Africa.
This can be seen from the NSPCA’s Annual Reports:

224 [https://nspca.co.za/farm-animal-protection/](https://nspca.co.za/farm-animal-protection/)
NSPCA Annual Report October 2017 – September 2018

During this period the NSPCA reported 3 successful prosecutions in total with 30 awaiting finalization. They conducted 1030 inspections and refer to charges laid against mohair farmers. They also speak to removal of pigs from an award winning farm. On that same farm during an earlier inspection, the NSPCA had to euthanise 18 sows to end their suffering. They also found Ecoli in water samples.

The NSPCA also laid charges against Malati Dairy for confining calves by chaining them in metal crates with no begging. The local State Prosecutor and the Director of Public Prosecutions declined to prosecute. The NSPCA then approached the National Prosecuting Authority.

NSPCA Annual Report October 2018 – August 2019 Report:

During this period a total of 559 inspections and investigations were conducted nationally and all complaints were fully investigated. The NSPCA notes that there were various contraventions of the APA including at facilities such as abattoirs, feedlots, poultry farms, hawkers, sale yards, dairy farms, pounds, pig farms, correctional facilities, rabbit farms, crocodile farms and agricultural farms to name a few. The NSPCA registered six new cases with SAPS, two pending cases were successfully prosecuted and 32 cases were pending finalization in the legal system.

In total, for this period, the NSPCA reported 18 successful prosecutions. These were all related to dog fighting. They refer to 97 cases awaiting finalization which include farmed animals.

During the period under review, 346 warnings, notices and letters of requirements were issued for improvements to living conditions and standards of care.

NSPCA September 2019 – August 2020 Report:

During this period, the NSPCA reported even less successful prosecutions – being 8. No details provided. There were 102 cases awaiting finalization. Under the Farm Animal Protection Unit Report it was noted that seven new cases of contraventions of the APA were encountered and charges laid with the South African Police services and two people were found guilty of animal cruelty.

During the period, 782 inspections were undertaken around South Africa including in abattoirs, feedlots, poultry farms, hawkers, rabbit farms, crocodile farms, cull outlets, aquaculture farms, petting farms, alpaca, mohair and agricultural farms.

The report noted that the Farmed Animal Protection Unit had a further 31 cases pending through the legal system (including the Thandi Modise case explained below).

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Specific Example: Thandi Modise

In July 2014, NSPCA encountered cruelty and animal neglect on a farm owned by Thandi Modise (the current Minister of Defence and Military Veterans of South Africa and former Speaker of Parliament in South Africa). Animals were left to fend for themselves without basic care including water, food and medical care. There were dead and decomposing bodies and dying animals (bodies of over 50 pigs and other animals such as geese, ducks, sheep and goats). The NSPCA had to euthanise 162 – 224 animals due to their condition and said that it was “one of the cruelest cases of animal abuse that the animal welfare organisation had ever seen’.

The State declined to prosecute and the NSPCA was granted authority by the Director of Public Prosecutions to prosecute. In 2018, the NSPCA mounted a private prosecution with the assistance of AfriForum – this was the first private prosecution being pursued by the NSPCA. In 2021, the case was dismissed in terms of a 174 application. The court said that Ms. Modise could not be held responsible for what happened on the farm. There was a man hired to look after the animals (who had eventually left after he had not been paid and was hungry) and that he should be held responsible for the crimes committed. This is despite provisions in the APA which allow for the owner to be held responsible.

The APA to date has not proven to be an effective legal tool to bring animals in agricultural facilities greater protection or to successfully prosecute those who harm animals. Unless something drastically changes, and prosecutions occur more frequently and there are harsh sentences for animal cruelty at animal agriculture facilities – justice and protection for farmed animals will remain trivial.

III. *Draft Animal Protection Bill, 2021*

The Draft Animal Protection Bill of 2021 seeks to amend the Animals Protection Act, (No. 71 of 1962) and the Foodstuffs, Cosmetics and Disinfectants Act, (No. 54 of 1972). The main focus of the amendments is to ban cosmetic testing on animals. It creates an offence for “testing of a cosmetic, or part of or ingredient of a cosmetic, on an animal.” It also provides a definition for “cosmetic” since such a definition is currently not contained in the Animal Protection Act. The Bill amends the Foodstuffs, Cosmetics and Disinfectants Act by criminalising the sale, or manufacturing of any cosmetic, which has been tested on an animal in the Republic. These provisions will be critical in providing protection to and preventing cruelty to animals in line with emerging international standards.

A 2020 notice by Member of Parliament Steven Swart seeking to introduce the Bill as a Private Members’ Bill highlighted that although there are no known laboratories in South Africa that test animals for cosmetic purposes, a specific law banning the practice would “send an important message...” 228

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228 Animal Protection Amendment Bill, 2021
that the testing of ingredients for cosmetics on animals is unacceptable to South Africans.”  

The Notice also highlights that other countries in the world including India, New Zealand, the United Kingdom already have legislation banning animal testing for cosmetics and that in the case of the United Kingdom and the European Union, such legislation had positive economic benefits due to spin-offs that were created in different sectors.

Although this proposed amendment relates to cosmetic testing on animals, it is important because if successful, it would be one of the few bans relating to animal practices in South Africa. To date only very few specific practices are banned in the context of domestic (companion) animals (mostly in respect of dogs).

It is also important because it relates to the methodology of bringing products to market when they impact on animal welfare. Accordingly, the passing of such legislation could serve as a significant platform for further efforts.

Animal Law Reform South Africa’s submission on the Draft Animals Protection Act Amendment Bill contains further comments on aspects of concern with the draft.

**IV. *Draft Animal Welfare Bill (To be Released)*

A working group has been appointed to draft a new “Animal Welfare Bill” aimed at updating and consolidating all existing animal regulation into a single statute. The impetus for the development of the Bill was a Socio-economic Impact Assessment conducted in 2018 which focused exclusively on South Africa’s position as an exporter of animal products. Further, the appointed working group is constituted almost entirely of representatives from South Africa’s agricultural department whose mandate has already been discussed.

There are therefore no representatives from animal welfare or environmental protection groups contributing to the drafting of the new law. As a result, there is a very real risk that the new law, which stands to embody Animal Law in South Africa, may constitute a regressive step for animal protection in South Africa by focusing on maximising potential profit from animal agriculture over any welfare considerations, particularly in the current economic climate.

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V. SPCA Act (Act 169 of 1993)

The Animal Protection Act is complemented by the Societies for the Prevention of Cruelty to Animals Act, 1993 whose purpose is to regulate societies for the prevention of cruelty to animals. These societies are critical for enforcement of, and compliance with the provisions of the Prevention of Cruelty to Animals Act. The provincial societies, together with their national affiliate body, the National Council of Societies for the Prevention of Cruelty to Animals (“NSPCA”) have played an important role in protecting farmed animals in the country as will be detailed elsewhere in this Working Paper.

There are various issues with the heavy reliance on the NSPCA and SPCAs respectively to enforce animal welfare regulation in the country. These warrant further discussion and research given the broad and far-reaching powers of the NSPCA in South Africa.

VI. Veterinary and Para-Veterinary Professions Act 1982 (Act No.19 of 1982)

The Veterinary and Para-Veterinary Professions Act provide for the establishment, powers and functions of the South African Veterinary Council (“SAVC”) and regulates various issues relating to veterinary professions and para-veterinary professions. The SAVC, veterinarians and para-veterinarians play a critical role in various animal regulation and laws in South Africa. A number of animal statutes provide for rights and duties of veterinarians, and other persons regulated. This is particularly important in the area of public health, animal health and welfare.

There are several Rules relating to these professions and related areas including animal health technicians. For example, services pertaining to the profession of animal health technician, include:

- Surveillance and inspection of all livestock, poultry and game, and where relevant the reporting of all diseases listed by OIE guidelines in disease control areas, at livestock auctions, sales and during routine farm visits and inspections
- Vaccination programmes in livestock
- Parasite control programmes in livestock
- Abattoir inspections and reporting

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233 Societies for the Prevention of Cruelty to Animals Act, Preamble
234 No. 19 of 1982
235 GNR.770 of 24 August 2007: Rules relating to the practise of the para-veterinary profession of animal health technician (Government Gazette No. 30184)
Meat inspections and other duties under the relevant abattoir legislation, if authorised thereto by the Provincial executive officer

And others.

An ‘animal health technician’ may carry out the following procedures on animals without veterinary supervision (non-exhaustive)

- Open castrations of:
  - cattle under 3 (three) months;
  - sheep and goats under 2 (two) months
  - pigs up to 7 (seven) days
- Dehorning of immature animals under 4 (four) months
- Tail docking:
  - pigs up to 7 (seven) days | sheep by using the open method under 2 (two) months and the elastrator method under 6 (six) weeks.
- Feet trimming
- Branding
- and others….

Also of importance is the South African Veterinary Strategy (2016 – 2026). This states that “[t]he biggest challenge to veterinary services nowadays is to ensure expanded animal and aquaculture production by small-scale farmers and in underdeveloped areas, which brings advantages in increasing total production of food and fibre, and higher incomes for farmers and Agro-processors.” On the cover page it states that “We preserve the health and welfare of our animals, to produce enough for ourselves and share with the world.”

A complete analysis of the South African Veterinary Strategy as well as its impacts and implementation is warranted and recommended as this is a critical policy document governing animal agriculture in South Africa.

Given the important role of professionals within the veterinary and related professions, including for farmed animals they are key stakeholders to achieving better protection for farmed animals. The regulation governing the professions as well as regulation in which they feature to perform certain tasks, should be further explored.
COMPONENT 2: STANDARDS BY PUBLIC ENTITY

I. SABS Standards

A. Standards Act (Act 8 of 2008)

The Act repeals the Standards Act of 1993 and provides for the continued existence of the South African Bureau of Standards ("SABS") whose role is to develop, promote and maintain South African National Standards ("SANS"). In turn, the Act envisages that an internationally recognised standardisation system will support the needs of South African enterprises and their global competitiveness, facilitate international trade and facilitate South Africa’s economic performance and transformation.\(^{237}\) In line with these provisions, the SABS has developed the following standards for farmed animals in South Africa. Though not binding, the standards play an important persuasive and moral role, amongst industry players and consumers alike. They can also be used as a springboard for the development of a binding regulatory framework to protect the rights and welfare of animals, consumer health and wellbeing as well as environmental protection and climate change mitigation.

According the NSPCA Annual Report October 2018 – August 2019\(^ {238}\) DALLRD was working on new draft regulations for the slaughter of rabbits and crocodiles in abattoirs which were expected to be finalised in 2020. They indicated that the Farmed Animal Protection Unit provided extensive input into these. They also engaged with the Milk Producers Organisation on a number of occasions regarding the welfare of dairy cattle and submitted draft regulations for improved welfare.

According the NSPCA Annual Report October 2018 – August 2019\(^ {239}\) the Farm Animal Protection Unit met with SABS regarding the Poultry Welfare Standards, Rabbit Welfare Standard and revising of the Crocodiles in Captivity standard all of which are currently in development.

The NSPCA also met with the SABS to discuss reassessing the pricing structure of the SABS standards or for the regulations to be promulgated into regulations. The SABS was pro turning the Standards into regulations and the NSPCA indicated that they would approach the Minister of Agriculture to discuss this option.

A few examples of some of the SABS SANS which relate to farmed animals are included below. These all have specific provisions in relation to the subject matter and should be further explored and researched.

\(^{237}\) Standards Act, Preamble


B. Code Broiler Production

The code notes the South African Poultry Association’s duty “to produce food safely, responsibly, and with as little harm to the environment as possible” in its foreword. The failure to specifically mention the rights and welfare of the poultry and the need to handle the birds in a humane way in the foreword is a glaring anomaly that may lead to failure to specifically address the rights and welfare of poultry in the production cycle.

In its body, the code however has specific provisions that may address the health needs of the consumer, environmental protection and the welfare of the poultry. It provides for housing of broilers, environmental considerations, preparation of poultry houses, management practices, including provision of water and food as well as health control.

It also has specific provisions for free range poultry production, in which it sets out the five basic freedoms accorded to poultry that is reared under this system in line with international research, and in particular that free range broilers should never be confined to cage production systems. This is an integral aspect of ensuring improved rights and welfare for the chickens.

C. Code Poultry Breeders and Day Old Chick Production

The code sets “minimum standards for the wellbeing of poultry in commercial operations, research and educational facilities.” It is therefore all-encompassing in that it doesn’t look only at farm production level but addresses the wellbeing of poultry in other settings where poultry is handled. The code also recognises that there is increasing knowledge and changing attitudes regarding the welfare of animals whilst considering the need for safe and wholesome food for human consumption. It provides for the humane handling of chicks and eggs at different stages of the production process, including housing/buildings (hatcheries), health and care of the chicks, transportation etc.

There are however a number of practices contained in the code that are of concern. This includes the fact that the code still recognises the practice of beak trimming, justifying it on the basis that it is a “humane alternative to the appalling effects of cannibalism” and that beak-trimming may be dropped as soon as an alternative to prevent cannibalism has been found. It also recognises the practice of disposing of or euthanizing “unwanted” chicks, including through practices such as decapitation, cervical dislocation, gassing with carbon dioxide and high speed maceration. Some or all of these practices, though considered a humane way of disposing of “unwanted” stock in the industry,
point to cruelty towards animals, and an emphasis on profit for the farmers, breeders and researchers as opposed to the need to protect the rights and welfare of the animals.

D. **SANS 1488 - Humane Transportation of Livestock by Road**

The welfare of animals during transport raises a number of concerns. This standard was not readily available but should be reviewed for completeness. Certain aspects of transportation of animals such as livestock are contained in the Regulations to the Meat Safety Act which are set out in further detail below.

E. **Draft Poultry Welfare Code**

This draft Code’s aim is to ensure that the environment in which chickens are kept prevents their exposure to pain, injury, disease and suffering. The Code seeks to support the Poultry Master Plan launched during the State of the Nation Address in 2021 with a focus on increasing local production, exports, and in general expanding the poultry industry in the country. The Code therefore focuses on production performance, condition of chickens, environment in which the chickens are grown, management of chicken growing entities, routine and daily care of chickens, euthanasia, sale of live birds and health controls.

It is an important Code in the protection of the welfare of chickens, but however seeks to expand the growing of and consumption of chicken, both as a food security and economic growth measure. However, it can be expected that expanded growth in the production of chickens in line with the Chicken Master Plan and as envisaged in this Code will also come with more violations as opposed to the protection of the chickens. This is due to increased industrial farming and production of chickens and the increased numbers to be grown and taken care of that can detract from the need to pay attention to the welfare and focus more on production and profits. The increased production of chicken also encourages increased consumption of chicken and not reduced consumption in favour of plant-based alternatives.

There were a number of issues with the draft Code as it was published for public comment. Most notably that it intended to allow for battery cages until 2039 with minimal improvements thereafter.

F. **SANS1469 - Humane Handling and Facilities for the Protection of Livestock at Shows, Auction Sales, Vending Sites and Livestock Pounds**

The Standard promotes and espouses the “Five Freedoms” of animals as detailed elsewhere in this paper. It provides for a responsible person accountable for the animals at the show, auction, vending site or pound as appropriate and this accountability is placed on the person from the time the animals are offloaded at the facility to the time the animals are loaded again. This responsibility entails ensuring
that the animals are handled humanely, that persons working with livestock at the respective facilities are trained, ensuring the provision of appropriate handling facilities as well as the cleanliness and safety of the facilities. The responsible person is also required to observe and implement the tenets of the five freedoms of animals.

**G. SANS Pig Welfare**

The Code promotes and espouses the five freedoms of animals as detailed elsewhere in this paper. It provides for the training of workers so that they can properly handle pigs and perform routine procedures in a manner which is clean and causes minimum disruption. Routine procedures that are allowed include tail docking, teeth clipping, ear notching and castration of piglets up to 7 days of age. Although allowed in the Code, these procedures are known to cause pain and are therefore a welfare issue for pigs.

The standard however also has many positive provisions including the prohibition of “kicking pigs, the use of electric prodders, whips, metal rods, heavy sticks or other objects liable to injure or terrify pigs, picking up by the ears, tail or foreleg.” It prohibits the installation of new tethers and phasing of the use of tethers by 31 December 1999. The Code provides standards for crates and creep areas, standards for pigs kept outdoors, handling and treatment of sick and injured pigs, pigs’ nutrition, transportation and abattoirs used for the slaughter of pigs.

Whilst it provides standards for the stunning and sticking of pigs, the Code acknowledges the need for research to devise optimal stunning methods and apparatus and the appropriate monitoring equipment to ensure humane stunning in the spirit of the Code. This is an acknowledgement of the fact that the current system being used has negative impacts on the welfare and wellbeing of animals and therefore needs to be addressed to ensure better protections for these animals.

**VII. SANS: Other Codes**

There are other SANS which may be applicable to animal agriculture not included herein. Some of these codes needed to be purchased and were not reviewed but are relevant. There are also standards relating to wild animals such as the SANS 10331 Translocation of Certain Herbivores and SANS 1884-3 - Vehicles for Transport of Herbivore; and SANS 1884-1 - Holding Pens Herbivores at Auction and...
Quarantine (This Code is for Wild Herbivores and is therefore not relevant to the study). A code relating to Feedlots is also referenced.

One of the major issues of the SABS SANS is accessibility. Such codes need to be purchased in order to be viewed. This creates a major barrier for members of the public and civil society organisations trying to gain access to these and view the standards. This further indicates a lack of transparency which is problematic.

SANS are only legally binding to the extent that they are subsequently incorporated into legislation or permitting standards. This means they are largely voluntary and unenforceable. There are several other issues with the SABS SANS and the regime overall, which should be further analysed.

**COMPONENT 3: INDUSTRY CODES AND STANDARDS**

**I. Introduction**

Outside of the SABS SANS there are various other industry codes and standards available. In many instances it is difficult to determine whether these are the latest documents or whether they have been superseded.

There are problems and challenges associated with industry codes and standards including that these are set by industry; they are voluntarily and not binding legally; enforcements is challenging; and they have the potential to constitute humane-washing and green-washing by paying lip-service to welfare concerns but with little genuine impact for animals.

For purposes of the Working Paper, a more complete analysis will be undertaken to determine up to datedness and particularly whether any of the codes or standards have been incorporated as SANS.

**II. LWCC**

The Livestock Welfare Coordinating Committee (LWCC) was established in 1978 to respond to increasing cruelty to animals during that period. As of 2018, it was composed of members of twenty-three (23) organisations and the State to coordinate welfare in the interests of animals.²⁵²

According to their website, “[t]he Livestock Welfare Coordinating Committee (LWCC) stands for humane livestock production and has been in existence since 1978. The LWCC has a voluntary industry membership where it had originally functioned as a Committee of the now disbanded Meat

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Board. In its present form the LWCC is funded by the Red Meat Industry from statutory levy income as well as from other commodity contributions. The main objective of the LWCC is to take proactive actions to ensure humane and responsible handling of production livestock. While not an animal rights organisation the LWCC promotes welfare of livestock by participating in the drafting of informative material for all farmers, livestock transporters, abattoirs, sale yards, vending site and show-ground operators. The LWCC encourages practical humane research projects, observations, and desk research.\textsuperscript{253}

According the NSPCA Annual Report October 2018 – August 2019\textsuperscript{254} “[i]n order to further the best interests and the humane treatment of farm animals, the National Council of SPCAs is actively involved in serving on the Livestock Welfare Co-ordinating Committee. This long-standing organisation promotes the responsible, humane and compassionate use and treatment of livestock in every phase of the production process. The National Council of SPCAs plays an important role in providing welfare input into standards of care documents codes and training manuals ensuring that farmers are equipped with information promoting farm animal welfare.” Notably, the NSPCA is not lister as a member on the LWCC website.\textsuperscript{255}

Members include AFS (Agency for Food Safety); DALRRD (The Department of Agriculture, Land Reform and Rural Development); DAWS (Department of Animal and Wildlife Science); GDARD (Gauteng Department: Agriculture and Rural Development); HSI (Humane Society International); IMQAS (International Meat Quality Assurance Services); LAWA (Livestock Animal Welfare Association); MPO (Milk Producers’ Organisation); NAHF (National Animal Health Forum); NERPO (National Emergent Red Meat Producers’ Organisation); NWGA (National Wool Growers Association); RMAA (Red Meat Abattoir Association); RMIF (Red Meat Industry Forum); RPO (Red Meat Producers Organization); RuVASA (Ruminant Veterinary Association of South Africa); SA Studbook; SABS (South African Bureau of Standards); SACIA (South African Crocodile Industry Association); SAFA (South African Feedlot Association); SAFLA (South African Federation for Livestock Auctioneers); SAMGA (South African Mohair Growers’ Association); SAOBC (South African Ostrich Business Chamber); SAPPO (South African Pork Producers’ Organisation); SAPS (South African Police Service); SASAS (South African Society for Animal Science); SAVA (South African Veterinary Association); SAMFA (South African Veterinary Council); University of Pretoria – Faculty of Veterinary Science

A. Codes

The LWCC mentions the following Industry Codes:

\textsuperscript{253} http://lwcc.org.za/
\textsuperscript{255} http://lwcc.org.za/about-us/membership/
1. Code of Practice for the Welfare of Dairy Cattle
2. Code of Practice for Handling and Transport of Livestock
3. Code of Practice for the use of prodders and stunning devices in Abattoirs
4. Code of Practice for the duties and functions of Abattoir Manager regarding the welfare of animals
5. MPO Code
6. RPO Kode van Beste Praktyk / RPO Code of Best Practices
7. Wool Industry Code of Best Practices
8. Code Pig Welfare

Certain of these have been expanded on below.

The website mentions the species-specific codes which are not specifically included on the website or are not easily accessible / loading: Cattle\(^{256}\); Goats\(^{257}\); Sheep\(^{258}\)

**B. LWCC Pig Codes**

The Code is produced by the South African Pork Producers’ Organisation (SAPPO) with the assistance of the Pig Veterinary Society (PVS). It is based on the five freedoms of animals. It provides for the appropriate training of stock owners and workers and the performance of elective procedures by competent stockmen. The outlined elective procedures have however been criticised for their negative impact on animal welfare including pain and suffering. The procedures include tail docking, tooth clipping, castration, injections, tattooing, ear notching and semen collection. Although largely accepted as industry practices, these practices must be relooked to ensure adequate animal welfare and protection, particularly considering that current practice allows them to be performed by people without veterinary qualifications even though they are supposed to be trained. To its credit, the Code prohibits the breaking, sawing or cutting of boars’ teeth/tusk except if performed by a veterinarian with appropriate anaesthesia.\(^{259}\)

The Code also has provisions for euthanasia, housing and loading and transportation of pigs.


\(^{259}\) The South African Pork Producers Organisation Code for the Welfare of Pigs, Elective Procedures
C. LWCC Code of Practice for the Handling and Transport of Livestock

The Code states that its aim is to set norms for the acceptable treatment of animals, and that the moral conscience and financial interests of the Livestock and Meat Industry can best be served by promoting the wellbeing of its animals.\(^{260}\)

It also emphasises the following important consideration in relation to animal welfare and treatment:

- Avoiding cruel and inhuman handling of animals in all stages of the production process, including transportation, marketing and slaughter;
- Need for the animal production industry to handle animals with patience and tolerance that take into account animals’ instinctual and natural behaviour, and basic needs;
- Protecting animals from physical injury, undue stress and suffering and harmful elements or deprivation of essential needs; and
- The recognition of animals as living, sentient beings to achieve financial and moral benefits for the meat industry.\(^{261}\)

To achieve the above, the code sets out best practices in different animal transportation stages, including standards for penning, handling, when livestock is moved on the hoof, types and condition of vehicles to be used in the transportation of livestock, watering and feeding of livestock prior to loading, loading and unloading procedure, distance, duration and feeding during transportation, responsibilities of owners and drivers during transportation, and restraining of animals during transportation.\(^{262}\)

As a relatively new code, this code captures best industry practices in the transportation of animals. It however must be juxtaposed with the reality that any movement of animals has a negative impact on their health, welfare and rights. Future reform focus must therefore be on minimising transportation of live animals and ensuring that any best practices as identified in this code are developed into legally binding laws and regulations. This will ensure compliance, including through annual reporting to relevant authorities and the criminalisation of non-compliance to ensure better protection for animals.

D. Slaughter Codes

The slaughter codes under the LWCC include the:\(^{263}\)

\(^{260}\) The Livestock Welfare Coordinating Committee (LWCC) (2018), Code of Practice: Handling and Transport of Livestock, Foreword
\(^{261}\) The Livestock Welfare Coordinating Committee (LWCC) (2018), Code of Practice: Handling and Transport of Livestock, Foreword
\(^{262}\) The Livestock Welfare Coordinating Committee (LWCC) (2018), Code of Practice: Handling and Transport of Livestock, Articles 1-9.
*WORKING PAPER* AS AT 18 JULY 2022

- Revised Code Handling of Livestock at Sale Yards and Vending Sites;
- Guidelines for Period between Stunning and Sticking at Abattoirs;
- Duties and Functions of the Abattoir Manager regarding Welfare of Animals; and
- Guideline for Using Prodders and Stunning Devices in Abattoirs.

In all instances, the LWCC emphasises that “no conflict exists between the humane treatment of animals and good animal husbandry.”

The slaughter codes provide for general objectives which include:

- To ensure responsible and humane handling of livestock at all times and in all situations in order to not cause avoidable suffering;
- To introduce reasonable operating norms to producers, handlers, transport contractor, the public and the law; and
- To aim for positive preventative measures with a view to preventing the cruelty and financial loss associated with severe injuries, which could also include condemnation due to bruising and death.\(^{264}\)

### E. LWCC Immobilisers and Guidelines for the Use of Prodders and Stunning Devices in Abattoirs

The LWCC provides information on stunning and recognises it as the cornerstone of animal welfare at abattoirs in the process of converting animals to “safe” meat for human consumption.\(^{265}\)

To meet the set objectives, the guideline notes that the use of electronic prodders delivers powerful and painful shocks to animals and as such should be used with discretion. It specifically states that electric prodders must not be used on sheep and pigs. However, given the recognition of the negative impact through shock and pain that electric prodders have on animals, the industry should simply abolish their use, and this in turn should be provided for in legislation to ensure the protection and welfare of animals. Whilst the LWC considers stunning to be the most effective and cost-effective method of immobilising animals, it also recognises the following regarding the use of this method, both on people stunning the animals and the animals themselves:

- Continued use of any stunning device can be very exhausting and dangerous to the operator, often leading to indifference, insensitivity and carelessness with the animals; and
- That stunning procedures only make an animal insensitive to pain for a very short period of time, meaning that if not properly administered, animals are then often bled-out after recovering consciousness.\(^{266}\)

\(^{264}\) The Revised Code Handling of Livestock at Sale yards and Vending Site, Article 1 and A Guideline for the use of Prodders and Stunning Devices in Abattoirs, Article 1 (available at: [http://lwcc.org.za](http://lwcc.org.za))


Effectively therefore, though considered a good industry practice, stunning of animals has negative effects on both the people employed to administer the stunning and the protection of animals from cruelty and pain.

F. The Revised Code Handling of Livestock at Sale yards and Vending Site

To achieve the set objectives, the code has general provisions such as that sales/auctions should not take place during extreme weather conditions that may cause significant stress to livestock unless protective measures have been taken, that sick, injured or diseased animals must not be put up for sale, that animals under the age of 21 days are not permitted at a sale and vending site and the manner and method of destroying injured or diseased animals.\textsuperscript{267} The code has detailed provisions on handling of livestock, loading and unloading, temporary identification and marking, lairage and housing facilities, feeding and watering, restraining and housing of fractious livestock and roadside vending.\textsuperscript{268}

G. The Code of Practice on the Duties and Functions of Abattoir Managers Regarding the Welfare of Animals

This Code requires abattoir managers and their assignees to comply with relevant legislation and regulations including under the Meat Safety Act 2000 (Act 40 of 2000) and Animals Protection Act 1962 (Act 71 of 1962).\textsuperscript{269} They are required to ensure humane transportation and handling of livestock and to be vigilant enough to identify any situations that may point to inhumane and cruel transportation and handling of livestock.\textsuperscript{270} It also provides for the proper management of access routes, appropriate use of stunning and slaughtering devices/equipment and appropriate procedures for ritual slaughter (Kosher and Halaal).\textsuperscript{271}

H. The Guideline for the Period Between Stunning and Sticking at Abattoirs

This Guideline seeks to ensure that there is a short interval between the two processes to ensure that an animal does not regain consciousness leading to pain and suffering during the process. The code notes that the Red Meat Regulations of the Meat Safety Act provide for an animal to be bled within 60 seconds after stunning (article 74) but recommends that abattoirs should follow the international guidelines of a stun to stick interval of 10 to 20 seconds for sheep and pigs. This provision points to a misnomer between the binding regulatory framework and the internationally accepted standard and

\textsuperscript{267} The Revised Code Handling of Livestock at Sale yards and Vending Site, Article 2
\textsuperscript{268} The Revised Code Handling of Livestock at Sale yards and Vending Site, Article 3-9.
\textsuperscript{269} Code of Practice on the Duties and Functions of Abattoir Managers Regarding The Welfare of Animals, Articles 1 and 2
\textsuperscript{270} Code of Practice on the Duties and Functions of Abattoir Managers Regarding The Welfare of Animals, Article 3
\textsuperscript{271} Code of Practice on the Duties and Functions of Abattoir Managers Regarding The Welfare of Animals, Articles 4 (A-D)
must therefore be used as a guideline to reform the relevant legislation in South Africa in order to
minimise animal suffering and cruelty to animals.

I. LWCC Manual for the Prevention of Stock Theft

The Manual for the Prevention of Stock Theft (2015), developed by the National Stock Theft
Prevention Forum (NSTPF) is supported/endorsed by various industry players, including ABSA
Bank, Insurers, Mutual and Federal, the Department of Agriculture, Forestry and Fisheries, Red Meat
Producers Organisation (RPO) and Afrivet. Its first Section provides for animal branding in terms of
the Animal Identification Act (Act 6 of 2002), emphasising that “A legitimate permanent mark is the
first line of defence against stock theft.” It provides for appropriate procedures to be followed in
marking and branding. Section 2 provides for marketing of livestock. It states that marketing or selling
of livestock is for financial gain but that in the process of doing so, all persons in the value chain must
comply with the law, in particular the Stock Theft Act (Act 57 of 1959) and the Animal Identification
Act (Act 6 of 2002).

The Manual also provides for procedures to follow when stock theft has occurred. Other than
identifying stock theft as an offence, it also recognises that stolen stock are often killed in very cruel
ways, such as “cows being slaughtered alive and lambs beaten to death by breaking their heads against
rocks or telephone poles” leading to contravention of the Animal Protection Act (Act 71 of 1962).
Victims of stock theft can therefore, in addition to reporting stock theft, report offences related to
animal cruelty where these occur, and in this regard, help in punishing such offenders. Section 4
provides for the Criminal Justice System in cases of stock theft, including the rights of victims of stock
theft to be compensated for loss suffered as part of the sentencing process. In Section 5, the Manual
provides for other Acts that may potentially be contravened during stock theft. These include the
Fencing Act (Act 31 of 1963) and Trespass Act (Act 6 of 1959). Section 6 of the Manual provides tips
for stock theft prevention.

J. LWCC Policy Statements

The LWCC has made numerous policy statements, particularly in relation to contested issues around
animal welfare and rights and the industry needs for animal production and profits. The policy
statements justify some of the current industry practices that are considered to be cruel and painful to
animals but also often agree that some of the procedures that were previously accepted and
commonplace are no longer allowed. A total of fifty three (53) such position statements could be

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272 Manual for the Prevention of Stock Theft, Part 1.1
273 Manual for the Prevention of Stock Theft, Part 2.1
274 Manual for the Prevention of Stock Theft, Part 3.5
276 AN example of a procedure that was previously accepted but is discouraged by the LWCC is mulesing in the wool
industry and this is contained in the Position Statement on the Justification for Using Certain Painful
gleaned from the LWCC website as at 12 June 2022, highlighting an industry and issues that are often in flux and highly contested. The important issue to be gleaned from this position is that these contests and discussions must continue, and that, often continued debate and engagement can lead to reform of standards and practices within the animal farming industry and also at a legislative level.

K. Codes under Development: Evaluating Farm Livestock Welfare

The LWCC is constantly in the process of developing industry codes in line with international best practices. As such there are several codes that are still under development, addressing the following issues:

- Electro-immobilisation;
- Electro-ejaculation (“LWCC is currently examining the possibility of guidelines for the correct use of Electro-Ejaculation in ruminants”);
- Evaluating farm livestock welfare;
- Livestock production and livestock welfare: are they at odds or in harmony; and
- Milking goat Welfare -2013.

The discussion on the issue of whether livestock production and welfare are at odds is particularly important, especially in the context of animal rights as opposed simply to animal welfare. The LWCC’s Draft Press Release dated 26 October 2016 clearly illustrates the organising that is inherent around this issue. It states that at the highest limits of farming practices, animal production and animal welfare can be at odds with each other, but that at the lower and medium levels, they are in harmony.

It identifies the following production levels as at odds with animal welfare needs:

- Very high producing dairy cows that are more prone to a long list of diseases and problems;
- Sows producing and raising very large litters at short intervals;
- Angora goats bred to produce so much mohair that they lose their ability to cope with harsh environmental conditions;
- Beef cattle bred larger and larger until they suffer from leg problems; and
- Ewes selected for twinning or producing triplets without regard for milk production or maternal care.

At such levels, it is noted that “Even with a range of management, nutritional or other interventions as production rises, it becomes more and more challenging to balance out the requirements of animal

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productions and animal welfare.” New industry codes and legislative provisions must therefore take account of this accepted reality, instead of focusing more on higher profits and productivity with little regard for the rights and welfare of the affected animals.

L. RPO Code of Best Practices

The Code makes interlinkages between farming and other considerations, and in this regard notes that “Modern day farming has evolved from a largely techno-economical viable enterprise into one that is integrated with natural resources, biodiversity, ecosystems, animal welfare, and social, global and consumer considerations.” It also borrows extensively from national policy and legislation, including the National Development Plan 2030, the Livestock Development Strategy for South Africa 2006-2015 and the National Agricultural Strategy. The code recognises the impact of climate change on livestock production and also acknowledges that livestock production contributes to greenhouse gas emissions and climate change. The contributions of the different species to livestock related greenhouse gas emissions are “beef cattle 63%, dairy cattle 10%, sheep 12.5%, goats 3% and farmed game 10.5%, with minor contributions from pigs, poultry and ostriches.” It also recognises nitrogen fertilisation of pastures and other crops needed to feed animals as contributing substantially to greenhouse gas emissions.

To address some of these challenges, the code provides mitigation recommendations to farmers such as:

- Improved production efficiency;
- Limitation of cultivation of crop lands;
- Energy efficiency and saving practices for both electricity and petroleum based fuels;
- Use of high quality and home grown feeds; and
- Use of well adapted breeds that require less feed per kilogram gain and therefore have a lower greenhouse gas footprint.

The Code also notes protection of natural resources as a good practice for farmers. It further provides for animal health and well-being, and that animal welfare is a reflection of people’s concern for the humane treatment of animals and recognises the five animal freedoms thus:

- freedom from hunger, thirst and malnutrition;
- freedom from fear and distress;
- freedom from physical and thermal discomfort;
- freedom from pain, injury and disease; and

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280 RPO/NEPRO Code of Best Practice (2014), Part 4.2
freedom to express normal patterns of behaviour

These freedoms closely correlate with the fundamental rights and freedoms that are accorded to human beings in international law (Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the Charter of the United Nations amongst others) and the bills/declaration of rights in different national constitutions. They therefore signal a shift from looking at animals as merely existing for the benefit of human beings, but that they exist for their own sake and have their own rights that they should enjoy. The acceptance and recognition of these freedoms by industry organisations such as Red Meat Producers Organisation (RPO) and National Emergent Red Meat Producers Organisation (NERPO) is therefore a step in the rights direction and should inform the development of practices, standards and legal and regulatory frameworks that provide better protections for animals in terms of both welfare and rights. This is despite the criticism levelled against these freedoms, in particular that they are vague and difficult to measure when it comes to implementation.

In addition, the Code also provides for biosecurity and disease measures to enhance animal health and wellbeing as well as the provision of quality and safe meat to consumers. The Code also provides for the management of wild predators and the need for them to be managed and controlled in a humane way, with killing being considered a last resort.

It also has provisions for the livelihoods and wellbeing of employees, emphasising that “the overriding principle is that farmers need to ensure that the rights and well-being of farm workers and their families are upheld.” This has to be in line with relevant employee rights legislation such as the Labour Relations Act, (No 66 of 1995), Employment Equity Act, (No 55 of 1998), Basic Conditions of Employment Act, (No 75 of 1997), Skills Development Act, (No 97 of 1998), Compensation for Occupational Injuries and Diseases Act, (No 130 of 1993) and Land Reform (Labour Tenants) Act, (No 3 of 1996).

The provision of safe and high quality animal products to the consumer is also covered, and the code notes that this responsibility and commitment is placed on all concerned in the supply chain, i.e. farmers, processors and retailers. A point in the code that “supply of safe and healthy (quality) livestock products is not about an organic versus a conventional farming system, or intensive versus extensive practices” but rather about controlling risk, however requires serious interrogation, especially considering that there are strong arguments showing that farming methods have a strong bearing on the quality and safety of the final meat products that are given to consumers.

The Code has addendums on Precautionary Measures to Support Biosecurity (Addendum 1), on Predator Management (Addendum 2), on Combating Stock Theft (Addendum 3) and on Good

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281 RPO/NEPRO Code of Best Practice (2014), Part 7.1
282 RPO/NEPRO Code of Best Practice (2014), Part 10
283 RPO/NEPRO Code of Best Practice (2014), Part 11
Management Practices and SOPs for Cattle Farmers (Addendum 4). The purpose of these addendums is to explain in detail the most critical issues that are addressed in the Code of Best Practice as detailed above.

M. Code of Practice for the Welfare of Dairy Cattle

The Code was developed in 2005 and may therefore not correctly reflect emerging issues relating to the welfare of dairy cattle. It is however important to note that the code was developed with this reality in mind and clearly states that it may need to be changed in light of future changes in knowledge.\(^\text{284}\)

To its credit, it is also premised on the five freedoms highlighted in the RPO/NERPO Code of Best Practice and as such recognises the need for high level of animal protection.

It can however be reinforced by the Dairy Standard Agency’s Code of Practice for Milk Producers. The Code is endorsed by Milk South Africa (“MSA”), the South African Milk Processors’ Organisation (“SAMPRO”) and the Milk Producers Association (“MPA”). The current edition of the standard is very new, having been published in 2022. It covers essential criteria as required by national legislation, voluntary national and international standards relating to structural requirements, animal health and welfare, hygiene practices, biosecurity and elements of environmental management.\(^\text{285}\)

The Code provides for standards, approvals and requirements for milking sheds/facilities, general milking environment and equipment and machines in line with Regulation R961 Relating to Hygiene Requirements for Milking Sheds, South African National Standards (SANS) 10049 on Food Safety Management: Requirements for Prerequisite Programmes (PRPs) and ISO/TS 20021/20022 on food safety.\(^\text{286}\) In this regard, the Code borrows from many other standards and comprehensively addresses these requirements in line with the dictates of milk production. These requirements are necessary for the safety of the milk as a food product in order to protect consumers’ health.

The Code has a comprehensive Section (Section 4) on herd health. It has provisions and standards on disease treatment and immunisation. The Code correctly notes the dangers associated with the use of over the counter (OTC) veterinary products and correctly advises the need to involve a veterinarian even though the products in question can be purchased over the counter. This correctly captures the position and need to minimise OTC sales of these remedies to minimise overuse and misuse, especially considering antibiotic resistance (and effects on both animals and human healthy) and the direct poisoning of both animals and human beings from these products.

The Code has a standard for animal feed and water and recognises that the safety of food of animal origin begins with safe animal feed. It further elaborates on the concept of animal welfare and further makes a clear definitional distinction between the principles of animal welfare and animal rights. This

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\(^{284}\) Code of Practice for the Welfare of Dairy Cattle, Introduction
\(^{285}\) Code of Practice for Milk Producers (2022), Preface
\(^{286}\) Code of Practice for Milk Production, Chapter 2
is important because the Code recognises the different views that are held by different people and interest groups, even though it does not go far enough in terms of taking a position on animal rights issues. It emphasises the positions taken in other industry codes such as SANS 1694:2018 which states that:

The dairy cow carries the double burden of producing large quantities of milk while at the same time trying to maintain body condition, and carry her next calf. This imposes great metabolic demands that can compromise the welfare of the dairy cow. Lameness and mastitis are significant indicators of poor dairy cow welfare, as are reproductive, metabolic and behavioural disorders.

The recognition of and concern over the burdens that are faced by dairy cows is a first step in the direction of formulating laws that provide for greater protection for dairy animals as opposed to focusing on their productivity and profits for the farmers.

To address some of the concerns in the dairy industry and the welfare of dairy cows, the Code provides standards on the following:

- Welfare and Management Procedures (employee training, the need for written protocols, identification and recordkeeping, veterinarian-client-patient relationship and milking routine);
- Needs of new born and milk-fed dairy cows;
- Nutrition and Welfare;
- Herd health plan (for new born and milk-fed calves, paying attention to painful medical procedures such as disbudding and dehorning, castration and branding, as well as animal observations and hygiene);
- Environment and Facilities (including temperature, air quality, lie down areas, flooring light and noise);
- Handling (awareness to animals’ visual perception, animal learning, animals’ personal space and calf handling);
- Transportation;
- Welfare of sick and injured animals;
- Auditing of animal welfare; and
- Biosecurity.

The inclusion of principles such as animals’ visual perception and animal learning in the Code are a recognition of the fact that dairy cows and other animals are perceptive and intelligent beings and should therefore be treated accordingly. This is a positive aspect in the law reform agenda and in the provision of greater animal protection and rights. The aspect of auditing of animal welfare is also critical and plays an important role in ensuring that there is communication and information to other actors including retailers, manufacturers and consumers about the milk production processes at specific farms and how this impacts the welfare and rights of the animals. This way, these actors are able to engage with facilities that provide better protections and disengage or not engage with those with poor animal welfare and rights approaches.
Statements in the Code from the Code Sponsor such as “If she can't stay pregnant, what else will she do” however betray the industry focus on maximising profitability and use of dairy cows for the benefit of the farmers, despite the claim for concern with the welfare of animals. In advertising its Bovi-Shield Gold FP vaccine, the sponsor further announces “keep your cows pregnant and on the job”, similarly highlighting the desire for the dairy cows to work and produce for the farmer as the primary concern. Even the wellness of the cows is more for profitability as opposed to their wellbeing for their sake as highlighted by the sponsor’s other slogan which states that “wellness is now a profitable choice.”

The South African legal framework must be analysed in line with international standards such as the World Organisation for Animal Health (OIE) Standards whose aim is “to improve the health and welfare of animals throughout the world, regardless of socio-economic, religious or cultural context.” The Standards are informed by the most recent scientific knowledge and technical knowledge and seek to improve the prevention and control of animal diseases including zoonoses, as well as improve animal welfare throughout the world.

III. SAPA Code

There is a 2012 South African Poultry Association’s Code of Practice for Breeders and Day Old Chick Production however it is unclear whether this is the latest document.

IV. SAPA: Code Pullet Rearing and Table Egg Production

The South African Poultry Association (“SAPA”) Code on Pullet Rearing and Table Egg Production was adopted in 2012. It, like other SAPA codes, seeks to provide “defined minimum standards for the wellbeing of poultry in commercial operations, research and educational facilities.” It has provisions for raising layer chickens in cages, in free range systems and in barns. Of particular concern in this regard is the issue of raising layer chicken in cages. Although the Code provides space requirements that are considered optimal for raising layer chickens in cages, research has shown that this chicken production system continues to present challenges for the welfare and rights of chickens such as musculoskeletal health, disease, severe feather pecking, and behavioural expression. It is given that this is the most widely used poultry production method in the world, including in South Africa but research shows that conventional cages lack adequate space for movement, and do not include features to allow behavioural expression. Hens therefore experience extreme behavioural restriction,

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289 Code of Practice for Pullet Rearing and Table Egg Production, Part 1
290 K.M Hartcher and B. Jones ‘The welfare of layer hens in cage and cage-free housing systems’ available at: https://www.tandfonline.com/doi/full/10.1017/S0043933917000812 (accessed 29 June 2022)
musculoskeletal weakness and an inability to experience positive affective states. Furnished cages retain the benefits of conventional cages in terms of production efficiency and hygiene, and offer some benefits of cage-free systems in terms of an increased behavioural repertoire, but do not allow full behavioural expression.\textsuperscript{291}

Given this reality, increased policy, legislative and industry research to inform research is required to ensure the protection and improvement of the welfare of chickens in egg production and pullet rearing.

The Code also has important provisions on temperature control, ventilation control, light control, feed, drinking water, beak trimming, supervision of poultry, access to external environment in free range production and transportation of birds. It has further provisions on health control which cover the nature of the establishment, flock health, keeping of records, vaccination, blood testing, parasite, vermin and insect control and biosecurity. Generally these are important provisions that can be used to improve the welfare, rights and wellbeing of egg laying poultry. Of concern under these categories however is the practice of beak trimming and its impact on the welfare and wellbeing of chickens as highlighted elsewhere in this report.

V. Critique of Industry Codes

While it can be seen that many of these codes have important provisions and statements around the welfare and care of nonhuman animals, they are, by their nature voluntary standards which are not enforceable. They are no substitute for proper government regulation nor statute. Regulation by government is required to be done in accordance with certain requirements in terms of the Constitution and other legislation which includes for example, a public consultation process as well as the ability to challenge these.

The current membership reflects the heavy industry representation on these bodies with minimal, if any input from civil society organisations including those working on animal protection and animal welfare. As aforementioned the NSPCA does not appear to be a member of the LWCC and the only animal protection focused organisation which is part of the LWCC is HSI Africa which only joined recently.

There are many issues with this self-regulatory, soft law framework which are not further detailed for purposes of this Working Paper.

It is essential that legally binding regulation which has undergone the proper public and other consultation processes are established for animals used in agriculture. Such regulations must

\footnotesize{\textsuperscript{291} K.M Hartcher and B. Jones ‘The welfare of layer hens in cage and cage-free housing systems’ available at: https://www.tandfonline.com/doi/full/10.1017/S0043933917000812 (accessed 29 June 2022)
furthermore be enforced and have the ability to be scrutinised and challenged by members of the public. Until such time as this is done, the current regulatory framework remains a major barrier to the transformation of the South African food system, particularly for the assurance of animal welfare, which impacts on a number of other areas as already detailed.

VI. Recent Regulation in respect of certain Animal Use Industries

Currently, there are two pieces of regulation which speak to the issue of having proper regulation of certain animal use industries. The first relates to aquaculture (the farming of aquatic species) and the second, to the live export of terrestrial animals by sea. These will be deal with briefly below but warrant further discussion. This is because it illustrates the way in which government intends to regulate certain industries going forward. Neither of these proposed regulations have yet been promulgated, and therefore presents opportunities to intervene before they become law.

A. Aquaculture Development Bill

The Aquaculture Development Bill was introduced to Parliament on 22 June 2018. The Bill seeks to introduce an institutional, operational and regulatory framework for the development of aquaculture in the country, including the creation of interlinkages and coordination mechanisms between national and provincial governments. The Bill recognises that Aquaculture contributes to “food security, equity, job creation and economic development and to create export opportunities for South African businesses.” It also recognises the right to adequate food and water as provided for in Section 27 (1) (b) of the Constitution and the responsibility of the State in ensuring the progressive realisation of this right.

In essence therefore, the Bill’s object is to ensure “responsible aquaculture development and the establishment of a sustainable and responsible aquaculture sector” to ensure food security and economic development in the country. In the context of food transformation and transitioning from animal-based to plant-based protein, the Bill defines aquaculture as the farming of aquatic organisms and these organisms are further defined to include both animal and plant or other living matter. Currently in South Africa, however, aquaculture involves the farming of animals more than plants, with seaweed the only plant of note to be grown. As a new Bill, this law must therefore include ways to increase and improve the farming of plant organisms and not only the farming of animals in aquaculture as a way of encouraging national shift from animal-based to plant-based protein through improving availability of such alternatives.

293 Aquaculture Development Bill, 2018, Preamble.
294 Aquaculture Development Bill, 2018, Preamble
As an intensive farming system, aquaculture has negative environmental impacts. These include nutrient and effluent build up, impact of fish farms on wild fish species due to disease and escaping, general environmental degradation, oxygen depletion in water, algae blooms and the creation of dead zones. To try and deal with some of these negative impacts, the Aquaculture Development Bill provides for environmental protection. To maintain environment integrity, the Bill provides for water quality management, protection of aquatic environment, prohibits release of live or disposal of dead aquaculture organisms and requires the reporting of release or escape of live aquaculture organisms to the aquaculture inspector.

The Bill also provides for the health, welfare, safety and quality of aquatic organisms and products. These are addressed through amongst others, the development of a national aquatic animal health and welfare programme, certification of aquatic animal health, management of notifiable pathogens and pests affecting aquatic organisms, humans or animals and management of aquaculture disease zones and quarantining of aquatic organisms. It also provides for compensation for destruction of aquaculture organisms, use of aquaculture drugs and feeds, provision of veterinary services, animal welfare, standards for aquaculture, aquaculture food safety monitoring programmes and certification system for aquaculture products. These provisions are important for the health, wellbeing and welfare of both humans and aquatic animals.

**B. Draft Guidelines for the Transportation of Animals by Sea**

The live export of animals by sea is an issue which has received much attention in South Africa. It is an animal agricultural practices which the South African public appears to have a major interest in, compared to other practices.

The NSPCA has been litigating on this issue for a few years with little success. While this issue and the litigation relating to it warrants further discussion, this is outside the scope of this Working Paper.

The Draft Guidelines are of particular interest as this process is currently ongoing. In July 2022, the DALRRD has hosted three consultation sessions in respect of the Draft Guidelines, one of which was a few days before the publishing date of this Working Paper.

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297 Aquaculture Development Bill, sections 43 - 46
298 Aquaculture Development Bill, sections 47-59
299 For more information on the NSPCA’s efforts in respect of live export, see here: https://nspca.co.za/category/farm/live-export/
The original Draft Guidelines were released for public comment on 31 March 2021. Many organisations made submissions in respect of these Draft Guidelines with many calling for a complete ban. On 30 April 2021, Animal Law Reform South Africa, together with the Centre for Applied Legal Studies submitted comments on the Draft Guidelines for the transportation of Live Animals by Sea. The submission called for an outright ban on the live export of animals from South Africa. It outlines the case for why allowing the live export of South Africa is in fact, unconstitutional. That unconstitutionality flows from the terrible cruelty involved in the practice. The submission documents some facets of this cruelty and suggest it could be subject to legal challenge. Given the government seems intent on allowing the live export of animals, the submission made comments on the Guidelines with a view to mitigating the negative welfare impacts on animals and improving oversight.

As part of the recent consultation process, the DALRRD circulated an updated draft of the Guidelines to the participants of the meetings. Given the timing, these have not been fully analysed for purposes of this Working Paper.

It remains clear however that DALRRD intends to continue with this practice despite the inherent cruelty.

**VII. Towards an Animal Rights Based Approach**

Emerging environmental protection principles are increasingly calling for the recognition of the fact that human development and survival should not come at the expense of other species and ecosystems. An example of this can be seen through recent efforts around the proposed international crime of “ecocide” or the killing of ecology for example, which is increasingly gaining momentum with calls for it not to be confined only to wanton or unlawful actions that harm the environment and ecosystems but that such a crime “should recognise that all forms of life, and the ecological systems that support them, have value for their own sake” It can also be seen through the increasing Rights of Nature and Earth Jurisprudence efforts from around the world.

This is tied to the principle of multi-species justice which has at its core the realisation of “the relationship and entangled functioning of human and nonhuman systems... understanding that humans, other animals, trees, rivers, soil, and more are inter-dependent, and all depend on the viability of ecological systems...challenging the traditional western view that human success will be won

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300 https://www.nda.agric.za/docs/media/Request%20for%20public%20comments%20Draft%20guidelines%20on%20the%20transport%20of%20live%20animals%20by%20sea.pdf
302 Anthony Burke and Danielle Celermajer (2021) ‘Human progress is no excuse to destroy nature. A push to make ‘ecocide’ a global crime must recognise this fundamental truth’ (theconversation.com) (accessed 22 March 2022)
303 Ibid
304 http://www.harmonywithnatureun.org/
through neglecting and exploiting other beings’ interests, needs, or viability.” The proposed international crime of “ecocide” has also been defined as “damage to, destruction of or loss of ecosystems of a given territory, such that peaceful enjoyment by the inhabitants has been or will be severely diminished.” There is an increased push to have this crime added to the Rome Statute of the International Criminal Court to improve environmental protection in all its components.

Recently, Member States at UNEA-5 adopt a pioneering resolution recognising the link between animal welfare, environment, and sustainable development. This is the first-ever resolution to be tabled and approved with explicit reference to animal welfare. In line with these emerging theories, global agriculture has been viewed as fitting these definitions, with animal consumption being seen as the primary driver of agriculture-based environmental destruction. The focus in this regard is therefore on environmental protection, including animal protection for the environment and animal’s sake and not as a means of ensuring the survival of the human species. As a theoretical approach however, the protection of the environment and animal rights in this sense is an emerging issue and may therefore take time to gain traction amongst the generality of the citizenry, not only in South Africa but worldwide.

In July 2022, the DFFE released the “Draft White Paper on the Conservation and Sustainable Use of South Africa’s Biodiversity” for public comment. If properly drafted and incorporated, this White Paper has the power for groundbreaking and much-needed legal and policy transformation in the country. It could potentially revolutionise the current paradigm and put South Africa on a path to achieving genuine sustainability and inclusive justice and make the country a true leader in conservation – one which protects not only humans, but nonhuman animals and the environment too. While it relates predominantly to wild animals, it illustrates a shift in thinking by the South African government (in respect of the environmental department relating to animals).

The field of “Animal Law” is furthermore an important factor to be considered, where lawyers around the world are specialising in this area working to advance the protection of animals within the regulatory framework.

308 Tim Thorpe ‘Is animal agriculture guilty of ecocide?’ 8 October 2019 Is animal agriculture guilty of ecocide? | Green World (accessed 22 March 2022)

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PART III: HEALTH, FOOD SAFETY AND FOOD PRODUCT REGULATION

I. Introduction

As has been previously throughout this Working Paper there are a vast number of potential health and food safety issues which apply in the context of both ASFs and alternatives. These have not been repeated herein. There are similarly several pieces of legislation which regulate different aspects of these potential consequences. Other legislation regulated specific aspects of food and food products but which overlap with other issues such as consumer protection.

COMPONENT 1: FOOD SAFETY

II. Meat Safety Act (Act 40 of 2000) and Regulations

The objectives of the Meat Safety Act (40 of 2000)\textsuperscript{310} are:

To promote meat safety and the safety of animal products; to establish and maintain essential national standards in respect of abattoirs; to regulate the importation and exportation of meat; to establish meat safety schemes; and to provide for matters connected therewith\textsuperscript{311}

In line with these objectives, the Act provides for essential national standards for meat, including the inspection and marking of meat in accordance with set standards. It also provides that “meat may only be removed from an abattoir if it is duly marked and the method of removal thereof poses no risk to the safety of the meat for human and animal consumption.”\textsuperscript{312} This standard is critical for the protection and promotion of consumer health and standards. It is also important from an animal rights perspective that the safety standards of the meat must not only apply to humans but must also be fit for animal consumption.

The Act also prohibits the slaughter of animals in any place other than an abattoir.\textsuperscript{313} Whilst this perspective is from a meat safety perspective, the requirement is also important from an animal welfare point. Given that the abattoir or other related facilities must be certified and approved in terms of the

\textsuperscript{310} The Act repealed the Abattoir Hygiene Act (121 of 1992).
\textsuperscript{311} Meat Safety Act, Preamble
\textsuperscript{312} Meat Safety Act, Section 11 (1) (m) and (n)
\textsuperscript{313} Meat Safety Act, Section 7 (1) (a)
Act before they can undertake any animal slaughtering, the certification and approval process can also be used to ensure that the slaughtering process complies with the animal welfare and prevention of cruelty requirements. This includes, for example, the effective pre-stunning of animals prior to slaughter to minimize pain and distress as recommended by the National Council of the Societies for the Prevention of Cruelty to Animals (NSPCA).\footnote{NSPCAs ‘Animal Slaughter’ available at: Animal Slaughter | The Code on Abattoir Management (nspca.co.za) (accessed 8 April 2022)} This of course is not to minimize the inherent pain, suffering and cruelty that animals suffer ahead of and during the slaughtering process under any circumstances.

A number of labelling regulations have been promulgated under the Meat Safety Act, whose foci are on separating species during slaughter to avoid possible cross-contamination. These include the Red Meat Regulations (1072 of 2004) and the Poultry Regulations (153 of 2006). There are also numerous regulations that have been promulgated at municipal level in terms of this Act to provide for implementation and operationalisation at that level.

The act defines “animal” to mean any animal referred to in Schedule I which includes both domesticated and wild animals. Currently in “domesticated” these include animals such as:

- bovine animals (including the species bubalus bubalis and bison bison);
- donkey;
- duck;
- farmed deer;
- fowl;
- goat;
- guineafowl;
- horse;
- kangaroo;
- mule;
- ostrich and other related ratite species;
- partridge;
- pheasant;
- pig;
- pigeon;
- quail;
- rabbit;
- sheep;
- and turkey.

Under wild game animals such as the following are included: blesbuck; blue wildebeest; buffalo; burchell’s zebra; crocodile; eland; elephant; gemsbuck; gray rhebok; hippopotamus; impala; kudu; mountain reedbuck; springbuck; and zebra.

Other definitions include: meat; abattoir; animal product; slaughter; slaughter facility; and others. In terms of the act, the Minister designates an officer of the Department who is a veterinarian as “National Executive Officer” who has various powers and duties. The act is largely administrative in nature. It regulates certain aspects about: abattoirs; registration; inspection; meat inspection scheme; export & import of meat. Notably, there are a number of welfare provisions and specific standards which largely relate to slaughter.

In terms of section 7, No person may slaughter any animal at any place other than an abattoir or permit the slaughter of any animal at any place under his or her control, unless the place is an abattoir or sell or provide meat for human and animal consumption unless it has been slaughtered at an abattoir. These requirements do not apply to slaughter for own consumption or for cultural or religious purposes. However, no meat or animal product obtained from an animal slaughtered for cultural / religious purposes may be sold to any person.

The act references essential national standards which set out various requirements in terms of standards – from hygiene to animal health. For example they state that an animal presented for slaughter at an abattoir must be handled humanely during loading, transportation, off-loading, housing, immobilising and killing as prescribed in accordance with the requirements of the Animals
Protection Act. 1962. No dead animal or animal suffering from a condition that may render the meat unsafe for human and animal consumption may be presented at an abattoir for slaughter. Any person suspecting that an animal is infected with a controlled animal disease as prescribed by or under the Animal Diseases Act, 1984, must convey that suspicion without delay to a veterinarian in the employ of the Department or a province.

An interesting provision relating to Confidentiality is contained in section 17 of the Act. It states that no person may disclose any information which relates to any person and which was acquired by him or her in the performance of his or her functions in terms of this Act, except: in so far as it may be necessary for the application of this Act; for the purposes of any legal proceedings under this Act; when required to do so by a competent court; if the Minister, in the public interest, authorises the disclosure thereof; or to the extent necessary in order to comply with a law dealing with access to information.

This is a very restrictive provision relating to potential for transparency at these facilities.

Regulations
Several regulations have been passed in terms of the Act (including for Ostrich, Poultry; Red Meat; and Meat Inspection Scheme) with others in draft form (including Regulations Crocodiles DRAFT; Regulations Game DRAFT 2016.02.16).

Only the regulations in respect of Red Meat and Poultry will be expanded on briefly here. Notably, these regulations do contain a number of welfare-type provisions, particularly in relation to the slaughter of animals.

The Red Meat and Poultry Regulations respectively are largely similar in terms of structure. They relate mainly to requirements for registration of abattoirs and hygiene requirements, meat inspections, markings, condemned material, etc. but they contain some explicit welfare provisions / protections

For example, in the Poultry Regulations, the following issues are provided for:
Catching & Loading; Requirements for vehicles and containers; Offloading; Hanging; Stunning; Bleeding; Scalding and defeathering; Removal of heads and feet and pre-evisceration wash; Evisceration; Chilling.

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Examples of certain welfare provisions within these categories include:\(^{321}\)

**Regulation 62 Catching and loading**

“(1) Catching of poultry on the farm and transport to the abattoir must be done considering the Animal Protection Act 1962 (Act no. 71 of 1962).
(2) Feed may be withdrawn 9 to 12 hours prior to slaughter.”

**Regulation 65: Hanging**

“Where live birds are hung on shackles on a moving conveyor line, care must be taken to avoid injury and stress and birds must be handled humanely and without the use of undue force when hooking the legs into the shackles.”

**Regulation 66: Stunning** See also regulation 20

“All poultry must be rendered unconscious humanely by means of –
(a) electrical stunning before bleeding and the abattoir owner must ensure that the electrical stunning apparatus is in a good state of repair and is used according to the methods approved by the national executive officer; or
(b). any other method approved by the provincial executive officer.”

For example, in the Red Meat Regulations, the following issues are provided for: Requirements for vehicles (to abattoir); Vehicle Hygiene; Offloading; Rest Periods; Lairaging; Herding; Emergency Slaughter; Isolation; Stunning; Methods of Stunning; Bleeding Times; Flaying and Evisceration; Final Washing; Quartering.

Examples of certain welfare-type provisions within these categories include:

**Regulation 69: Herding**

Herding [See also regulations 23; 241 69]

“Animals in lairages, pens, passages and crushes must be handled calmly and humanely, without hitting or shouting.
Prodders must be battery operated and may not be used when animals are already moving forward.”

It is unclear the extent to which such regulations are actually enforced and the oversight in respect of the slaughter of the over 1 billion animals killed for food every year in South Africa.

Proposals To Update Meat Safety Act In 2020

In 2019, there was a draft bill proposing amendments to the Meat Safety Act, specifically Schedule 1 to include more animals 3 pages of specific species (many new ones) such as porcupines, warthogs, peacocks, etc.

There was also a catch all recordals that “This Act also applies to all other species of animals not mentioned above including birds, fish and reptiles that may be slaughtered as food for human and animal consumption. This schedule includes animals that may be listed as threatened species in accordance with conservation provisions and therefore their slaughter for human and animal consumption must be in line with the relevant conservation provisions.”

Animal Law Reform South Africa’s submission on the Draft Amendment to the Meat Safety Act together with the EMS Foundation contains further comments on aspects of concern with the draft, particularly as it pertains to food systems and agriculture.322

III. Animal Health Act (Act 7 of 2002)

The Animal Health Act (Act 7 of 2002) is intended to repeal the Animals Diseases Act (Act 35 of 1984) and its 1991 amendment. There is uncertainty as to the full force and effect of all provisions of the Animal Health Act as the Animal Diseases Act is widely referenced and utilised. This issue must be further researched and clarified for the White Paper as to the current application of the Animal Health Act.

The purpose of the Animal Health Act is to provide for measures to promote animal health and to control animal diseases; as well as regulate the importation and exportation of animals and things. It also provides for the delegation of the administration of the Act to provinces and provides for the establishment of animal health schemes.

Section 7 (1) of the Act places limitations on investigations, experiments and research with, and manufacture and evaluation of products such as a “vaccine, serum, toxin, antitoxin, antigen or other biological product that consists of or originates wholly or partially from any animal or thing” and also limits the use of such experimental things on animals. It also limits the infection or contamination of any animal or thing with any animal disease or parasite for experimental or research purposes. Such processes can only be undertaken with the authorisation of the National Executive Officer appointed in terms of the Act, and in line with any conditions that may be imposed as part of the authorisation.

These provisions are important in protecting animals from unregulated experimentation in the development of animal medicines, and therefore ensures that animals are protected from harm, cruelty.

and from activities that may negatively impact their health. The World Organisation for Animal Health (OIE), provides guidelines for use of animals in research and education and would therefore be an important resource in ensuring adherence to best practice and high standards. The organisation acknowledges that the use of animals in research and education makes a major contribution to the wellbeing of people and animals, but that this should be done only when no other alternatives are available and must be done in line with set standards.323

Section 8 and 9 of the Act restrict exportation from and importation of animals into South Africa except on the strength of a certificate or permit respectively, which must be issued by the National Executive Officer. The certificates and permits must confirm the health of the animal to be imported or exported and that it is free from particular animal diseases. This ensures the protection of the exported or imported animals by certifying their health and also protects the health of other animals and human beings that the animals may come into contact with during export and import. There are also provisions for the handling of animals in transit during the import and export process as well as their quarantining should this be deemed necessary.324

However, despite these measures, the export and import of live animals poses serious concerns for their health and welfare as well as their protection from cruel treatment, both during transportation and when they reach their destinations. It has been noted that the “demand for meat sets nearly 2 billion farm animals on the move a year despite concerns about poor transport conditions and inhumane slaughter”325 and that every day at least 5 million animals are in transit.326 As the Act is not yet in force, this may be an opportunity for South Africa to put in place increased restrictions on the exportation and importation of live animals and put in place measures for improved monitoring of animals as they are transported in situations where live exportation of importation is unavoidable.

Where live exportation is allowed, measures must be put in place to ensure that humane treatment is guaranteed outside of South Africa, including in transit countries and at destination. The OIE provides extensive guidelines for the exportation and importation of live farm animals through various modes such as land and sea,327 and these guidelines provide an important reference framework in law reform for South Africa.

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324 Animal Health Act, Sections 10 and 11
IV. Animal Diseases Act (Act 35 of 1984)

The purpose of the Act is to provide for the control of animal diseases and parasites, for measures to promote animal health. It was intended to be repealed by Animal Health Act, 2002 (but this act has not entered into full force and thus provisions of the Animal Diseases Act remain applicable). Clarification and further information on this issue must be sought for the White Paper.

Animal diseases in terms of the Act are either classified as controlled or as notifiable animal diseases. Examples of controlled diseases include Foot and Mouth Disease, Brucellosis, Anthrax, African Horse Sickness, Tuberculosis and Rabies. Examples of Notifiable Animal Diseases: Blue Tongue, Lumpy Skin Disease and Bovine Malignant Catarrhal Fever. The act regulates a number of issues pertaining to animal diseases including: Importation of animals, quarantine stations, powers, control measures, straying of animals; Duties of Owners and Managers to make reports about diseases and suspected diseases. It provides for very broad powers of director (entering, seize and others).

The act defines “animal” as any mammal, bird, fish, reptile or amphibian which is a member of the phylum vertebrates, including the carcass of any such animal. It defines and “infectious thing” means any animal which is infected with a controlled animal disease or parasite, any animal product derived or obtained from such animal by means of which such disease or parasite can be spread in the Republic, and any other thing which is capable of causing any such disease, including any prescribed animal product or thing contemplated in subsection (7) (b) of this section.

Section 19 provides for compensation for slaughtered animals. Farmers can claim compensation for animals for animals “destroyed” in terms of the Act.

In the case of the Minister of Agriculture v Blueliliesbush Dairy Farming (Pty) Ltd: (2008)\(^\text{328}\), the Supreme Court of Appeal (SCA) awarded a claim of over R10 800 000 when 7 000 (seven thousand) cattle were slaughtered in the Eastern Cape to prevent the spread of tuberculosis. The claim was based on Section 19 of the act, read together with Regulation 30. The farmers were entitled to 80% the fair market value of an animal when an infected animal was slaughtered. When an uninfected animal was slaughtered to prevent the spreading of a disease, farmers were entitled to 100% of the fair market value of the animal.

V. Animal Diseases

South Africa has regularly outbreaks of Zoonotic Diseases. According to an article from 11 July 2022, “Industry players believe foot-and-mouth disease is still rife and poses a significant threat to

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\(^{328}\) Minister of Agriculture and Another v Blueliliesbush Dairy Farming (Pty) Ltd and Another (270/2007) [2008] ZASCA 60; [2008] 4 All SA 81 (SCA); 2008 (5) SA 522 (SCA) (29 May 2008)
http://www.saflii.org/za/cases/ZASCA/2008/60.html
The news is flooded with reports of outbreaks and impacts on the livestock industry.

According to the NSPCA Annual Report October 2018 – August 2019, since April 2019 there had been 18 reported outbreaks of African Swine Fever (ASF) throughout South Africa, all situated outside the ASF controlled area.

The NSPCA Annual Report September 2019 – August 2020 indicated that in July 2020, a case of ASF was reported in Heidelberg, Gauteng. The NSPCA Farm Animal Protection Unit monitored the humane euthanasia of over 150 pigs. The report states that there is no treatment or vaccine and pigs suffer tremendously.

According to the United States Department of Agriculture: “The ongoing outbreak of highly pathogenic avian influenza (HPAI) H5N1 in South Africa, which began in April 2021, has led to the culling of nearly 3 million birds, primarily layers. While the greatest impact to date has been in the Western Cape, the virus is now continuing to spread primarily in Gauteng and KwaZulu-Natal. The Gauteng province produces 24 percent of South Africa’s eggs while KwaZulu Natal produces 10 percent. As a result of the outbreak, many of South Africa’s regional trading partners have imposed import restrictions on South Africa’s egg and poultry products.”

VI. Agricultural Product Standards Act 119 of 1990 and relevant Regulations

A. Introduction

The Act provides for control over the sale and export of certain agricultural products and other related products; and for matters connected therewith. Under the Act, the Minister may prohibit the sale or export of designated products, or prescribe distinctive marks to be used in the sale of agricultural products. Under the Act, false or misleading description of products is prohibited and an offence. The executive officer appointed in terms the Act or his or her designated assignees have powers of

330 https://www.google.com/search?q=SOUTH+AFRICA+OUTBREAK+OF+FOOT+AND+MOUTH+DISEASE
332 NSPCA Annual Report September 2019 – August 2020
334 Agricultural Product Standards Act, Preamble
335 Agricultural Product Standards Act, sections 1 and 2
336 Agricultural Product Standards Act, section 5
337 Agricultural Product Standards Act, section 6
entry, investigation, sampling and seizure in furtherance of compliance with the provisions of the Act. There are a number of regulations made in terms of the Act to aid in its implementation.

Recent court cases relating to this Act state that (emphasis added) “The department [DALLRD] has, for some years, been unable to properly fulfil its regulatory functions due to a lack of capacity. The Director-General of the Department was aware of this deficiency and consequently, on 12 December 2014 he recommended to the Minister that potential service providers should be invited to apply to be designated as assignees in a number of sectors, the dairy sector being one of them.”

Notably, this case related to the performance of duties under the Agricultural Product Standards Act. One of the applicants for designation was the Dairy Standard Agency (“DSA”), a non-profit company which had been established by the organized dairy industry to balance the interests of the industry and the consumer. It is funded by the producers of dairy products and it assists the department and its inspectors to identify compliant and non-compliant processors and manufacturers. It is clear that having an organisation funded by the Dairy Industry carrying out duties in terms of the Agricultural Product Standards Act could raise conflict of interests issues.

While the DSA was not selected, this assignment was subsequently litigated on by certain actors in the dairy industry.

According to the court judgment, the assignee: “had agreed to reduce the inspections to six per annum. The [dairy] industry, however, persisted in its demand for only one inspection per annum.”

The dairy industry ultimately failed in its attack on the constitutionality of section 3 (1A) (b) (ii) of the APS Act as well as their request that the Minister must present an amendment to the APS Act to Parliament. All the relief sought by the dairy industry under PAJA must also fail, save for the relief sought in respect of the determination of inspection fees, and the publication thereof on 25 May 2018.

B. Regulations


This is the main regulatory framework providing detailed guidelines on labelling of milk and dairy products. An important aspect of the milk labelling regulations is that they also provide for the labelling of plant-based milk substitutes. This is a recognition of the increasing use of plant-based milk substitutes in the diets of South Africans.

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338 Agricultural Product Standard Act, sections 7 and 8
Part II of the Regulations provide for imitation dairy products standards, which can consist of either a combination of plant and animal-based milk or be fully plant-based. The imitation dairy products included in the Regulations include condensed (sweetened milk), imitation cheese, cultured imitation dairy products, imitation cream, imitation milk, imitation milk powder and creamer. The breadth of the imitation dairy products included is an indication of the general acceptance by the State and citizens of the high level of consumption of these products in the country. To note however, is the fact that milk and other dairy products labelling is managed through a complex mix of Acts of Parliament and regulations in addition to these Regulations. Other relevant Acts of Parliament include the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (54 of 1972) and the Trade Metrology Act, 1973 (77 of 1973).

In November 2017, an industry dispensation was granted in respect of:
(a) relaxation of the existing ice cream compositional requirements for non-dairy ice creams; and
(b) labelling of non-dairy edible ices under the classes ice cream and frozen dessert.

In the dispensation, the DALRRD noted that “on a number of occasions, the Department has been approached by non-dairy ice cream manufacturers to assist with the correct classification of their products. This is due to the fact that non-dairy ice creams are not able to comply with all prescribed minimum compositional requirements for the class ‘ice cream’”.

Other dispensations have been granted for other products in respect of compliance with the regulations in terms of the APA.


These regulations provide for restrictions on the sale of eggs in the Republic of South Africa unless the eggs meet the grading, packing and marking requirements provided for in the Regulations. The major provisions relate to sizing and grading of eggs, containers and outer containers and marking requirements. In terms of Part IV “For the purpose of inspection for quality control, an inspector shall take such samples of a product, material, substance or other article in question as he or she may deem necessary.”

Of note is the provision on what constitutes free range eggs, given that this form of egg production is considered as more humane compared to cage and purely barn production. The Regulations state that no eggs may be labelled as free range unless such eggs are produced by poultry which:

- are not caged and are housed in a shed/ barn with a stocking density not exceeding 10 adult hens per square meter of available floor space; and
- have daily access to an outdoor range area not exceeding 5 adult hens per square meter.

With this labelling requirement, consumers will be able to make a choice when purchasing eggs, and in particular if they want to or prefer to consume only free range eggs. Alternatively, it will inform them that their eggs have come from caged chickens. This is an important development for many reasons in the South African ASF’s labelling regime. If other ASFs could similarly indicate on the packaging the methods of production of such products (for example: caged meat) it would assist with transparency and information around animal agricultural practices and create informed consumers.

Animal Law Reform South Africa’s submission on the Regulations Regarding the Grading, Packing and Marking of Eggs Intended for Sale in the Republic of South Africa contains further comments on aspects of concern with the draft.341


This regulation has already been discussed in some detail in respect of the Communique (which is expanded on below). The regulations do not apply to canned meat products, raw (fresh) processed meat products or “Meat analogue products or non-meat-based products that in general appearance, presentation and intended use correspond to processed meat products (e.g. vegan or vegetarian type processed products). By excluding vegan and vegetarian products from this regulation, the State’s view suggests that it does not recognise such products as processed meats, or alternatively may require that they be regulated under a different regime.

These regulations do provide opportunities to scrutinise current processed meat products for compliance and around enforcement, for example in terms of section 14: (emphasis added):

“(3) No word, mark, illustration, depiction or other method of expression that constitutes a misrepresentation or directly or by implication creates or may create a misleading impression regarding the quality, nature, class, origin or composition of a processed meat product shall be marked on a container or outer container thereof.

(4) No claim regarding the absence of any substance that does not normally occur in processed meat products in general, or in a specific class of processed meat product, shall be marked on the container or outer container thereof except in cases where it is allowed for in the regulations published under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).”

C. Recent Action by the DALRRD

Quoting these Regulations and the enabling Act (Agricultural Product Standards Act), the Executive Office of Agricultural Product Standards issued a communique dated 22 June 2022 addressed to all processors, importers and retailers of meat analogues advising them not to use legislated processed meat labels to mark or label analogue meat. In the communique, the Executive Officer labelled the use of such names on analogue meat as illicit and that in terms of the said regulation “processed meat” is defined as meat that has undergone any action that substantially altered its original state (including, but not limited to heating, smoking, curing, fermenting, maturing, drying, marinating (surface application), extraction or extrusion, or any combination of all these processes), but excludes raw processed meat.”

The communique stated further that “meat analogues must not use the product names prescribed and reserved for processed meat products since the scope of… the regulation does not include analogue meat. It revoked the provisions of section 8 of the enabling Act on seizures and stated that the Food Safety Agency (Pty) Ltd as the agency designated for the inspection of processed meat products will seize any meat analogue products using the prescribed names for processed meat products and that use of such names in the said manner was a criminal offence.

At a stakeholders’ meeting called on 24 June 2022 to clarify the communique, the Department of Agriculture, Land Reform and Rural Resettlement insisted that the warnings given in the communique would be implemented with immediate effect, despite calls from industry actors for a grace period given the likely impact on businesses, the economy and job losses. It stated further that this communique was necessitated by the fact that since the promulgation of the regulations in 2019, there had been no compliance from the relevant actors, “to the detriment of consumers” although it could not confirm whether any consumers had complained about this issue. The Department further indicated that a separate regulation to deal with analogue meat would be developed in future although no timelines were given for this activity.

Following the communique and the meeting and indications that the Department would not back down on its position, fifty three (53) organisations in the plant-based industry sent a joint letter to the Department, requesting it to withdraw the communique. In response to the joint letter, the Department insisted that it would go ahead with the implementation of the regulations but again referenced the development of separate regulations for plant-based products.

Unsurprisingly, the move was welcomed by animal agricultural industry players for example, the South African Meat Producers Association (SAMPA): “While SAMPA is aware of, and welcomes the growth in the vegan/vegetarian/flexitarian (VVF) market, it is important that we all understand that the law is made to protect consumers, and so it is incumbent on all food producers, both meat and plant-based, to acquaint themselves and comply fully with all legal requirements,” said Peter Gordon,
SAMPA CEO. “This is in the best interest of consumers, who deserve honest labelling and to know exactly what is contained in the products that they buy, at first glance.”

Some of the actors in the plant-based meat industry have threatened legal action and disagree with the Department's interpretation of the regulations. Notably, there are mechanisms within the APA to object to directives including an appeal process and dispensations. As indicated above, previously, other alternatives have received dispensations which could be pursued.

The communique and the position of the Department can be challenged in terms of section 33 (1) of the Constitution which provides that “Everyone has the right to administrative action that is lawful, reasonable and procedurally fair.”

The Promotion of Administrative Justice Act (3 of 2000) is the enabling legislation for this constitutional provision as required in section 33 (3) of the Constitution. Section 3 (1) of the Act provides that “Administrative action which materially and adversely affects the rights or legitimate expectations of any person must be procedurally fair” and for an administrative action to be considered to be procedurally fair, it must meet the following criteria in relation to the affected person:

- adequate notice of the nature and purpose of the proposed administrative action;
- a reasonable opportunity to make representations;
- a clear statement of the administrative action;
- adequate notice of any right of review or internal appeal, where applicable; and
- adequate notice of the right to request reasons as provided in section 5 of the Act.

These provisions can be used in the present case and in any other cases relating to transformation of South Africa’s food system if any administrative actions or omissions are considered to unfairly impact such efforts.

However, whilst the inconveniences and challenges wrought by the Department’s communique are noted, it is important for interested parties to press the government for immediate promulgation of regulations to address the marking, packing and classification of analogue meat to ensure certainty in the industry and for the benefit of consumers and all other actors. This will also assist in creating awareness about analogue meat, its benefits and create acceptability amongst the citizens. Arguing with the government about naming analogue meat under the current processed meat framework may create an impression that these are products that are generally not being accepted but are being imposed under an existing framework meant for different products.

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Marketing of Agricultural Products Act 47 of 1996

The purpose of the act is to authorise the establishment and enforcement of regulatory measures to intervene in the marketing of agricultural products; including the introduction of levies on agricultural products; to establish a National Agricultural Marketing Council; and to provide for matters connected therewith.

This is a potentially useful piece of legislation as it relates directly to the marketing of agricultural products particularly in the context of consumer protection and information and warrants further research and exploration.

COMPONENT 2: HEALTH

I. National Health Act (61 of 2003)

The NHA is premised on the need for the State to comply with the health rights protected in the Constitution including in:

- Section 27(2) of the Constitution which enjoins the State to take reasonable legislative and other measures within its available resources to achieve the progressive realisation of the right of the people of South Africa to have access to health care services, including reproductive health care;
- Section 27(3) of the Constitution which provides that no one may be refused emergency medical treatment;
- Section 28(1)(c) of the Constitution which states that every child has the right to basic health care services; and
- Section 24(a) of the Constitution which states everyone has the right to an environment that is not harmful to their health or well-being.

It places the responsibility for health and for citizens to enjoy these rights in the national government through the Minister as well as to provincial governments and municipal authorities. Sections 3 and 4 of the Act deals with the issue of National and Provincial Health and to achieve this, the Department of Health through the Director General as well as provincial health authorities are amongst other things required to issue, and promote adherence to norms and standards on health matters, including:

- nutritional intervention;
- environmental conditions that constitute a health hazard;

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343 Marketing of Agricultural Products Act, National Agricultural Marketing Council 344 National Health Act, Preamble 345 National Health Act, section 3
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- promote health and healthy lifestyles;
- Facilitate the provision of indoor and outdoor environmental pollution control services; and
- Facilitate and promote the provision of health services for the management, prevention and control of communicable and non-communicable diseases.

These provisions are critical in the debates on transforming the country’s food system. Through nutritional interventions, the Department can use its power to encourage citizens to transform their diets from animal-based to plant-based protein and in the process facilitate not only nutritional wellbeing but also help in the ongoing battle to fight non-communicable diseases in the country, many of which are tied to the consumption of animal-based protein. The World Health Organisation (WHO) for example has linked the consumption of red meat and processed meat to carcinogenicity. Red meat is placed on the WHO Carcinogen List 2A meaning that “positive association has been observed between exposure to the agent and cancer but that other explanations for the observations (technically termed chance, bias, or confounding) could not be ruled out.”\(^{346}\) Processed meat was placed on Group 1 meaning that “there is sufficient evidence of carcinogenicity in humans. In other words, there is convincing evidence that the agent causes cancer”\(^{347}\) and the identified form of cancer is colorectal cancer.\(^{347}\) It is therefore important for the State to put in place legal measures to address this by ensuring the adoption of dietary and nutritional measures that can lead to reduced meat consumption and increased plant-based foods consumption. The increase in zoonotic diseases and their communicable nature should also be a point of concern for the State in its implementation of the provisions of the National Health Act.

The need to address environmental conditions that constitute a health hazard and facilitate the provision of indoor and outdoor environmental pollution control services also need to be looked into in the context of animal production, and in particular factory farming and the attendant health hazards and environmental pollution. The framework provided in the National Health Act is therefore a useful platform for law reform in an effort to transform the country’s food system, with a focus on protecting the health of the nation.

**II. Regulations of Notifiable Diseases, 2017**

The regulations are made in terms of the National Health Act and place responsibilities at various levels of national, provincial and district government authorities as well as health institutions, laboratories and related personnel in line with the WHO International classification of diseases. A notifiable medical condition is classified as a “medical condition, disease or infection of public health

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\(^{346}\) World Health Organisation ‘Cancer: Carcinogenicity of the consumption of red meat and processed meat’ available at: https://www.who.int/news-room/questions-and-answers/item/cancer-carcinogenicity-of-the-consumption-of-red-meat-and-processed-meat (last accessed 3 July 2022)

\(^{347}\) World Health Organisation ‘Cancer: Carcinogenicity of the consumption of red meat and processed meat’ available at: https://www.who.int/news-room/questions-and-answers/item/cancer-carcinogenicity-of-the-consumption-of-red-meat-and-processed-meat (last accessed 3 July 2022)
importance as classified in the Regulations. The Regulations acknowledge the role of animals in spreading notifiable disease and in this regard identifies the need for animal control to address and manage the spread of such disease.

The Act defines a factory farm as an ‘intensive animal feeding system’ which refers to a farm constructed for purposes of breeding animals for the production of meat, milk, eggs, fur or any other product of animal origin. In terms of the HA, the Minister may, after consultation with the Minister of Agriculture, Land Reform and Rural Development, draft regulations relating to the regulation, control, restriction or prohibition of intensive animal-feeding systems, and to registration of such systems, the requirements in regard to the manner of application for such registration, the submission of terrain, building and site plans for such systems, the materials which shall be used in the construction of such systems, the construction and ventilation of such systems, the provision of sewerage and drainage systems and water and washing and sanitary conveniences for workers at such systems, the prevention of overcrowding of such systems, or any other matter deemed necessary with which any such feeding system shall comply for the purposes of registration, and the circumstances under which any registration may be cancelled or suspended.

III. Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972

A. Act

The purpose of the Act is to control the sale, manufacture and importation of foodstuffs, cosmetics and disinfectants, in as far as such substances are not regulated under the Drugs Control Act (101 of 1965). It sets the standards for such substances and in particular prohibits the sale, manufacture or importation of foodstuffs, cosmetics and disinfectants that are harmful or injurious to human health.

The Act is wide, far-reaching and regulates numerous issues related to the manufacture, importation and sale of foodstuffs, cosmetics and disinfectants, including but not limited to the following:

- the ingredients, process or method, and the appliances and containers used in the manufacture, packing, labelling, storage and conveyance of any foodstuffs, cosmetic or disinfectant; and
- the preparation, serving or administering of any foodstuff or cosmetic.

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548 Regulations Relating to the Surveillance and the Control of Notifiable Medical Condition, Definitions
549 Regulations Relating to the Surveillance and the Control of Notifiable Medical Condition, section 16 (2)
550 Section 1(b) of the Health Act.
551 Section 36 of the HA.
552 Foodstuffs, Cosmetics and Disinfectants Act, section 2 (1)
B. Regulations

Regulations made under the Act include the Regulations Relating to the Labelling and Advertising of Foodstuffs and the 2017 Draft Regulations relating to the Labelling, Advertising and Composition of Cosmetics. The regulations remain in draft form and have not been finalised or adopted. Of importance is that they provide good manufacturing practice and outline prohibited substances in the composition of cosmetics. These provisions can be used to prohibit testing of cosmetic products on animals and the inclusion of animal products in the composition of cosmetics. Such processes or inclusions are currently legal in South Africa, but given that these regulations remain in draft form and therefore technically open for input provides an opportunity for inclusion from a policy and law reform perspective so as to provide better protections for animal welfare and rights in the country.

The Regulations Governing General Hygiene Requirements for Food Premises, The Transport of Food and Related Matters of 2018 (R638) are developed under this Act. In terms of the regulations, food handling premises must have a certificate of acceptability issued before they can operate and must have set standards, including hygiene standards (premises, equipment, containers etc) in order to be issued with a certificate by a local authority. It also sets standards for the display, storage and temperature of food as well as for protective clothing. The regulations also prohibit the handling and transportation of food except as provided for in the regulations. It places duties on persons in charge of a food premises and on food handlers. An Inspector appointed in terms of section 10 of the Act plays an important role in the inspection of premises and facilities leading to the granting of a certificate of acceptability, its renewal or its withdrawal.

The Regulations governing microbiological standards for foodstuffs and related matters

These are made in terms of 15 (1) of the Foodstuffs, Cosmetics and Disinfectants Act. The Regulations seek to prescribe the nature and composition of any foodstuffs…or standards for the composition, strength, purity or quality or any other attribute of any foodstuff…or any ingredient or part of a foodstuff…” as provided for in section 15 (1) of the Act. Relevant foodstuffs for this research included in the Regulations are cooked poultry and egg products. The Regulations prohibit the sale of cooked poultry with antibiotics and other antimicrobial substances in amounts that exceed the maximum legally permitted levels. This provision ties in with the general concerns regarding the overuse of antibiotics and antimicrobial substances in chicken production in the country and are therefore an important way of addressing this challenge. Regarding egg products, the regulations also set microbiological specifications including Salmonella organisms, Staphylococcus aureus, mesophilic aerobic bacteria, coliforms and yeast and moulds and similarly seek to ensure that the egg products are not harmful to human health.

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354 Regulations governing microbiological standards for foodstuffs and related matters, sections 7 and 11
355 Regulations governing microbiological standards for foodstuffs and related matters, sections 7 (a) (i)
356 Regulations governing microbiological standards for foodstuffs and related matters, section 11
The use of antimicrobial in food animal production processes has been associated with human health consequences. It has been noted that “presence of antimicrobial residues in animal originated foods may induce serious health problems such as allergic reaction, antimicrobial resistance (AMR), and lead to carcinogenic and mutagenic effects in the human body.”

IV. Occupational Health and Safety Act (Regulations for Hazardous Biological Agents)

The Regulations are made in terms of section 43 of the Occupational Health and Safety Act which seeks to protect the health and safety of persons at work. The Regulations define a “biological agent” as “any microorganism, cell or organic material with plant, animal or human origin, including any which have been genetically modified” and a hazardous biological agent as “a hazardous biological agent (HBA) which may cause an infection, allergy or toxicity, or otherwise create a hazard to human health.” The regulations apply to every employer and self-employed person at a workplace where a hazardous biological agent is produced, processed, used, handled, stored or transported or to a space such as a food production plant, where there is contact with animals or products of animal origin. The regulations also apply to clinical, veterinary and diagnostic laboratories where an incident may occur that may result in persons being exposed to HBAs even though there is no deliberate intention to work with HBAs in the space concerned.

The Regulations are therefore relevant in the context of animal and meat production as well as the processing of related food products and recognises that these activities can result in the people working in such spaces getting in contact with HBAs that may be detrimental to their health. The employers and other responsible persons are therefore required to put measures in place to protect the health of workers in such spaces. The regulations require the provision and training of employees at risk, places duties on employees who may be exposed to HBAs, requires risk assessments, exposure monitoring, medical surveillance for affected employees, record keeping, exposure control, amongst others.

Failure to comply with these requirements is a criminal offence and on conviction, one is liable to a fine or imprisonment for up to 12 months.

V. Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947

The purpose of the Act is to provide for the registration, regulation and prohibition of the importation, sale, acquisition, disposal or use of fertilisers, farm feeds, agricultural remedies and stock remedies.

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357 MZ Hosain et al ‘Antimicrobial uses for livestock production in developing countries’ (2021) 14(1) Vet World
358 Regulations for Hazardous Biological Agents, sections 4-10
359 Regulations for Hazardous Biological Agents, section 19
360 Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, Preamble
It compliments the Medicines and Related Substances Control Act, 1965 (Act 101 of 1965), and the Hazardous Substances Act, 1973 (Act 15 of 1973) and resultantly excluded from its purview any remedy that is addressed by these two laws. It defines an agricultural remedy as: any chemical substance or biological remedy, or any mixture or combination of any substance or remedy intended or offered to be used—

(a) for the destruction, control, repelling, attraction or prevention of any undesired microbe, alga, nematode, fungus, insect, plant, vertebrate, invertebrate, or any product thereof; or
(b) as plant growth regulator, defoliant, desiccant or legume inoculant, and anything else which the Minister has by notice in the Gazette declared an agricultural remedy for the purposes of this Act.

Through this Act, the Regulatory Authority who is the Registrar of Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies has the powers to ensure that any remedy that is put on the market is sufficiently effective for the intended purpose, complies with all regulatory requirements and that its registration is not contrary to the public interest. Sale or importation of any remedy is prohibited unless the remedy in question is registered in terms of the Act and complies with other requirements as stipulated in the Act. Using these powers, the Registrar can prohibit the use in both animal and plant agriculture of any remedies that are detrimental to the wellbeing of animals, the environment and human beings. The Act can also be used by interested parties such as animal rights organisations, citizens and other actors, including the state and its relevant institutions to block the registration of any remedies that have a negative effect on animals, human beings and the environment, and if already in use to ensure their deregistration and discontinuance from use.

As can be seen from the years of enactment, these are decades old pieces of legislation, which despite amendments may not fully address emerging issues relating to the human rights and health implications of microbial use in food animal production. For example, there is concern that the framework as it stands allows for unregulated over the counter purchases of animal antibiotics by farmers without prescriptions, leading to overuse of such antibiotics. There is therefore a call to reform the framework to ensure that animal antibiotics can only be bought with a prescription from a veterinary doctor.

To address some of these concerns, South Africa developed an Antimicrobial Resistance National Strategy Framework (2014-2024). The Strategy has as one of its goals “to improve the appropriate use of antibiotics in human and animal health” and a strategic objective of “Promoting appropriate use of antimicrobials in human and animal health through antimicrobial stewardship.” In line with these goals

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361 This is in as far as the Medicines and Related Substances Control Act, 1965 (Act 101 of 1965) seeks to provide for the registration of drugs intended for human use and not for animal use.
362 Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, section 1
363 Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, section 3 (2) (a)
364 Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, sections 7 and 16
and objectives, the strategy recognises the importance of “Legislative and policy reform for health systems strengthening to support the quality of antimicrobials in the country and to enable control over prescribing of antimicrobials in the animal health sector.” These are important strategic focus areas in not only addressing the use of antimicrobial in animal production, but in addressing the animal growing conditions that encourage their increasing and sustainable use. This is in light of the fact that research shows that “the greatest volumes of antibiotics for food animals in South Africa are used in intensively reared poultry and pigs, followed by feedlot cattle and dairy cows” as opposed to “extensively farmed sheep, goats and cattle that feed mainly on grass”366

Feed is a particularly critical area for further research not only in respect of health implication but also environmental consequences. This act and its regulations warrant further exploration as a potential tool in tackling some of the harms associated with industrialised animal agriculture.

Animal Law Reform South Africa’s submission on the Draft Regulations relating to Farm Feeds contains further comments on aspects of concern with the draft.367


I. Introduction

South Africa has a robust environmental regulatory framework based on the right to environment, which presents several opportunities to challenge harmful activities involved in intensive animal agriculture and to achieve greater protection not only for humans and the environment, but nonhuman animals too.

Research shows that large-scale animal agriculture significantly contributes towards greenhouse-gas emissions, habitat destruction, pollution and loss of biodiversity.\textsuperscript{368} Current food production and dietary choices have also been linked to biodiversity loss, and destruction of ecosystems.\textsuperscript{369}

Up to this point, Environmental Law has been an underutilised avenue when it comes to tackling harmful food systems but this area warrants further research and analysis.

II. Constitution

The environmental protection and rights framework in South Africa is premised on Section 24 of the Bill of Rights, guaranteeing that everyone has a right:

\begin{itemize}
  \item[(a)] to an environment that is not harmful to their health or well-being; and
  \item[(b)] to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
    \begin{itemize}
      \item[(i)] prevent pollution and ecological degradation;
      \item[(ii)] promote conservation; and
      \item[(iii)] secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.\textsuperscript{370}
    \end{itemize}
\end{itemize}

These provisions are in line with various international environmental protection treaties and standards that South Africa is a party to. These include the Sustainable Development Goals (SDG), where Goal Number 12 aims to ensure sustainable production and consumption patterns and Goal Number 15 that seeks to ensure the protection, restoration and promotion of sustainable use of terrestrial ecosystems, sustainable management of forests, combating desertification, and halting and reversing

\textsuperscript{368} Green Party ‘Animal Rights’ \url{https://policy.greenparty.org.uk/ar.html} (accessed 22 March 2022)
\textsuperscript{370} Constitution of South Africa, Section 24
land degradation and halting biodiversity loss. Similarly the United Nations Convention on Biological Diversity (CBD) enjoins states parties to “Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings.”

South Africa has domesticated these provisions in a number of national laws and in line with section 24 of the Constitution.

### III. Environmental Framework: NEMA

**National Environmental Management Act (NEMA) of 1998**

NEMA is the overarching or umbrella environmental framework in South Africa under the constitutional regime and intends to provide for co-operative, environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state. NEMA provides for “SEMAs” or specific environmental management acts, a few of which are highlighted briefly below.

Whilst as an international treaty, the CBD places the duty of care on the environment on state parties, the NEMA places such obligations on individuals as a way of ensuring compliance and sharing the burden of environmental care and protection between the state and citizens.

NEMA has a number of positive provisions throughout which aim at protecting the environmental right and promoting accountability for environmental harm and damage. This act presents significant opportunities to challenge practices and industries which impact on the right to have the environment protected and must be properly researched and analysed in the context of industrial animal agriculture.

Animals or “animal life” is specifically included in the definition of the environment. There are several important guiding principles relevant to activities such as industrialised animal agriculture.

Section 28 (1) of NEMA places a duty on every person who causes, has caused or may cause significant pollution or degradation to take measures to prevent such pollution or degradation from occurring, continuing or recurring. The responsible person may also be required to take measures to minimise or rectify pollution depending on whether the pollution or environmental degradation cannot be stopped or has already occurred. Given the significant pollution and environmental degradation that is caused by intensive animal farming, these provisions can be used to minimise this type of animal farming and instead encourage extensive approaches that have lesser impact on the environment.

A challenge is that despite using the terms “significant pollution or degradation of the environment” or “significantly affect the environment” or “significantly affect environmental protection” there is no

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371 United Nations Convention on Biological Diversity, Article 8 (d)
definition of these terms or what “significant” means in the Act. In a contested and emerging area of
the law such as animal law, and the contestations arising from diverse interests in keeping, promoting
or extending intensive animal farming, the lack of clarity in such definitions may create challenges for
reform and implementation. Such clarity is therefore required as part of law reform to ensure common
understanding, implementation and compliance with the law.

There are several important enforcement mechanisms in NEMA including but not limited to in
Section 31 which provides for access to environmental information and protection of whistle-blowers;
Section 32 which provides for legal standing to enforce environmental laws”; and Section 33 which
provides for private prosecution. These and other enforcement mechanisms are important when
considering the vast environmental harms caused by certain industrial animal agriculture activities.

In order to give effect to the general objectives of integrated environmental management as provided
in the Act, NEMA has an activity implementation system that gives authorities tasked with permitting,
authorisation or allowing activities to ensure that such activities are considered, assessed and
investigated prior to implementation. Such considerations, assessment and investigation must include
looking at the impact of the activity on the environment, socio-economic conditions and cultural
heritage. These provisions can be used to assess, investigate and consider the impact of new
agricultural activities, including intensive animal farming and determine their suitability in line with
their impact on the environment, socio-economic conditions and the cultural heritage of particular
affected communities or the country as a whole. Where the impacts are considered to be significant,
the permitting or authorising authorities may decline to issue permits for the implementation of such
activities, or allow implementation but with stringent conditions.

In relation to existing activities, the Minister may, with the concurrence of the MEC “identify existing
authorised and permitted activities which must be considered, assessed, evaluated and reported on.”
This provision allows for the continuous assessment, investigation and consideration of agricultural
activities to ensure continuous compliance, and in the absence of compliance, to compel such
compliance or order the cessation of operation of activities that negatively impact the environment,
socio-economic conditions and cultural heritage.

Several activities relating to animal agriculture are explicitly included in the National Environmental
Management Act: Listing Notice 1 of activities and competent authorities identified in terms of
sections 24(2) and 24D. This notice defines a “concentration of animals” to mean the keeping of
animals in a confined space or structure, including a feedlot, where they are fed in order to prepare
them for slaughter or to produce products such as milk or eggs. There are specific activities designated
in relation to slaughtering of animals which set clear guidelines for their application.

372 National Environmental Management Act, section 24 (1)
373 National Environmental Management Act, Section 24 (2) (d)
A more complete analysis of NEMA in relation to industrialised animal agriculture and its various components and potential impacts on the environment is warranted as this is a potentially useful tool in achieving greater animal and environmental protection as well as human rights.

**National Environmental Management Laws Amendment Act (NEMLA) of 2022**

The National Environmental Management Laws Amendment Act, 2022\(^ {375}\) which became an act on 24 June 2022 will come into force on a date proclaimed by the president. This is a significant piece of legislation which amends various pieces of environmental legislation and will introduce shift in South Africa’s environmental regulatory landscape.

This new act should be further researched in terms of its potential use and implication pertaining to intensive animal agriculture facilities.

Animal Law Reform South Africa’s submission on the NEMLA bill (earlier version) contains further comments on aspects of concern with the draft, particularly as it pertains to animals and their wellbeing.\(^ {376}\)

**IV. Environmental Element Water:**

**A. Introduction**

The right to sufficient water is contained in the same section as the right to food and healthcare, in section 27 of the Constitution.

Historically, cows in South Africa have grazed on grasslands that were not suitable for crops. Today, 75% of South Africa’s cattle spend at least a third of their lives in feedlots, fed by grains grown on the country’s arable land, which accounts for only 13% of the country. “Compared to naturally fed beef, it takes about 65 times the quantity of surface water to produce feedlot-finished beef in South Africa.”\(^ {377}\) It has been estimated that 27% of the water footprint of humanity is related to the production of animal products, while only 4% relates to domestic water use.\(^ {378}\) This problem is especially bad in South Africa, where the water consumption in industrialised cattle production, for

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example, has been estimated at being around 1.8 times higher than the global average and more than 3 times higher than the Australian average.\textsuperscript{379}

The water footprint of any animal product is larger than the water footprint of a wisely chosen crop product with equivalent nutritional value… The average water footprint per calorie for beef is 20 times larger than that for cereals and starchy roots and per gram of protein for milk, eggs, and chicken it is about 1.5 times larger than for pulses. On average 1 kcal of animal product requires roughly 2.5 L of water, while products of vegetable origin with similar nutrition only 0.5 L of water/kcal.\textsuperscript{380}

**B. National Water Act**

The National Water Act (36 of 1998) places the responsibility to prevent water pollution from occurring, continuing or recurring on an occupier, user, owner or person in control of land.\textsuperscript{381} This is in line with the provision of Section 28 of the National Environmental Management Act, which places the duty of care and remediation of environmental damage on the person responsible for causing the pollution of environmental damage.

The National Water Act defines pollution as:

- the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it -
  - a) less fit for any beneficial purpose for which it may reasonably be expected to be used;
  - b) harmful or potentially harmful
    - (aa) To the welfare, health or safety of human beings;
    - (bb) To any aquatic or non-aquatic organism
    - (cc) To the resource quality; or
    - (dd) To property

Industrial agricultural activity and livestock farming have been proven to have a huge impact on all water sources, including underground, freshwater sources and the oceans and the seas.\textsuperscript{382} For marine water, run-off from barnyards and feedlots has been seen to carry manure that is deposited into water systems, carrying with it E. coli and causing algal blooms that destroy marine life.\textsuperscript{383} Intensive fish


\textsuperscript{381} National Water Act, Section 19 (1)

\textsuperscript{382} FAIRR ‘Marine pollution as a result of intensive farming’ available at: https://www.fairr.org/article/marine-pollution-as-a-result-of-intensive-farming/#:~:text=Runoff%20from%20barnyards%20and%20feedlots%20and%20animals%20on%20the%20seabed (accessed 9 April 2022)

\textsuperscript{383} Ibid
farming similarly produces concentrated waste that can pollute water and smother animals and plants on the seabed. In light of this, it is clear that the wastewater produced by intensive animal farms qualifies as waste in terms of the National Water Act and that those responsible for the management of the land and farms on which the waste is produced should be held responsible for the resultant water pollution. The framework therefore exists for the protection of water sources from pollution caused by intensive animal farming.

A point to note is that the Act does not recognise that water pollution can also cause harm or potential harm to the welfare, health or safety of animals, yet this is a reality. It can however be argued that the protection of animals under this provision can be inferred under prevention of harm or potential harm to “property” in light of the fact that farm animals are generally viewed as property belonging to a person in the South African legal system. It is accepted that this characterisation of animals and the shifting of paradigms remains contentious. However, from an animal rights and welfare point of view, amendments to provisions such as these will go a long way in shifting mind-sets and providing more and better protections to animals. An amendment to this provision in the National Water Act to reflect the effect of water pollution on the health and lives of animals is therefore one of the ways to start and maintain the animal law reform discourse and engagement.

Intensive animal farming similarly causes harm to land and plant life. Provisions of laws such as the National Environmental Management Act are therefore critical in ensuring the protection of land and plant life from damage, pollution and degradation.

C. Water Services Act No. 108 1997

The Act seeks amongst other things “to provide for the rights of access to basic water supply and basic sanitation necessary to secure sufficient water and an environment not harmful to human health or wellbeing.” It further recognises that everyone has a right to basic water supply and basic sanitation and places a responsibility on water services institutions and authorities to take reasonable measures to ensure the realisation of this right. The Act therefore operationalises section 27 (1) (b) of the Constitution which provides for the right of access to sufficient water.

The Act is supported by a number of regulations and notices, compulsory national standards, norms and standards for tariffs, implementation of contracts and joint ventures with services providers in terms of section 19 of the Act, management of water services works owned by the Minister, and establishment, disestablishment and extension of service areas of different water boards.

The Water Services Act and the supporting framework can be used to arrest agricultural activities that impact the rights of citizens to basic water supply, sanitation and secure and sufficient water. This

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384 Ibid.
385 Water Services Act, section 2 (a)
386 Water Services Act, section 3 (1), (2) and (3)
includes the regulation and monitoring of intensive animal agriculture in relation to water pollution given that the “accumulation of manure in the field and the storage of livestock ban sewage in ponds can cause water pollution through surface runoff and underground seepage on rainwater.”\textsuperscript{387} Intensive animal farming also causes heavy metal contamination from animal waste, which can accumulate in soil, leading to water contamination. The contamination causes public health problems and has a negative impact on the environment \textsuperscript{388}

V. Environmental Element: Waste

A. NEMWA

National Environmental Management: Waste Act 59 of 2008 (“NEMWA”) and relevant documentation

The Act provides for the “reform of the law regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.”

The Act seeks to implement section 24 of the Constitution on the right to an environment that is not harmful to one’s health and wellbeing specifically in relation to:

- prevention of pollution and ecological degradation;
- promotion of conservation; and
- securing ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The Act further notes the disproportionate impact of poor waste management practices on the poor, that sustainable development requires the avoidance of waste generation, and the need to minimise pollution and improper use of natural resources.\textsuperscript{389} It therefore has strong social justice principles in view of its recognition of the impact of pollution on the rights of the most vulnerable and marginalized.

The Act defines industry to include commercial agricultural activities. It also has provisions for the storage, treatment and disposal of animal waste as a waste management activity in respect of which a licence is required.\textsuperscript{390} It further defines the following animal related waste as hazardous:

\textsuperscript{388} FoodPrint ‘How Industrial Agriculture Affects our Water’ available at: How Industrial Agriculture Causes Water Pollution - FoodPrint (accessed 26 June 2022)
\textsuperscript{389} National Environmental Management-Waste Act, Preamble
\textsuperscript{390} National Environmental Management-Waste Act, Schedule 1
● wastes from research, diagnosis, treatment or prevention of disease involving animals;
● wastes from the preparation and processing of meat, fish and other foods of animal origin; and
● hazardous portion of wastes from the leather and fur industry.  

By defining these as hazardous waste, the Act states that the waste “contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment” highlighting the detrimental effect of animal related agricultural and industry activities to the environment and human health and the need for these to be properly managed, including the issuance of licenses to dispose of or handle the waste.

Feedlots use veterinary chemicals/medicines and generate significant manure waste that is classified as hazardous. In terms of the Act if a feedlot stores old veterinary residue and containers in excess of 80 m2 it will be required to undertake an environmental impact assessment and have a waste management licence. In addition, manure from feedlots is also not regarded as general waste in terms of the Act as it has direct impacts on human health and the environment. Sludge from biogas plants getting manure from the feedlots is also considered as hazardous waste, and the plants would therefore require a licence to operate, as would rendering plants and water treatment plants.

“A concentration in the byproducts of animal production accompanies the intensification of livestock farming.” The livestock sector is the largest sectoral source of water pollution, contributing to eutrophication, dead zones in coastal areas, and degradation of coral reefs. The sources of pollution are from animal waste, antibiotics and hormones, fertilizers and pesticides from food crops and sediments from eroded pastures. The typical waste from the slaughter of the animals includes "urine, faeces, discarded milk, blood, detergent, disinfectant, and other waste." The pollution and degradation of South Africa’s aquatic ecosystems is particularly egregious, especially our river ecosystems. One of the major causes is the discharge of untreated effluent. Much of this effluent is sourced from animal production facilities. Animals produce more waste than humans. A single cow, for instance, produces 29 litres a day. As there are about 14 million head of cattle in South Africa at any one time (2016 statistics, so this number is likely higher, now), cattle produce

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391 National Environmental Management-Waste Act, Schedule 3, Category A
392 National Environmental Management-Waste Act, Schedule 3, Category A
395 Department of Environmental Affairs and Tourism South Africa Environment Outlook: A report on the state of the environment xx.
397 https://pastoralismjournal.springeropen.com/articles/10.1186/s13570-020-00186-

798 million litres of waste, every day, in our country. While chickens produce relatively little waste, 29 litres for every 250 chickens, the fact that nearly a billion are killed every year in South Africa means that the waste produced by chickens is also immense.

Waste disposal or treatment from industrialised livestock operations is notoriously difficult. Even the best manure management practices may not be sufficient to adequately guard against waste pollution and “[b]ased on available data, generally accepted livestock waste management practices do not adequately or effectively protect water resources from contamination with excessive nutrients, microbial pathogens, and pharmaceuticals present in the waste.”

Excessive land application of manure can lead to nitrate leakage into groundwater, phosphorus runoff into adjacent water bodies, and the triggering of elevated bacterial or viral pathogen levels in lakes and rivers. The manure of factory farmed pigs includes, for instance, “ammonia, methane, hydrogen sulphide, carbon monoxide, cyanide, phosphorus, nitrates, and heavy metals” as well as over 100 microbial pathogens including salmonella, cryptosporidium, streptococci and girardia.

Waste from industrial livestock operations is a listed waste management activity and is also “hazardous waste” in terms of the National Environmental Management: Waste Act 59 of 2008 (NEMWA). All industrialised livestock operators are required to have a waste management licence. There are also various general duties of care for waste producers (and increased duties for hazardous waste producers) and requirements e.g. for the storage of waste and to take steps to avoid odours and visual impacts, avoidance of pollution.

NEMWA creates offences for, inter alia, producing waste without a licence when one is required and contravening a general duty of care. A person convicted of any offences in NEMWA “… is liable to a fine not exceeding R10 000 000 or to imprisonment for a period not exceeding 10 years, or to both such fine and such imprisonment, in addition to any other penalty or award that may be imposed or made in terms of the National Environmental Management Act.”

It is unlikely that all industrialised livestock operations have obtained waste management licenses and/or are compliant with the above requirements in NEMWA. This creates a significant risk for livestock operators and their financiers, as they may be required to shell out large amounts in fines for such non-compliance.

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399 https://mg.co.za/article/2018-10-26-sky-has-fallen-on-chicken-lickens-head/
401 Coetzee, A. 2018. “What makes free range chicken ‘free.’” Stellenbosch University Master’s Thesis., p.31
VI. Environmental Element: Air

B. NEMAQA

National Environmental Management: Air Quality Act 39 of 2004 (NEMAQA) and relevant documentation

Like the NEMWA, the Air Quality Act seeks to implement section 24 of the Constitution. In this regard, its focus is on reforming “the law regulating air quality in order to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development”\(^{403}\). It addresses issues of offensive odours, greenhouse gas emissions and air pollution generally, all of which are directly associated with the raising of animals and related industries. The Act can therefore be used to regulate air pollution by the animal production industry, ensure licensing and penalties for exceeding set emission standards and criminal liability for contravention of the Act.

An important impact of industrial livestock operations is large-scale air pollution of surrounding areas. Besides the nuisance and social impacts of the stench from industrial livestock operations, “air-borne particulate matter” from animal waste have been found to severely affect local peoples’ health. In a study of externalities from industrialised animal operations, it was found that an increase of 100,000 animal units (one animal unit is equal to 250 layer chickens, 1.14 fattened cattle, or 2.67 breeding hogs) in an area “corresponds to 123 more deaths of infants under one year per 100,000 births, and 100 more deaths of infants under twenty-eight days per 100,000 births. A doubling of [livestock] production [in an area] induces a 7.4% increase in infant mortality.”\(^{404}\) This study is supported by many others.\(^{405}\) Infant mortality associated with livestock farming is primarily driven by airborne pollutants rather than waterborne pollution.\(^{406}\)

Livestock are also responsible for almost 64% of anthropogenic ammonia emissions, which contribute significantly to acid rain and acidification of ecosystems.\(^{407}\)

VII. Environmental Element: Biodiversity

A. NEMBA

\(^{403}\) National Environmental Management-Air Quality Act, Preamble


\(^{405}\) Ibid, p.128

\(^{406}\) Ibid, p.125

The National Environmental Management - Biodiversity Act (NEMBA) (10 of 2004)

This Act seeks to ensure that the nation’s plants, animals, and ecosystems are protected for the benefit of future generations.\(^{408}\) It also gives effect to South Africa’s international commitments relating to biodiversity.\(^{409}\) The Act applies to “human activity affecting South Africa’s biological diversity and its component”\(^{410}\) and this includes animal raising and agricultural activities with an impact on this biodiversity. Intensive farming, including intensive livestock production is considered to be amongst the biggest drivers of biodiversity loss.\(^{411}\) The provisions of this Act are therefore important in monitoring the livestock production sector to minimise its impact on biodiversity loss in the country.

This can be done through the implementation of the provisions of section 9 (1) which gives the Minister powers to:

“issue norms and standards for the achievement of any of the objectives of this Act., including for the management and conservation of South Africa’s biological diversity and its components and restriction of activities which impact on biodiversity and its components, as well as to set indicators to measure compliance with those norms and standards.”

Livestock production is one of the main contributors to deforestation, biodiversity loss and land degradation.\(^{412}\) The demand for feedgrains and other feed materials has greatly increased the arable land requirements of livestock production from a very small area to about 34 % of the total arable land today (Steinfeld 2006).\(^{413}\) When land for grazing is included in the calculation, livestock production uses 70% of agricultural land.\(^{414}\) Some 306 of 825 terrestrial eco-regions reported livestock as a current threat. Twenty three of 35 Conservation International biodiversity hotspots reported livestock as a current threat.\(^{415}\)

By 2000, approximately 19.86% of South Africa’s major districts had been transformed and severely degraded, a trend that is only increasing.\(^{416}\) About eighty percent of South Africa’s land is used for

\(^{408}\) The National Environmental Management - Biodiversity Act, section 2
\(^{409}\) The National Environmental Management - Biodiversity Act, section 5
\(^{410}\) The National Environmental Management - Biodiversity Act, section 4 (1) (b)
\(^{415}\) Ibid.
agricultural purposes and 69% thereof is used for grazing. Further, maize, soy and other cereals are fed in large part to livestock (see below). This contributes to an increase in monoculture crops and a concomitant loss of biodiversity.

**B. NEMBA TOPS Regulations**

**Threatened or Protected Species Regulations, 2008, in term of the National Environmental Management - Biodiversity Act**

These regulations provide a specific approach for the country in the protection of species facing threats of extinction. In the context of this research, the regulations are important in as far as they “apply to the carrying out of restricted activities involving specimens of terrestrial and freshwater fish species, and marine species where specifically provided for, that have been listed as threatened or protected in terms of section 56 of the Biodiversity Act.”

The regulations require one to have a permit in order to “carry out a restricted activity involving a specimen of a listed threatened or protected species.” The permit system is a way of monitoring the use of such species and in the context of marine and freshwater fish, to prevent overfishing, leading to the extinction of the threatened or protected species.

In addition, risk assessment are required in respect of:

- restricted activities involving wild specimens of critically endangered species; and
- restricted activities carried out in ecosystems listed as threatened in terms of section 52 of the Biodiversity Act, amongst others, thereby providing an additional protective layer for threatened or protected species.

The risk assessments assist in identifying the impact of the restricted activities on the biodiversity and the possibility of causing or threatening extinction of the affected species. This gives the regulatory authorities the information required in order to make decisions regarding the permits applied for, including granting the permits, declining the application, or granting with conditions.

The use and application of biodiversity protection legislation in industrial animal agriculture warrants further research and exploration.

**C. The Draft Biodiversity Offset Guideline**

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417 Department of Environmental Affairs and Tourism *South Africa Environment Outlook: A report on the state of the environment* 91.


420 Threatened or Protected Species Regulations, section 2 (2)
This Draft Biodiversity Offset Guideline is important for biodiversity protection in South Africa particularly to attempt to rectify harmful activities and practices. It is issued under section 24J of the National Environmental Management Act in line with the implementation of principles of sustainable development as provided for in section 24 of the Constitution. Its purpose is to “indicate when biodiversity offsets are likely to be required as mitigation by any competent authority (CA), to lay down basic principles for biodiversity offsetting and to guide offset practice in the environmental authorisation (EA) application context.”

The guideline is applicable in the terrestrial and freshwater realms but not to offshore marine realm and estuarine ecosystems.

It recognises that “Biodiversity is fundamental to the health and well-being of people, as well as economic activity and socio-economic upliftment” and in this regard biodiversity offsetting in the Guideline is considered as an important aspect in remedying ecosystem disturbance or loss in line with various national environmental management principles.

Although offsetting is considered as a final option in the mitigation hierarchy, it plays an important role in ensuring:

- Long-term securing of biodiversity;
- Contribution to the expansion of South Africa’s protected area network;
- Maintenance and restoration of ecological infrastructure and the services and benefits it provides; and
- That the cumulative impact of the authorised activity, or activities, and land and resource use change does not:
  - result in the loss of irreplaceable biodiversity or jeopardise the ability to meet biodiversity targets;
  - lead to any ecosystem with a threat status of Vulnerable or Least Concern becoming Endangered, or any Endangered ecosystem becoming Critically Endangered;
  - cause an irreversible decline in the conservation status of species and the presence of special habitats; and
  - cause a significant loss in ecosystem services.

An important provision in the Guideline is that “The loss of irreplaceable biodiversity cannot be replaced by socio-economic benefits. The circumstances under which an activity, or activities, could be authorised when it is likely to have a negative impact on irreplaceable biodiversity – in other words, when it is fatally flawed from a biodiversity perspective - must be truly exceptional.”

This is an important provision given that often the economic benefit mantra is used by industry and commerce to justify development or industry activities with damaging environmental, ecological and biodiversity consequences. Such industry activities can include overfishing and intensive animal
farming practices. The inclusion of Biodiversity offsets in the environmental authorisation application process\textsuperscript{426} is therefore an important measure in ensuring that industry activities prevent or minimise the impact of their activities on national biodiversity.

A Draft Guideline was released earlier in 2022 for public comment but this has not yet been finalised. Animal Law Reform South Africa’s submission on the Draft Guidelines for Biodiversity Offsetting contains further comments on aspects of concern with the draft, particularly as it pertains to food systems and agriculture.\textsuperscript{427}

**D. Other Biodiversity Regulation**

There are various other pieces of regulation and policy relevant to the discussion of biodiversity protection which are relevant but not discussed for purposes of this Working Paper.\textsuperscript{428}

**VIII. Climate Change**

A major rise in sea level, ocean acidification, changes in average rainfall patterns, increased flooding and droughts have been identified as some of the impacts of climate change, which also seeps into different aspects of existence and negatively affects "lives, livelihood, health, ecosystems, economies, societies, cultures, services, and infrastructures."\textsuperscript{429}

The UN Food & Agriculture Organization estimates that the livestock sector is responsible for 18\% of human produced emissions,\textsuperscript{430} which is higher than the entire transport industry.\textsuperscript{431} The volume of emissions is set to rise with increasing intensification of livestock production.\textsuperscript{432} Studies show that it is unlikely that global temperature increases can be contained below 2 degrees Centigrade without changes in global meat and dairy consumption.\textsuperscript{433} Increasingly, the negative consequences of industrialised livestock production on food security, economic development, health and social justice are being understood, and resulting in calls for reform of the sector.\textsuperscript{434} Worldwide, livestock are likely to be the greatest anthropogenic contribution to methane emissions and beef cattle contribute at least

\textsuperscript{426} Draft Biodiversity Offset Guideline, Part 5
\textsuperscript{427} https://www.animallawreform.org/wp-content/uploads/2022/05/ALRSA-Biodiversity-Offsets-Submission.pdf
\textsuperscript{428} See for example: https://www.dffe.gov.za/documents/strategicdocuments/national_biodiversitystrategy_actionplan
\textsuperscript{429} Ndlela TS and Murcott MJ "Innovative Regulation of Meat Consumption in South Africa: An Environmental Rights Perspective" PER / PELJ 2021(24) - DOI http://dx.doi.org/10.17159/1727- 3781/2021/v24i0a7519
\textsuperscript{432} Bajželj B. Et al, 2014. Importance of food-demand management for climate mitigation, Nature Climate Change
\textsuperscript{434} See for example the Interim report of the Special Rapporteur on the right to food, UN General Assembly, 5 August 2015

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half of livestock-related methane emissions." Nitrous oxide and phosphorous emissions are also substantially sourced from livestock, directly or indirectly. Deforestation caused by livestock farming is also responsible for driving climate change due to emissions from burning and clearing land and from the lost carbon-uptake potential from covered land.

According to the National Response Climate Change White Paper of South Africa, "Conventional, commercial input-intensive agriculture has a range of negative environmental, social and economic externalities, which increasingly render it an unsustainable model." Historically, agriculture has contributed around 41% of methane emissions in SA. Methane emissions from South African livestock have been estimated at 1255 Gg/year. Methane has 25 times the global warming potential of carbon dioxide.

Climate change externalities are starting to be regulated, with the intention of making producers responsible for their emissions – internalising the externality. This will affect agriculture, significantly. For instance, the European Union’s (EU) Cross-Border Adjustment Mechanism (CBAM) will come into effect in 2025, after a transition period starting in 2023. Agricultural products are likely to be impacted by CBAM, especially considering the EU’s Farm-to-Fork Strategy, which forms part of the European Green Deal and aims to drastically improve sustainability in the food/agricultural sector.

Per the European Commission’s website:

> Food systems cannot be resilient to crises such as the COVID-19 pandemic if they are not sustainable. We need to redesign our food systems which today account for nearly one-third of global GHG emissions, consume large amounts of natural resources, result in biodiversity loss and negative health impacts (due to both under- and over-nutrition) and do not allow fair economic returns and livelihoods for all actors, in particular for primary producers.

ProVeg International notes that “A plant-based diet can have numerous positive effects on the environment, including the preservation of biodiversity, more sustainable use of resources, and..."
With specific reference to climate change it is noted further that “The production and consumption of animal products is a major driver of climate change, whereas adopting a plant-based diet helps to reduce greenhouse gas emissions.”

**IX. International Law**

South Africa is party to international agreements on addressing climate change. Key amongst these is the United Nations Framework Convention on Climate Change (UNFCCC) (1992), the Kyoto Protocol (1997) and the Paris Agreement of 2015, which seeks to enhance and strengthen the implementation of the UNFCCC. One of the strategies of the Paris Agreement is to foster “low greenhouse gas emissions development, in a manner that does not threaten food production.” However research shows that animal farming and production generally leads to the production of greenhouse gas emissions but intensive animal farming in particular leads to the production of more GHG than extensive, pasture fed animal production systems. This is in part because:

Robust breeds of animals reared in extensive systems often have longer productive lifetimes and these systems often have lower reliance on fossil fuel and grain inputs. Intensive “high input, high output” systems that appear highly efficient at first glance are in fact energy and resource hungry.

Effectively, the above deductions show that humane animal production systems are important in the climate change mitigation strategies that any country may adopt. In light of these realities, it is important to understand how South Africa’s commitments to the UNFCCC and the Paris Agreement and implementation at the national level address the issue of animal production and its implications on climate change.

Like other countries, South Africa has made climate commitments under the Paris Agreement. The country released its latest climate commitments on 27 September 2021, pledging to “limit [its] GHG emissions to 398-510 MtCO2e by 2025, and to 350-420 MtCO2e by 2030, significantly lower than targets communicated in 2016.” This pledge has been viewed by environmental and climate change advocates as shifting “the country’s commitments closer to what is needed globally for us to limit

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444 Proveg International ‘A plant-based diet is better for the planet’ available at: https://proveg.com/za/5-pros/evnironment/ (accessed 8 April 2022).
445 Ibid
446 The first commitments under the Kyoto Protocol expired in 2012 but some countries took on commitments in second commitment period for eight years between 1 January 2013 and 31 December 2020
447 Paris Agreement, Article 2 (1)
448 Paris Agreement, Article 2 (1) (b)
450 Ibid
warming to 1.5 degrees Celsius, according to criteria used by Climate Action Tracker [and an] important and very welcome leadership from President Ramaphosa and South Africa..."\textsuperscript{452}

**X. Nationally Determined Contributions (NDC)**

Though initially placing importance on the electricity and transport sectors as the major contributors to GHG emissions, the country’s Nationally Determined Contributions (NDC) positions also recognise the need for the “capacity building of the agriculture sector on climate change and full implementation of a climate-smart agriculture framework.”\textsuperscript{453} Similarly, the agriculture sector is seen as a priority sector for the development of climate response plans.\textsuperscript{454}

Animal Law Reform South Africa’s submission on the Draft NDC together with the Environmental Law Association of South Africa contains further comments on aspects of concern with the draft, particularly as it pertains to food systems and agriculture.\textsuperscript{455}

**XI. Climate Change Bill**

The country’s NDC is complemented by a legislative framework that has seen a Climate Change Bill being formally tabled in Parliament on 18 February 2022, and is expected to lead to the development of a robust climate change law.\textsuperscript{456} The Bill seeks to “enable the development of an effective climate change response and a long-term, just transition to a low-carbon and climate-resilient economy and society for South Africa in the context of sustainable development.”\textsuperscript{457} It goes on to define just transition as “a shift towards a low-carbon, climate-resilient economy and society and ecologically sustainable economies and societies which contribute toward the creation of decent work for all, social inclusion and the eradication of poverty.”\textsuperscript{458} Ecological sustainability, decent work, social inclusion and the eradication of poverty cannot be divorced from the country’s food systems and the attendant production, manufacturing, distribution and consumption patterns. These are therefore important elements to be linked to the country’s law reform efforts in both climate change and transformation of the country’s food system.

\textsuperscript{452} World Resources Institute ‘STATEMENT: South Africa’s Climate Commitment Much More Ambitious Than Before’ available at: \url{STATEMENT: South Africa’s Climate Commitment Much More Ambitious Than Before | World Resources Institute (wri.org)} (accessed 9 April 2022)
\textsuperscript{453} Government of the Republic of South Africa ‘First Nationally Determined Contribution under the Paris’ Agreement (2021) 10
\textsuperscript{454} Government of the Republic of South Africa ‘First Nationally Determined Contribution under the Paris’ Agreement (2021) 10
\textsuperscript{455} \url{https://www.animallawreform.org/wp-content/uploads/2021/04/NDC-Submission-ALRSA-and-ELA.pdf}
\textsuperscript{457} Climate Change Bill, Purpose
\textsuperscript{458} Climate Change Bill, Section
The Bill recognises agriculture as one of the sectors for which Sectoral Emission Targets and Sectoral Adaptation Strategies and Plans must be developed. This is a good and important framework to pivot the legislative framework on climate change for law reform to support the transformation of the country’s food system from one that causes climate change to one that supports climate-smart production, distribution, and consumption patterns. The pros and cons of meat-based diets and plant-based diets can be weighed in the context of climate change legislation to ensure the promotion of diets and consumption patterns through climate change based incentives and disincentives for producers, manufacturers, retailers and consumers.

Animal Law Reform South Africa’s submission on the Draft Climate Change Bill contains further comments on aspects of concern with the draft, particularly as it pertains to food systems and agriculture.

XII. National Legal and Policy Framework on Climate Change and Agriculture

The National Development Plan: Vision for 2030 recognises the need to remedy current trends in carbon emissions to prevent dire consequences for future generations. It is therefore an important policy resource in the national development discourse to ensure that agriculture is more efficient, sustainable and is viewed in the context of climate change mitigation and adaptation. Specific climate change related national plans and policies compliment and elaborate the NDP in relation to climate change and greenhouse gas (GHG) emissions. These include the National Climate Change Response Policy (NCCRP) which was published as a White Paper and approved by the Cabinet in October 2011. The White Paper recognises that globally agriculture is a key contributor to climate change, being responsible for about 14% of all GHG emissions.

With specific reference to South Africa, the NCCRP acknowledges that “commercial input-intensive agriculture has a range of negative environmental, social and economic externalities, which increasingly render it an unsustainable model.” With this realisation, intensive commercial agriculture is regarded in the NCCRP as a locus for adaptation, including the creation of a climate resilient agricultural response that provides not only food but a range of environmental and socio-economic benefits. Specific approaches that are identified in the NCCRP include the “appropriate use of small-scale labour-intensive agriculture techniques and models [that] could reverse the present decrease in agricultural jobs; contribute to empowerment goals; promote food security; conserve soil quality and structure; and contribute to biodiversity.” Law reform in the animal production agricultural sector should therefore be informed by these pronouncements at government level to ensure that this activity

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459 Climate Change Bill, Schedules 1 and 2
462 National Climate Change Response Policy White Paper, Part 5.3
463 National Climate Change Response Policy White Paper, Part 5.3
464 National Climate Change Response Policy White Paper, Part 5.3
reduces its contribution to GHG emissions and climate change but also positively contributes towards economic development, employment creation and the general livelihoods and well-being of the most vulnerable and marginalised South Africans.

The National Climate Change and Health Adaptation Plan (NCCHAP) of 2014-2019 was developed to provide a broad framework for the health sector action towards implementation of the NCCRP.\textsuperscript{465} The NCCHAP identifies groups and population sectors that are particularly vulnerable to the effects of climate change.\textsuperscript{466} The capacity building component of the Plan of action for a national health adaptation plan for South Africa 2014-2019 in the NCCHAP identifies the training of national experts and environmental health fraternity on…environmental sciences, epidemiology, public health, animal health, vector control, safety of drinking water, air pollution, sanitation, waste management…” as a critical supplementary activity supporting adaptation.\textsuperscript{467} All these issues of focus are directly linked to animal agriculture and meat consumption in one way or another and training and attendant research can be used to encourage citizens to shift from meat based diets to plant-based diets in order to address health issues associated with meat consumption. The Plan also identifies the growing of fruit and nut trees as an adaptation strategy that contributes to relieving food hunger and insecurity.\textsuperscript{468} In addition to ensuring food security, this strategy also helps in ensuring consumption of alternative foods and reducing overreliance on meat-based foods and protein.

The National GHG Emissions Reporting Regulations\textsuperscript{469} have the purpose of introducing a single national reporting system for the transparent reporting of greenhouse gas emissions, which will be used:

(a) to update and maintain a National Greenhouse Gas Inventory;
(b) for the Republic of South Africa to meet its reporting obligations under the United Framework Convention on Climate Change (UNFCCC) and treaties to which it is bound; and
(c) to inform the formulation and implementation of legislation and policy.\textsuperscript{470}

The regulations set out a classification of emission sources and data providers and a list of activities for which GHG emissions must be reported to the competent authority.\textsuperscript{471} The classifications and activities include agriculture, Forestry and Other Land Use, under Code 3 and different types of livestock under Code 3A. The inclusion of agriculture and related activities including livestock production is a clear recognition of its contribution to GHG emissions and climate change. Given that the reporting mechanism is meant to inform implementation and formulation of legislation and

\textsuperscript{465} National Climate Change and Health Adaptation Policy, Part 1.3
\textsuperscript{466} These are indicated as young children, the elderly, women and child-headed households, those with pre-existing health conditions, the poorest in urban and remote rural areas, those performing work in sun-exposed conditions including those living and working in the hottest parts of the country, such as the Northern Cape, migrant or displaced people and coastal populations.
\textsuperscript{467} National Climate Change and Health Adaptation Plan, Annexure D
\textsuperscript{468} National Climate Change and Health Adaptation Plan, Annexure C
\textsuperscript{469} Made in terms of the National Environmental Management: Air Quality Act (No 39 of 2004)
\textsuperscript{470} National Greenhouse Gas Emissions Regulations, section 2
\textsuperscript{471} National Greenhouse Gas Emissions Regulations, Annexure 1
policy amongst other things, this is an important focus area for transforming South Africa’s food system through evidence-based and science-based law reform as informed by the reports submitted to the competent authorities.

The National Climate Change Adaptation Strategy adopted in October 2017 “acts as a common reference point for climate change adaptation efforts in South Africa, and it provides a platform upon which national climate change adaptation objectives for the country can be articulated so as to provide overarching guidance to all sectors of the economy.” It is also meant to provide guidance and input into the country’s adaptation legal framework, through the planning, implementation and reporting framework provided therein. Its focus is however on developing a framework for mitigating against the effects of climate change on various sectors including agriculture and its sub sectors such as crop production, livestock productions and fisheries, without providing details on the impact of these sectors on climate change. It however recognises a number of other policies that are being implemented by the government with an impact on climate change and agriculture such as the Climate Change Mitigation and Adaptation Plan for Agriculture, Forestry and Fisheries, Small-scale Fisheries Policy, National Policy on Extension and Advisory Services and the National Research and Development Policy. Monitoring of the implementation of these policies can provide incisive and useful information and data on the impact of the different agricultural sectors on climate change, leading to the development of appropriate policy and legislative reforms for the transformation of South Africa’s food systems.

The Carbon Tax Act (15 of 2019) specifies emission factors for regulated activities as determined by the Intergovernmental Panel on Climate Change (IPCC). It sets out endeavours by South Africa to contribute towards global efforts in stabilising GHG concentrations in the atmosphere. Agriculture, Forestry and other Land Uses are specified under Code 3A of the IPCC Code which is further sub-categorised into livestock, croplands, and others. Fisheries and Fishing and Fish Farms are included under IPCC Code 1A4c. In terms of this Act, carbon tax is levied on a person conducting an activity in South Africa resulting in GHG emissions above the set threshold within a tax period. The more the GHG emissions caused by an activity, the more the carbon tax the person responsible for that activity is expected to pay. The carbon tax regime can therefore be used to curtail agricultural activities that cause significant GHG emissions by discouraging the activities altogether or encouraging climate friendly approaches in the implementation of such activities.

The National Energy Efficiency Strategy (NEES) was informed by the White Paper on Energy Policy published in 1998. The first NEES for South Africa was published in 2005 and reviewed in 2008. The Strategy set out an overall energy saving target/energy reduction target of 12% to be achieved by 2015 and also provides for sectoral targets. It shows that the energy use by agriculture in 2004 was only

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472 National Climate Change Adaptation Strategy, Executive Summary
473 National Climate Change Adaptation Strategy, Part 7.2
474 Carbon Tax Act, Preamble
475 Carbon Tax Act, section 4
476 National Energy Efficiency Strategy, Part 1.3
2.9% with industry, domestic and transport sectors accounting for the bulk of the energy use (at 36.2%, 17.9% and 25.7% respectively). The 2005 NEES Strategy was followed by the draft post 2015 NEES which sets energy efficiency targets for 2030. Although it recognises that the agricultural economic sector only accounted for 2% of energy consumption in 2012, it sets the final economy-wide energy reduction target at 29% and sets the target for agriculture at 30%. This is because the strategy recognises agriculture as a key economic sector, directly connecting 20% of South Africans and posits that “Addressing the inefficient use of energy in agriculture therefore has the potential to contribute to the modernisation of the sector as part of the process of rebuilding an inclusive rural economy.”

The Strategy however recognises that there has been relatively little research to identify opportunities for energy savings in the agriculture sector. It calls for involvement of and partnerships between and with research institutions and farmers’ organisations such as Agricultural Research Council (ARC), the Council for Scientific and Industrial Research (CSIR), African Farmers’ Association (AFASA) and Agri South Africa to assist in such initiatives.

The Post 2015 NEES looks at energy consumption reduction mainly from an economic perspective, with the aim of improving efficiency in various sectors, including agriculture. It however does not address specific agricultural activities such as intensive animal farming or fish farming and how they contribute towards increased energy. As the strategy rightly points out, there is need for more, targeted, and disaggregated research in the agriculture sector in order to determine such issues, and the findings can be used in law and policy reform with the aim of transforming the country’s food system, amongst other considerations.

South Africa’s Drought Management Plan (DMP) of 2005 notes the need for increased research including research on climate change and norms and standards on veld and animals as a response and recovery approach. As indicated elsewhere in this report, research is important in law and policy development as it guides the process through evidence-based approaches to law and policy formulation. The research in this regard should provide insights on how moving to alternative sources of protein can assist in arresting climate change and the attendant drought induced disasters and their impact on the environment as well as human and animal health and wellbeing. The DMP is anchored on four main key performance areas (KPAs) namely: institutional arrangements, integrated institutional capacity, disaster risk assessment and reduction planning, and response and recovery and these KPAs should therefore guide any research to be carried out.

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477 National Energy Efficiency Strategy Part 3.1
479 Post-2015 National Energy Efficiency Strategy, part 5.5
480 Drought Management Plan, Executive Summary
481 National Environmental Management-Waste Act, Preamble

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I. Introduction

Consumer protection is a significant area that is being underutilised in South Africa to date but has had increasing success in other jurisdictions with regard to tackling harmful practices which mislead and misinform the public. South Africa has robust consumer protection laws which can be utilised.

These may include the labelling or marketing of certain goods as well as advertising standards, all of which are regulated to ensure the protection of consumers. In the realm of this Working Paper, issues such as false labelling, humane-washing and green-washing are relevant. These issues must be addressed in protecting consumers’ rights to health and food as well as the right to make appropriate consumer choices as provided for in the Act.

Certain legislation referenced in the Part above contain provisions which intersect with consumer protection and have not been repeated herein. This Part deals with additional legislation, standards and examples of case law as it potentially relates to animal agriculture.

Recommendations for transformative food system changes need to be grounded in authenticity and transparency and also need to be integrated to ensure a consistent message is given to consumers, and to avoid any unintended consequences of an action in one area to the detriment of another area.

COMPONENT I: CONSUMER PROTECTION

II. Consumer Protection Act, 2008

A. Background

Recognition that apartheid and discriminatory laws of the past have burdened the nation with unacceptably high levels of poverty, illiteracy and other forms of social and economic inequality Necessary to develop and employ innovative means which includes to fulfil the rights of historically disadvantaged persons and to promote their full participation as consumers; to protect the interests of all consumers, ensure accessible, transparent and efficient redress for consumers who are subjected to abuse or exploitation in the marketplace and to give effect to internationally recognised customer rights.
Among its purposes, the Consumer Protection Act (68 of 2008) was promulgated to:

- Improve access to, and the quality of, information that is necessary so that consumers are able to make informed choices according to their individual wishes and needs;
- Protect consumers from hazards to their well-being and safety;
- Develop effective means of redress for consumers; and
- Promote and provide for consumer education, including education concerning the social and economic effects of consumer choices.

These provisions form a strong basis for the protection of consumers in relation to making choices regarding the consumption of either animal and/or plant and fungi-based protein and soon, cell-based foods. At the centre of the protection measures is the provision of information and education to ensure that consumers have the basis to make choices that protect and promote their health and wellbeing and protect them from hazards. It also seeks to ensure that when their rights are violated, they have the requisite information to seek effective redress and remedies for such violations.

In this regard, advertising and food labelling and marketing are important components in providing consumers with the necessary information to make food choices and to seek redress when their health, wellbeing and other rights are violated through misinformation and disinformation, or the sale of meat and other animal products that do not protect their health and wellbeing.

The act also sets out specific rights for consumers including (among others) the Right of equality in consumer market; Consumer’s right to privacy; Right to disclosure and information; Right to fair and responsible marketing; Right to fair and honest dealing; Right to fair, just and reasonable terms and conditions. One such right relates to the right to fair value, good quality and safety and which are further specific in sections on Consumer’s rights to safe, good quality goods (section 55); and Liability for damage caused by goods (section 61).

The listeria outbreak has already been mentioned earlier on in this Working Paper however there is a particular case of relevance under this discussion. In 2017–2018 South African listeriosis outbreak was a widespread outbreak of Listeria monocytogenes which is the largest outbreak in history. This food poisoning resulted from contaminated processed meats (likely polony). The outbreak was traced back to foods produced by Enterprise Foods, a subsidiary of Tiger Brands at Polokwane facility. There were 1,060 confirmed cases of listeriosis during the outbreak, and about 216 deaths. At a press conference, Tiger Brands CEO Lawrence MacDougall denied responsibility, stating “There is no direct link between any of the deaths and our products”. The government issued a recall of products. A number of countries suspended all imports of processed meat from South Africa (including Zambia, Namibia, Botswana, Kenya and others).

In December 2018, the High Court granted a certification order opening up the process for class-action lawsuit against Tiger Brands. There are around 1,000 claimants. Each claimant might be eligible

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482 For more details on the case see: https://listeriaclassaction.co.za/
to seek between R100,000 and R2,000,000 in compensation for their losses due to the outbreak. There have been various actions of court since then. For example, Tiger Brands has argued that it may not be the ‘sole source’ of the listeriosis. In February 2022, the Supreme Court of Appeal found that Tiger Brands’ ‘sole source’ argument has no relevance in the class action, and described its subpoenas as entirely speculative. It stated: “[Tiger Brands] seems to hope that in the midst of all the test results it requires, it would find a basis on which to pin co-liability on another party.”483 This is an ongoing case which is yet to be decided.484

B. Meat and Animal Product Labelling

Some aspects of labelling of animal products have been dealt with above – see for example the Animal Agricultural Products Standards Act and regulations which have not been repeated herein but apply to the area of consumer protection and information.

Food labelling is important in providing consumers with the essential information to help them in making their purchasing and consumption choices. It helps consumers in making good food choices and in avoiding less desirable choices.485 It is however also a complex subject.486 Section 24 of the Consumer Protection Act deals with product labelling and trade descriptions. It states in part that a person must not “knowingly apply to any goods a trade description that is likely to mislead the consumer as to any matter implied or expressed in that trade description” and that a retailer of goods must “not offer to supply, display or supply any particular goods if the retailer knows, reasonably could determine or has reason to suspect that… a trade description applied to those goods is likely to mislead the consumer as to any matter implied or expressed in that trade description.”487

NSPCA has previously raised issue with the use of retailers who label their pork as “sow friendly pork” or “kinder to sows”. They indicate in their 2017 – 2018 report that they will continue to fight against these claims as pigs are still kept in crates and are unable to express normal behaviours. This confinement in metal crates, usually with bare floors, denies pigs their freedom of movement, interaction with other pigs and opportunity to forage or root.488

The NSPCA states that inspectors continue to raise pig welfare concerns with the South African Pork Producers Association and that individual pig farms are inspected and warnings are issued for sows

483 https://listeriaclassaction.co.za/updates
484 https://listeriaclassaction.co.za/about-listeria-class-action
487 Consumer Protection Act, Section 24 (3) (a) (i)
kept in crates. They indicate that to that point, farmers had been complying with warnings to remove pigs from gestation crates.\textsuperscript{489}

On the issue of “free-range labelling”, the NSPCA indicates that they continue to raise free range labelling and advertising with DALRRD (then DAFF) in an effort to ensure that products are correctly labelled and not misleading to consumers.\textsuperscript{490}

As aforementioned, the Agricultural Product Standards Act contains specific regulations around the marking and packaging of egg products. More specifically requiring in terms of section 8(1)(b)(i) egg producers are required to indicated on the package the specific production methods, namely “cage”, “barn” or “free range”. These terms are specifically defined in the act.

The significant aspect to note in terms of the Meat Safety Act and its regulations is that except for a few provisions, the labelling is aimed at protecting the health, wellbeing, and safety of consumers with limited consideration for labelling that seeks to protect the rights of the concerned animals. To protect the rights of animals, animal rights and welfare labelling on meat and meat products should therefore also be an important focus. This can improve animal welfare by unlocking the available but untapped market demand for products that can prove higher animal welfare considerations.\textsuperscript{491}

The NSPCA is amongst several animal rights and welfare organisations in South Africa advocating for animal production and slaughter methods to be part of the food and non-food animal product labelling.\textsuperscript{492} This way, consumers can exercise their “right to make informed decisions in accordance with their moral and belief systems and be assured that the labelling is independently verified and verifiable.”\textsuperscript{493}

It has been noted that producers currently use labels such as “free-range”, “sow friendly”, “organic”, “barn”, and “free to roam”, to promote their products and increase sales by indicating animal-friendly production.”\textsuperscript{494} Such labelling is however often factually inaccurate and oftentimes deliberately misleading as producers are more focussed on sales and profit as opposed to providing the correct and factual position regarding the welfare and rights of the animals they produce and slaughter.

\textsuperscript{491} UK Department for Environment Food and Rural Affairs ‘Labelling for animal welfare: Call for Evidence’ (2021) 11
\textsuperscript{492} NCSPAs ‘Labelling of Animal Products’ available at: \url{https://nspca.co.za/farm-animal-protection/labelling-animal-products/} (accessed 8 April 2022)
\textsuperscript{493} Ibid
\textsuperscript{494} Ibid
The lack of specific criteria for such labelling perpetuates the misinformation, disinformation, and misleading representation about animal welfare to the detriment of both the animals and the human beings consuming the animal products. This should therefore be the subject of animal law reform efforts in South Africa.

C. Advertising and Marketing

It is not only in the area of labelling and naming of products where consumer protection and information issues arise. How products are marketed and advertised also raises important issues, and for which legal remedies and rights exist.

Consumer Protection Act

Section 29 of the Consumer Protection prohibits any producer, importer, distributor, retailer or service provider from marketing goods or services “in a manner that is reasonably likely to imply a false or misleading representation…or…in a manner that is misleading, fraudulent or deceptive in any way.”

The Act further prohibits false, misleading, or deceptive representations in relation to goods or services. It states that in the marketing of any goods or services, the supplier must not either through words or conduct:
   a) directly or indirectly express or imply a false, misleading, or deceptive representation concerning a material fact to a consumer;
   b) use exaggeration, innuendo, or ambiguity as to a material fact, or fail to disclose a material fact if that failure amounts to a deception; or
   c) fail to correct an apparent misapprehension on the part of a consumer, amounting to a false, misleading, or deceptive representation, or permit or require any other person to do so on behalf of the supplier.\(^{495}\)

These provisions provide a strong basis for the protection of consumers from misleading, false, deceptive advertising or other supply of information that is not factual or accurate. Yet, in an age of consumer sensitivity to animal rights and protection, the meat industry often make dishonest claims about the treatment of animals in advertising in order to allay consumers’ concern about the rights and welfare of the animals that they raise. It has been noted that:

“Consumers care about their food choices and many care deeply about animals. For these reasons consumers are increasingly demanding transparency from these industries. To meet these demands, it is unfortunate that green-washing and humane-washing advertising techniques are extremely common and heavily on the increase. These advertising techniques

\(^{495}\) Consumer Protection Act, Section 41 (1) (a) (b) and (c)
are designed to purposely manipulate and exploit the good faith of well-meaning consumers.”

Given this reality, the advertising industry plays an important role in ensuring that consumers are not manipulated and misinformed about the nature of animal production, rearing and handling, leading to their arm-twisting to purchase and consume animal products that are otherwise not in line with their expectations of animal rights and protection.

**Advertising Regulatory Board**

The ARB decisions are governed by the Code of Advertising Practice, which in turn is based upon the International Code of Advertising Practice, prepared by the International Chamber of Commerce. There are a number of important provisions in the code relating to standards for advertising.

In particular, clause 4 deals generally with the truthful presentation of advertising. Clause 4.1 provides inter alia that an advertiser must be in possession of documentary evidence that substantiates the claims, made by it in its advertising, that are capable of objective substantiation. Clause 4.2.1 prohibits misleading claims, providing: “Advertisements should not contain any statement or visual presentation which, directly or by implication, omission, ambiguity, inaccuracy, exaggerated claim or otherwise, is likely to mislead the consumer.”

The ARB has played an important role in protecting consumers vis a vis advertising relating to the consumption of animal protein. Its Code of Practice is “based upon the International Code of Advertising Practice, prepared by the International Chamber of Commerce. This is internationally accepted as the basis for domestic systems of self-regulation.” Although a drawback could be that it is a voluntary body whose rulings are not binding on non-member advertisers, self-regulation in various professions and industries has been found to be effective as it brings pressure to bear amongst practitioners who understand the rules and have a standard and a reputation to build and maintain.

**Example Case**

In the case of *Charissa Kemp and 10 Others v Fair Cape Dairies (PTY) LTD,* the Advertising Regulatory Board’s Advertising Appeals Committee ordered Fair Cape Dairies to remove some misleading statements regarding the status of dairy cows from an advertisement. The company had used the

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496 Statement on Advertising Appeals Committee decision on complaint Fair Cape Dairies vs Kemp, Fairbrother, others, issued on 5 May 2020 available at: https://medium.com/@joannefairbrother/statement-on-advertising-appeals-committee-decision-on-complaint-fair-cape-dairies-vs-kemp-1173775edd14 (accessed 7 April 2022)
499 Charissa Kemp and 10 Others v Fair Cape Dairies (PTY) LTD, Paragraphs 18 and 19
slogan #happy cows and described its dairy as humane, claims that were proved by the applicants in the matter as misleading in light of the treatment of dairy cows, their offspring and how the milk is acquired from the cows.

Fair Cape Dairies had been using terms “humane” and “#happycows” as well as “#dotherightthing” in its advertising. There were suggestions, such as that in the article above about dairy being environmentally friendly. Complaints laid by several members of the public with Advertising Regulatory Board (previously Advertising Standards Authority). The ARB administers the widely-accredited Code of Advertising Practice which regulates the content of South African advertising.

The complainants alleged in brief that Fair Cape Dairies was misleading the public by claiming their cows are happy which suggests milk is humanely produced. They raised issues including that cow farming is one of the most environmentally destructive industries in the world today.

Figure 6: Example of Fair Cape Advertising which was the subject of the complaint

The initial complaint was dismissed by the ARB (Directorate level). In summation, the Directorate’s decision stated that one needed to “consider what the reasonable person would understand from the advertising and whether they would feel misled if they knew “the truth”. They said that the hypothetical reasonable consumer could not expect that [cow’s milk] could be sold without some compromise being made around the animals’ freedoms. Just as meat cannot possibly arrive on a shelf without some suffering to an animal (it is killed), the same applies to dairy products (the cow is milked.

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501 [https://arb.org.za/](https://arb.org.za/)
502 Source: Fair Cape Dairies and Cape Talk Advertisement
and separated from its calf). The consumer who believes otherwise is naïve (“naïve consumer”). They noted that one had to accept that it cannot cater to the ignorant consumer, the uneducated consumer, or the wilfully naïve consumer. The law calls on one to consider the “reasonable” consumer. To do otherwise, would put too heavy a burden on advertisers. After having considered the Dairy Standard Agency’s audit report: within the context of dairy farming, the cows are as humanely treated and therefore as “happy” as possible.

The complainants subsequently appealed to the ARB Appeals Board and further documentation was submitted. Animal Law Reform South Africa provided assistance to the complainants with the appeals process.

The ARB Appeals board disagreed with the ruling of the Directorate. They said that the Directorate had erred in holding that the advertising in issue must be viewed through the lens of the practices that are generally accepted in the commercial dairy industry. They noted that while it may be that the reasonable consumer expects some compromise being made on the freedom of cows who are farmed so as to produce milk, but there is no evidence that such a consumer expects cows to be forcefully impregnated by human fists or arms only so that they are able to produce milk; or that male and female babies are taken from their mothers at birth; or that the cows mourn the loss of their babies; or that it is the dairy industry that fuels the veal industry because baby male calves are slaughtered shortly after birth; or that dairy cows are eventually slaughtered. They further distinguished milk from meat based on the Directorate’s statement:

“The reasonable consumer who purchases meat is fully aware that the meat comes from an animal who has been killed. However, in our view, it cannot be said that the reasonable consumer who purchases milk expects the cow to have been raped, or her babies to have been taken from her at birth so as to maximise the milk available for sale. Nor does the reasonable consumer think of the fate of the cow’s babies, or the fate of the cow herself. None of this is uppermost in the mind of the reasonable consumer when purchasing a bottle of milk.”

The Advertising Appeals Committee subsequently ruled that the use of the phrases/words “#HappyCows” and “humane” by Fair Cape in its advertising is in breach of clause 4.1 and 4.2.1 of the Code of Advertising Practice; and that Fair Cape is instructed to withdraw the phrases/words “#HappyCows” and “humane” from its advertising in accordance with clause 15.3 and 15.5 of the Procedural Guide.

The Advertising Appeals Board also stated that “In our view, humane treatment means more than freedom from violence, pain and disease; it means treatment characterised by tenderness, compassion, and sympathy. It does not include many of the practices complained of, such as the forced impregnation of cows, the forced separation of calves from their mothers immediately after birth, and the slaughter of male calves thereafter. It follows then, in our view, that the cows cannot be described as happy, or as humanely treated.” (emphasis added)
Recently, the Supreme Court of Appeal handed down a decision on 12 April 2022, confirming that the Advertising Regulatory Board (ARB) is entitled to consider the advertising of non-members, and issue decisions thereon, for the guidance of its members.\textsuperscript{503}

Together, these two cases represent an important avenue for the development of the law relating to the marketing of farmed animal products in South Africa. The ARB Fair Cape Dairy case presents opportunities to build on jurisprudence insofar as it relates to misleading advertising akin to green-washing and humane-washing. Such practices are prevalent in many suppliers of animal agricultural products across the board.

Fair Cape’s website as at the date of this report speaks to “Doing the Right Thing” which it states “remains the company’s moral and ethical compass”.

In reaching its verdict the Advertising Appeals Committee stated that:

“In our view, humane treatment means more than freedom from violence, pain, and disease; it means treatment characterised by tenderness, compassion, and sympathy. It does not include many of the practices complained of, such as the forced impregnation of cows, the forced separation of calves from their mothers immediately after birth, and the slaughter of male calves thereafter. It follows then, in our view, that the cows cannot be described as happy, or as humanely treated.”\textsuperscript{505}

\textsuperscript{503} Advertising Regulatory Board NPC and Others v Bliss Brands (Pty) Ltd (786/21) [2022] ZASCA 51; [2022] 2 All SA 607 (SCA); 2022 (4) SA 57 (SCA) (12 April 2022). \url{https://www.saflii.org/cgi-bin/disp.pl?file=za/cases/ZASCA/2022/51.html}
\textsuperscript{504} Fair Cape Dairies Website \url{http://www.faircape.com/}
\textsuperscript{505} Charissa Kemp and 10 Others v Fair Cape Dairies (PTY) LTD, Paragraphs 18 and 19
The Committee therefore concluded that the terms #happy cows and humane were misleading given the above treatment of the cows and ordered Cape Dairies to remove them from its advertising in accordance with clause 15.3 and 15.5 of the Procedural Guide.\textsuperscript{506}

In the case of Nicola Millson \& Peter de Fouw v Karan Beef,\textsuperscript{507} the Advertising Regulatory Board similarly ordered a misleading advertisement to be taken off air after the complainant took issue with the advertiser’s claim which stated, “want a healthy lifestyle: make beef part of your daily diet.” The complainant submitted that:

“Red meat has been classified as Group 2A, probably carcinogenic to humans by the World Health Organisation (International Agency for Research on Cancer). Furthermore, WHO states that the risk of colorectal cancer could increase by 17\% for every 100-gram portion of red meat eaten daily.”\textsuperscript{508}

The complainant therefore took issue with the claim that making beef part of daily diet promoted a healthy lifestyle when in fact major organisations, such as the WHO, with the backing of solid scientific research have indicated that meat is probably carcinogenic. The advertiser undertook to withdraw the advertisement following the complaint. The ARB concluded that its objective was to “protect consumers from advertising that contravenes the Code of Advertising Practice” and was therefore satisfied with the advertiser’s undertaking to withdraw the matter as a way of resolving the matter.

**COMPONENT 2: CERTIFICATIONS**

**A. Industry Certifications**

In undertaking such reform, and in the absence of government issued regulations, industry voluntary standards can play an important role in informing government efforts. Such approaches also play an important role in providing the necessary moral and ethical considerations for industry as the country waits for legally binding animal welfare and rights food labelling.

Voluntary industry standards also help in bringing pressure on non-compliant actors particularly when it affects the bottom line due to consumer choices. However, there are a number of potential issues with this including the potential for green washing and humane washing.

In South Africa, examples of Industry Certifications can include the following:

SAPPO 360

\textsuperscript{506} Ibid, Paragraph 22.2

\textsuperscript{507} Nicola Millson \& Peter de Fouw v Karan Beef

\textsuperscript{508} Nicola Millson \& Peter de Fouw v Karan Beef
According to SAPPO:

“SAPPO’s quality assurance system, Pork 360, is a guarantee to the consumer and retailing sector that the producer has a consistent production process that complies with minimum standards and ensures high quality pork. Producers participate in the system by choice. The system originated with PPP some years back, but as it is to the benefit of pork producers in all provinces, Pork 360 is now a national matter, managed by SAPPO’s Portfolio Committee for Quality Assurance.

Pork 360 was developed by producers in consultation with key players in the pork products value chain. These include abattoir representatives, processors, retailers and pig veterinarians. The number of units participating in SAPPO’s quality assurance system, Pork 360, are growing. In 2014, 33 units, representing 50 340 sows participated. In 2012 it was 31 units, representing 38 000 sows, and in 2010, 21 units representing 31 420 sows.”

The Standards do not appear to be available online and therefore there is a lack of transparency as to what these entail. The Pork360 Website has the following under the “Standards Tab”: (extracted from website, formatting may differ).

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509 https://sappo.org/what-pork-360-is-all-about/
510 https://www.pork360.co.za/standards/
Close to 60 farms are accredited according to the website.\footnote{\ref{511}} One such piggery is Vusithemba. This piggery was central to a notable court case of 2014,\footnote{\ref{512}} which is discussed further in the Administrative Law section of this Working Paper below.

\footnote{\ref{511} Pork 360 Website https://www.pork360.co.za/accredited/}
B. Third Party Certifications

Animal Welfare, Environmental and Other Certifications

Certifications from organisations such as A Greener World (AGW) provides labelling “for animal products that have been produced with a real commitment to animal welfare and sustainable livestock production.”\(^{513}\) It provides certification for meat, eggs, and milk.\(^{514}\) The certification process has a set and verifiable criteria and standards such as:

- being raised outdoors on pasture range;
- No common industrial practices such as teeth clipping, tail docking, dehorning, or beak-trimming;
- Guarantees that animals receive no added hormones or sub-therapeutic antibiotics\(^{515}\)

From an environmental and sustainability point of view, the certification requires that farmers exhibit water friendly and environmentally sustainable practices.\(^{516}\) There is also an element of the production and slaughter process being just, an important consideration in focusing not only on the welfare of the animals but their rights as well. The element of justice also applies to the people who work on the farms, slaughtering processes and who consume the animal food and products. It also addresses aspects of environmental and climate justice that have become key issues in production and consumption discussions throughout the world. Justice also requires that access to food is fair and sustainable and addresses the food needs of all citizens of the world on the basis of equality.\(^{517}\)

The above considerations are therefore an important guidance in the animal law reform process, and in engaging with the government to ensure that issues of meat and animal food labelling in the country help in addressing animal and human rights as well as environmental and sustainability imperatives and encouraging the government to put in place binding legislative frameworks in this regard.

However, whilst certification can still be used in ensuring humane and animal welfare-based farming, there are growing concerns that certifications are in reality doing more harm than good. In their report titled “The Dirt on Humane washing”, Farmforward notes that certifications as they currently exist are no longer an effective way of dismantling factory farming but that at best the labels are being used by industry to confuse well-meaning consumers and at worst to actively deceive them.\(^{518}\) The report

\(^{513}\) Foodormzansi ‘10 farm certified by new ethical food label’ available at: [https://www.foodormzansi.co.za/ethical-food-label-certifies-10-local-farms/](https://www.foodormzansi.co.za/ethical-food-label-certifies-10-local-farms/) (accessed 8 April 2022)

\(^{514}\) Ibid

\(^{515}\) Ibid

\(^{516}\) Ibid

\(^{517}\) ProVeg International ‘A plant-based diet can help reduce inequality’ available at: [https://proveg.com/za/5-pros/justice/](https://proveg.com/za/5-pros/justice/) (accessed 8 April 2022)

concludes that certifications as they stand today enrich corporations that benefit from factory farming and shield the practice and the corporations from criticism.

**Vegan / Vegetarian / Plant-Based Certifications**

On the other side of the industry certifications are certifications for vegan, vegetarian or plant-based products.\(^{519}\) It is critical that the integrity of products bearing such wording are protected from being used on products which are not vegan or vegetarian. One means to do so is to proactively seek legislation around the definition and use of terms such as “vegan”, “plant-based”, “vegetarian” or other terms. Similarly, for cultivated alternatives, having such term legally defined with specific standards will ensure that it is not utilised in the incorrect manner or in a way which misleads consumers.

**Figure 7: Example of South African Vegan Society Product Endorsement**


COMPONENT 1: LEGAL AREAS

A. Introduction

There are many different legal areas which can be used to make advancements in the two Avenues. Below are some examples for consideration. We have not included all potential legal areas that may prove beneficial for increased animal protection and welfare; however it suffices to note that there are a number of potential legal and policy interventions that exist outside of the traditional realm. These will be expanded on for purposes of the White Paper.

B. Constitutional Law

A number of rights in the Bill of Rights are impacted by our use, exploitation of and relationship with animals. A selected non-exhaustive list of the rights include the following:

- Section 10: The right to human dignity; an overarching right that is impacted by the fulfillment or non-fulfilment of many of the rights in the Bill of Rights.
- Section 11: The right to life that is similarly impacted by many other rights including the right to food, water and healthcare, the right to an environment that is not harmful to one's health and well-being, the right to work and many others.
- Section 24: Right to an environment that is not harmful to one's health or wellbeing. A number of laws such as the NEMA and its framework and the National Health Act are premised on this provision.
- Section 27: Right to food and water on which the National Water Act is premised. South Africa has also developed national policies and strategies to protect and fulfill this right as highlighted in this Working Paper.
- Section 33: Right to Just Administrative Action on which the Promotion of Administrative Justice Act is premised.

Other critical rights that are impacted by the country’s food system include children’s rights, workers’ rights and freedom of conscience, religion, thought, belief and opinion. The ultimate consideration is to accept that these rights are interdependent, indivisible and interrelated and therefore the country’s food system has an equally intertwined impact on the rights of the citizens.

C. Administrative Law

Administrative law is a key area for animal advocacy and protection efforts relating to government accountability and actions, as well as a tool that can be used to protect human rights and health and
the environment with the key aim of transforming the country’s food system. This includes the relevant Constitutional right to just administrative action, which can be achieved through the use of the Promotion of Administrative Justice Act 3 of 2000 ("PAJA") and other more specific legislation and tools – depending on the circumstances such as the administrative law provisions in NEMA and NEMBA, among others.

Whenever there is administrative action, administrative law can be used. Administrative law is utilised widely to challenge Government and other bodies’ actions and omissions on certain issues. These can be direct animal matters, or more lateral ones relating to environment, climate, regulation, public participation and various other areas. Examples include administrative actions relating to the issuing of permits for specific activities (whether this is done at a National or Provincial Level and in terms of various enabling legislation). Another example is the recent (22 June 2022) communique by the Executive Office of Agricultural Product Standards addressed to all processors, importers and retailers of meat analogues advising them not to use legislated processed meat labels to mark or label analogue meat. The decision was made in terms of the Agricultural Product Standards Act, (Regulations Regarding the Classification, Packing and Marking of Processed Meat Products Intended for Sale in the Republic of South Africa, 1283 of 2019) but without adequate consultation or advance notice to the affected actors. Such an administrative action can be challenged on various bases including the issue of lack of consultations.

Potential in future challenges are innumerable as there are a number of problematic policies, as well as problematic administrative actions. This includes for example, the owning and use of certain animals – including wild and domestic animals.

The Promotion of Access to Information Act ("PAIA") can be utilised to obtain information from public bodies. PAIA was enacted in compliance with section 32 (1) of the Constitution. Chapter 4 of PAIA enumerates the specific grounds on which access to a document may or must be refused, and these decisions constitute administrative acts. These provisions constitute a limitation on the right guaranteed in section 32(1). Although this limitation can probably be regarded as constitutionally acceptable, these provisions must be narrowly construed. In the absence of a ground for refusing the information, PAIA and the Constitution require that access must be given. The Courts have held that “[u]nder our laws, the disclosure of information is the rule and exemption from disclosure is the exception. The default position in respect of access to information held by the state is that of disclosure.” (M & G Media Ltd v President of the Republic of South Africa and Others [2013] 2 All SA 316 (GNP)). (emphasis added)

Other laws also have specific provisions relating to administrative law, including section 2 principles of NEMA, which serve as guidelines by reference to which the Department of Environment, Forestry and Fisheries (DEFF) is required to exercise any function relating to the protection of the environment, incorporate the principles that “the participation of all interested and affected parties in environmental governance must be promoted”, that “decisions must take into account the interests,
needs and values of all interested and affected parties” and that “decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law”.

In a case from 2014, the pork industry attempted to use PAIA against the NSPCA. In summary, a complaint was lodged with Lephalale SPCA (SPCA) regarding the poor living conditions of pigs in Vus’ithemba Piggery Vaalwater situated near Vaalwater, Limpopo Province (Piggery). The NSPCA obtained an warrant and investigated. They issued directives including that ‘sick/injured or otherwise unsound pigs must be treated immediately by a veterinarian or the pigs must be humanely destroyed without delay. The owner of the Piggery engaged the services of Veterinarian who recommended, among others, that ‘the animal in G8 who is battling to get up is to be sent for slaughter as possible. SAPPO requested access to certain documents and reports in possession of NSPCA pertaining to Vus’ithemba Piggery. The NSPCA provided information except for certain information, including any complaints received by the NSPCA, upon which the inspector’s reasonable suspicion was based enabling him to testify under oath in order to obtain the warrant. The NSPCA refused on the ground that the disclosure of the record consist of information supplied in confidence by the complainant. They argued that if they are compelled to disclose the details of complaints made to them or any SPCA, the disclosure could reasonably be expected to prejudice the future supply of similar information from persons wishing to remain anonymous.

SAPPO sought relief on certain sections of PAIA and rights to privacy of complainant. The court said that SAPPO’s right to information was infringed but asked whether it was justifiable. The court found that in the particular case, the complaint was justified as there was animal cruelty. It noted that there is a duty to protect the confidentiality of the complainants. It found that the protection of privacy of the complainant and protection of confidentiality of the information given by NSPCA is reasonable justifying the limitation in the constitutional right of access to information.

Other national and provincial laws also find application here, depending on the action and provide opportunities to challenge decisions that relate to animals.

**D. Criminal Law**

As aforementioned, the APA is a criminal statute. There are also other laws that have criminal provisions relating to animals – such as for example wildlife crimes. Opportunities exist to bring prosecutions for crimes against animals (and potentially the environment). The NEMA and its framework also provides for offences and the applicable sentences for breaching the provisions of these laws.

Notably, private parties may bring prosecutions, subject to certain conditions, including if a *nolle prosecuri* is obtained, however this is a long and potentially otherwise problematic process. A point to note is

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http://www.saflii.org/za/cases/ZAGPPHC/2014/877.html
that in the event that it becomes absolutely necessary, this is a redress mechanism that can be employed. Corruption should also be considered as an important factor relating to animal use and exploitation in South Africa.

E. Business and Corporate Law

Given the role of corporations in society, corporate law is an area which can and should be further explored. One example is the area of corporate social responsibility as well as shareholder and director accountability, to name but a few. The Companies Act\(^{522}\) in section 7, has a number of notable purposes which relate to the food system in South Africa. These include among others; promoting the development of the South African economy by encouraging transparency and high standards of corporate governance as appropriate, given the significant role of enterprises within the social and economic life of the nation; and reaffirming the concept of the company as a means of achieving economic and social benefits. Companies and juristic persons are bound by the Constitution and the Bill of Rights and another one of the purposes of the Companies Act is to promote compliance with the Bill of Rights as provided for in the Constitution, in the application of company law. Corporate Social Responsibility is a key area to assist companies to do the right thing. There is also increasing discourse around the role of corporates in human rights law.\(^{523}\) Similar justifications can be found in relation to protecting animals and the environment. The King IV Report\(^{524}\) is another important source for company governance and stakeholders such as directors. The internal policies and constitutional documents of companies are also notable sources for obligations for. This is an important avenue for organisations undertaking corporate engagement work to achieve better welfare standards for animals through initiatives such as, for example: The Better Chicken Commitment.\(^{525}\)

F. Tax Law

Tax law is another area that is being utilised for animal protection. Possibilities include the introduction of a possible meat tax as a way of reducing consumption.\(^{526}\) The Carbon Tax Act was included in the section on Environmental Law above.


\(^{523}\) Cambridge Studies in Constitutional Law Ser.: Fundamental Rights and the Legal Obligations of Business by David Bilchitz (2021)

\(^{524}\) https://www.iodsa.co.za/page/king-iv

\(^{525}\) https://betterchickencommittance.com/

Another example might be increasing tax on harmful products and the use of the Customs and Excise Act. In the same vein, tax incentives can be used to lower the costs of alternatives and encourage broader consumption by the generality of the population. Similarly, with the introduction of a carbon tax this should inevitably consider the carbon related to animal agricultural activities as well as alternatives.

In 2013, a case arose relating to anti-dumping duties imposed under the Customs and Excise Act 91 of 1964. It also related to the effect of termination of World Trade Organisation Agreement and effect of regulations promulgated under the International Trade Administration Act 71 of 2002. Dumping is “a situation of international price discrimination, where the price of a product when sold in the importing country is less than the price of that product in the market of the exporting country.”

While other products where included, this case was notable for the anti-dumping duty imposed on chicken meat portions emanating from the United States of America and it implicated a number of local poultry companies. These duties are critical to protect the local market and are an important mechanism in the context of the South African food system. Any introduction of tax on products will implicate the cost of such products and have knock on impacts for the South African public. This needs to be carefully considered given the extreme rates of poverty and vast inequalities in the country.

G. Competition Law

Competition law is another emerging area being utilised in the animal law realm; particularly, where unfair practices are carried out by animal exploitation industries. This area of law is being increasingly utilised in the realm of animals as food and problematic practices by powerful companies. The Competition Act explicitly notes in its preamble that apartheid and other discriminatory laws and practices of the past resulted in excessive concentrations of ownership and control within the national economy, inadequate restraints against anti-competitive trade practices, and unjust restrictions on full and free participation in the economy by all South Africans; that the economy must be open to greater ownership by a greater number of South Africans; that credible competition law, and effective structures to administer that law, are necessary for an efficient functioning economy; that an efficient, competitive economic environment, balancing the interests of workers, owners and consumers and focussed on development, will benefit all South Africans.

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529 World Trade Organisation: https://www.wto.org/english/tratop_e/adp_e/adp_info_e.htm
The act was enacted to provide all South Africans equal opportunity to participate fairly in the national economy; to achieve a more effective and efficient economy in South Africa; provide for markets in which consumers have access to, and can freely select, the quality and variety of goods and services they desire; to create greater capability and an environment for South Africans to compete effectively in international markets; restrain particular trade practices which undermine a competitive economy; regulate the transfer of economic ownership in keeping with the public interest; to establish independent institutions to monitor economic competition; and to give effect to the international law obligations of the Republic.

The Competition Commission is a statutory body constituted in terms of the Competition Act, No 89 of 1998 by the Government of South Africa empowered to investigate, control and evaluate restrictive business practices, abuse of dominant positions and mergers in order to achieve equity and efficiency in the South African economy. The Commission is empowered by the Competition Act to investigate, control and evaluate restrictive business practices, abuse of dominant positions and mergers in order to achieve equity and efficiency in the South African economy.531

Their website explicitly mentions “a growing, deconcentrated and inclusive economy”.

Given the market composition of animal agriculture, it is important to properly assess any implications in competition law and specifically in light of the Competition Act’s objectives. Issues that arise in the context of competition law include but are not limited to collusion and price fixing532 and mergers – such as dairy companies,533 and other issues arising in terms of the Competition Act.534

Some of the arguments most brought out relating to limiting meat consumption are that this would lead to job losses and food insecurity. This is true because these industries have a huge hold on the country’s economy and food security and therefore limiting their operations would inevitably impact the economy and food security. This can be addressed by ensuring the emergence and success of more independent producers, especially those working on alternatives.

It is important to consider and further research in this area and how this relates to various players and actors in the food system across different issues.

In 2020, the South African Competition Commission eliminated the use of exclusive lease agreements in South Africa’s retail industry. South Africa’s four major supermarket chains (Shoprite, Pick n Pay, Spar, and Woolworths) had entered into exclusive lease agreements with shopping mall landlords for decades, preventing one another and small, medium, and micro enterprise (SMMEs) grocers from

531 Competition Commission https://www.compecom.co.za/
533 https://www.comptrib.co.za/cases-archived keyword search “dairy”
opening stores at particular shopping malls. South Africa’s Competition Commission announced additional details.\textsuperscript{535}

Competition law has the potential to be a useful tool in tackling harmful practices, particularly considering the composition of South Africa’s retail market.

**II. Property Law and Land**

Animals are regarded as property in the law. Accordingly, any efforts relating to animals have the potential to impact on property rights in South Africa. The right to property is protected in section 35 of the South African Constitution. When property rights are implicated by animal agricultural activities, there are opportunities to utilise legislation protecting these rights. Other areas of law such as zoning laws and bylaws find application here. Land rights is another key focal area which must be properly considered as it intertwined with agriculture in South Africa. There are a few pieces of key legislation that relate specifically to property and owner obligations towards animals.

**1. Animal Improvement Act (62 of 1998)**

The main object of the Act is “to provide for the breeding, identification and utilisation of genetically superior animals in order to improve the production and performance of animals in the interest of the Republic.”\textsuperscript{536} It repeals the Livestock Improvement Act (25 of 1977) and its amendments. The Act has extensive provisions for the regulation of animal improvement activities, including insemination, semen collection, embryo collection, embryo transfer and animal breeding and creates offences related to engaging in these activities without getting the necessary registrations, permits or without following the laid down procedures. These provisions can be construed to offer protection to animals by eliminating the operations of unlicensed operators or the use of unlawful or prohibited improvement processes. This is however inadequate as the Act does not specifically provide for animal protection and welfare.

In addition, some of the animal improvement approaches provided in the Act, such as artificial insemination are viewed as a form of cruelty to animals, and a form or sexual violation or rape.\textsuperscript{537}

Effectively the purpose of animal improvement as provided for in the Act is not for the benefit of


\textsuperscript{536} Animal Improvement Act, Preamble

\textsuperscript{537} People for the Ethical Treatment of Animals (PETA) ‘Is your food a product of rape’ available at: \url{https://www.peta.org/features/rape-milk-pork-turkey/} (accessed at 28 May 2022)
animals, but for the benefit of human beings through improving food security, better animal yields and returns for the animal farmers and economic development for the country.


The purpose of the Act is to consolidate the law relating to the identification of animals in the country. According to the Department of Agriculture, Forestry and Fisheries, animal identification “act[s] as a first line of defence against stock theft, enhance[s] identification of property and support[s] traceability.”\(^{538}\) It is estimated that the South African economy loses ZAR1.4 Billion\(^{539}\) annually due to stock theft hence the importance of this legislation. However, some of the identification procedures such as branding and ear tagging cause pain to animals thereby impacting their welfare. Branded animals often show signs of pain for weeks.\(^{540}\)

3. Stock Theft Act

Stock theft is a major issue in South Africa and is a major challenge for animal farmers. It is a priority crime which has far-reaching impacts for the sector. The Stock Theft Act\(^ {541}\) aims to consolidate and amend the laws relating to the theft of stock and produce. There are additional policies and laws relating to the theft of animals which have not been expanded on for purposes of this Working Paper.

I. Intellectual Property Law

Intellectual Property is relevant to both animal agriculture as well as alternatives. In the context of animal agriculture, intellectual property issues arise as to genetics of animals, methodologies used throughout the process to produce animal products and other matters.

Due to the nature of certain alternatives, particularly for cultivated meats, many of these are patented.\(^ {542}\) While some suggest that patent protection can secure the future of alt meat\(^ {543}\) and protecting innovation is essential, this issue must be carefully considered in the South African context particularly as an issue of access and social justice, particularly given the current realities. This area of law must be further researched and warrants further discourse.


\(^ {542}\) https://www.lexology.com/library/detail.aspx?g=be46d664-c3ac-4d6f-a6d0-db296b494e2

J. Nuisance Law

In other jurisdictions, such as the USA, Nuisance Law has increasingly been used in legal efforts against terrestrial factory farming including by surrounding and neighbouring communities whose rights to enjoy their property are impacted by farming activities.

This area of law warrants further research and exploration.

K. Insurance Law

There are specific policies for farmers and other stakeholders in the animal agricultural sector aimed to protect them from losses due to an increasing number of risks. These provide cover for losses relating to death of the animals due to fire and lighting; attacks by wild animals; rain, freezing or cold conditions, or plant poisoning.

The South African Insurance Act regulates various aspect pertaining to insurance in South Africa. This area of law warrants further research and exploration.

L. Other Legal Tools

While not expanding on for purposes of this White Paper, there are other areas of the regulatory regime in South Africa which present opportunities to transform the food system away from intensive animal agriculture and towards alternatives. Most notably, these include in the financial sector.

COMPONENT 2: REGULATORY LEVELS AND MANDATES

A. Introduction

This Working Paper has largely focused on legislation at a national level, however the regulation of food systems is done at various levels. One should not discount legal and policy reform and initiatives at provincial and local levels which have the potential to greatly impact on the food systems.
B. Provincial Level Legislation

According to Schedule 5 of the Constitution, functional areas of exclusive provincial legislative competence include among others abattoirs. As abattoirs are an essential link in the chain, it is possible to work towards law reform at a provincial level in this area.

It is often easier to get legislation passed at a provincial level than at a national level.

C. Local Level Legislation

There are many ways through which local level laws can assist in moving away from ASFs towards alternatives. One example is to strategically integrate resilient food policies into urban planning using a systems approach which recognises the interconnectedness and interdependence of system components. Local municipalities have jurisdiction over a number of important areas which intersect with food systems.

D. International Law

South Africa is required to take international law into account, as per the Constitution. The country is a party to a number of key international agreements that relate to our use of and the attendant impact on animals. Some examples include the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity (CBD) and the Paris Agreement all referred to throughout this Working Paper. Other sources of international law include the World Organisation for Animal Health, and more specifically, their animal welfare codes.

Other important international law to be further explored include the CODEX, SDGs, and other treaties.

International trade law is another legal mechanism which warrants further exploration in light of the multitude of products exported out of and imported into South Africa and the potential impacts of this on the South African producers as well as the health and wellbeing of the South African public.

E. Foreign Law

There have been a number of positive (and negative) developments for animals in the law in foreign jurisdictions. South African courts may consider foreign law, in terms of the Constitution. These developments may prove useful for comparative purposes. For purposes of the White Paper, an analysis of developments in certain foreign law jurisdictions will be included in order to consider whether such approaches might be feasible in South Africa in light of its legal system and context. More specifically, progressive legal and policy reforms relating to Avenue 1 (shifting away from ASFs) and Avenue 2 (shifting towards alternatives) will be considered and included as part of the final recommendations.

F. Governmental Departments and Mandates

The mandates of a few governmental departments were further explored in Section 1. However, it is important that there is co-operation among these governmental departments particularly where there is overlapping jurisdiction and mandates. This is the case for many aspects within the food system. In the context of alternatives for example, the regulation thereof potentially straddles three governmental entities (maybe more) being DALRRD, DoH and DTIC.

In the USA, given a similar overlapping of mandates issue and lack of clarity around regulation in in 2019, the USDA and FDA announced “a formal agreement to jointly oversee the production of human food products made using animal cell culture technology and derived from the cells of livestock and poultry to ensure that such products brought to market are safe, unadulterated and truthfully labeled. Under the agreement, FDA will oversee cell collection, growth, and differentiation of cells. FDA will transfer oversight at the cell harvest stage to FSIS. FSIS will then oversee the cell harvest, processing, packaging, and labeling of products. FDA and FSIS also agreed to develop joint principles for the labeling of products made using cell culture technology under their respective labeling jurisdictions. Seafood, other than Siluriformes fish, falls under FDA’s jurisdiction, whereas meat, including Siluriformes fish, and poultry are under FSIS’ jurisdiction.”

A similar agreement or arrangement may be considered in the context of alternatives where such overlapping / gaps in regulation exist.

In South Africa, the principles and regulatory framework governing “Co-operative Governance” will be essential for the proper regulation of food systems which are currently not holistically regulated, particularly in light of the far-reaching consequences across sectors as highlighted in this Working Paper.

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PART VII: OTHER SOCIAL JUSTICE, RIGHTS, COMMUNITY ASPECTS

A. Cultural and Religious Rights and Considerations

South Africa is fondly known as the “Rainbow Nation”, a term first coined by Archbishop Desmond Tutu and later by Nelson Mandela in a post-apartheid South Africa. There are 11 official languages and a massively diverse population across all demographics.

There are several complexities with respect to culture and religion and ASFs. One example can be seen by the fact that the South African Public Holiday on 24th September, which is Heritage Day, has become synonymous with “Braai Day”. “Braaing” is comparable to an American style barbeque which typically involves cooking different meats on a coal or gas “braai”. According to sources, Heritage Day was originally intended to recognise King Shaka, who was known for uniting the Zulu nation. Each year South Africans would gather at his grave to honour him. While an attempt to have the day recognised as “Shaka Day” was rejected, it was ultimately endorsed as a public holiday known as Heritage Day in 1995. Thanks largely to a 2005 media campaign, the day is largely known as Braai Day.

This is one example illustrating how in recent time, the eating of animal products across various cultures in South Africa has become deep rooted. The issue of culture and religion in South Africa is wrought with additional complexities particularly given its past and the system of apartheid which denied the recognition and practising of many of these.

The right to Language and Culture is protected in Section 30 of the Bill of Rights in the Constitution and the Right to Cultural, religious and linguistic communities are protected in Section 31 of the Bill of Rights. There are also other various protections in law as well as in customary law, which is recognised in South Africa.

There are additional historical issues including in relation to economic and social status, among others. While further discussion around culture and religion is outside the scope of the Working Paper, it suffices to say that the consumption and preparation of ASFs has become deeply entrenched in modern South African culture and in certain religions. These cultural and religious considerations respectively are critical considerations in discourse around transforming food systems and the appropriate care, consideration and sensitivity are needed to navigate these hugely multifaceted contexts.

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551 https://www.gov.za/heritage-day
552 https://nationaltoday.com/heritage-day/
The Meat Safety Act allows animals to be slaughtered outside of abattoirs if the slaughter is “for own consumption or for cultural or religious purposes.” It can be argued that the slaughter of animals for cultural and ritual purposes is provided for in the Constitution under section 15 which provides for “freedom of conscience, religion, thought, belief and opinion.” It is also a reality that the ritual slaughter of animals is an integral part of many religious practices and ritual performances in South Africa. The Commission for the Rights of Cultural, Religious & Linguistic Communities (CRL Commission) issued a “Guidelines Report on the African Ritual of Animal Slaughter” in 2009. This followed a public outcry occasioned by the ritualistic slaughter of a bull by a leading politician in the country following his release from prison.

In producing the report guidelines, the CRL acknowledged the rights of people to slaughter animals for ritual purposes but equally acknowledged that in doing so, those who slaughter should take into account the rights and sensitivities of others who may be opposed to such practices. The question remains a highly contentious and divisive one in the context of South Africa, and probably one that requires more engagement and regulation, if not to ban or limit the cultural and religious slaughter of animals, then to provide for scientifically proven humane ways of slaughter without negating the attendant cultural and religious considerations.

III. Children’s Rights

The South African Constitution protects the rights of children to basic nutrition. In the context of transforming the country’s food system, efforts must therefore focus on the impact of available and proposed foods and their sources in providing basic nutrition to children and the protection of their right to food and health. Research shows that South Africa has stalled in its efforts on marketing of unhealthy food to children. Previous efforts have focused on addressing the issue of malnutrition and overnutrition (obesity) in the country with indications showing that both indicators are over the global average and that the marketing of food to children in the country is largely unregulated compared to the developed world.

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553 Meat Safety Act, Section 7 (2) (a)
555 IOL ‘Yengeni Bull Slaughter Defended’ available at: Yengeni bull slaughter defended (iol.co.za) (accessed 8 April 2022)
557 Constitution of South Africa, Section 28 (1) (c)
559 Ibid.
In 2015, the Government released the Strategy for the Prevention and Control of Obesity in South Africa.\textsuperscript{560} The Strategy notes in part that:

“Unhealthy diets are a risk factor for non-communicable diseases. The risk factor starts in childhood and builds up throughout life. Evidence from systematic reviews conducted by [the World Health Organisation] concluded that advertising unhealthy foods to children is extensive and widespread. This can influence children’s food preferences, purchase requests and consumption patterns.”

Although no tangible efforts have been made to date in ensuring the creation of a regulatory framework to support the strategy and encourage healthy eating amongst children, controlling obesity and regulating marketing of unhealthy food amongst children in the country, it is a programme that the Government still seems determined to pursue.\textsuperscript{561} In efforts to improve the nutritional and health rights of children, the issue of animal protein versus plant-based protein can also be included as part of law reform. The animal rights approach can also be included to ensure that the education and awareness efforts on animal rights and awareness issues are brought to the attention of children at an early age as they begin to make conscious decisions about their food choices.

\section*{IV. Workers’ Rights and Issues}

Workers and their rights are protected in various ways in the South African Constitution. Most notably section 23 of the Bill of Rights relates to “Labour Relations”\textsuperscript{562} which states that everyone has the right to fair labour practices, among others. Research shows that workers in the insensitive animal agriculture industry suffer a significant level of rights violations, ranging from bad living conditions and low wages. In its handbook on Farmworkers and Human Rights, the South African Human Rights Commission noted that “Farm workers, in general, form a vulnerable and marginalised group due to a number of social and economic conditions.”\textsuperscript{563} This vulnerability manifests in the form of poor remuneration, long working hours, poor housing conditions, forced and child labour, failure to provide adequate leave allowances and unfair termination of labour amongst others.\textsuperscript{564} In the spirit of creating interlinkages and interdependencies between human and non-human animals and the recognition of these

\textsuperscript{560} Department of Health, Strategy for the Prevention and Control of Obesity in South Africa 2015-2020
interdependencies from a rights perspective, the rights of farm workers in legislation should be inextricably linked to the rights and welfare of the animals that they look after. Protection of both will inevitably bring benefits to both the animals and the farm workers.

In addition, those who work in the slaughter of animals have to experience the daily violence that animals go through during slaughter and as a result suffer from mental health, including post-traumatic stress disorder.

The NEMA also provides protection for workers who refuse to undertake work that has a negative impact on the environment. Section 29 (1) of the Act provides that:

“Notwithstanding the provisions of any other law, no person is civilly or criminally liable or may be dismissed, disciplined, prejudiced, or harassed on account of having refused to perform any work if the person in good faith and reasonably believed at the time of the refusal that the performance of the work would result in an imminent and serious threat to the environment.”

These are strong protections that can be used to protect the rights of farm workers and others working on intensive animal farming projects in light of their negative impact on the environment. The strength of the provisions lie in the fact that they override any other laws, including employment and labour laws that may otherwise be used by employers to punish, discipline or dismiss workers for refusing to perform environmentally hazardous work. The NEMA defines the environment as “the surroundings within which humans exist and that are made up of…animal life…”\(^{565}\) The provision can therefore clearly be used to support workers who refuse to work in situations that cause harm, suffering or cruelty to animals or otherwise impact the rights, life, wellbeing and dignity of the animals that the workers will be attending to or looking after.

Studies including from a commercial abattoir in South Africa\(^{566}\) illustrate the risk potential of employees suffering from post-traumatic stress syndrome.

In addition to psychological impacts, there are a number of physical impacts on workers across stages of animal agriculture. Further research is needed and particularly how these issues interact with relevant regulation including for example the Occupational Health and Safety Act\(^ {567}\) and other labour related regulation and protections offered to workers.

Further research should also be done in respect of unions within the agricultural sector and issues faced by these organised units and their members.

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565 National Environmental Management Act, Section 1 (xii)
V. Womxns’ Rights and Issues

The protection of animal rights has been shown to have a spinoff effect on the rights of humans. For example, research shows that “efforts to reduce cruelty to animals are likely to reduce the tolerance that communities have for interpersonal violence.” Cruelty to and violence towards animals often results in a violation of animal rights such as the right to life and health. Yet a cessation of such cruelty and violation and its correlation with ending interpersonal violence would be hugely beneficial to South Africa and its people. The country is currently ranked as one of the most violent countries in the world outside of a war zone and the President has referred to gender-based violence in the country as the second pandemic (to COVID-19).

GBV and violence generally have a negative impact on the country’s economic development and gross domestic product, causes mental and physical harm to victims and perpetrators alike, and in extreme cases, causes death. Even with significant data limitations, a KPMG report estimated “the cost of GBV to be between at least R 28.4 Billion, and R 42.4 Billion, or 0.9% and 1.3% of GDP.” Laws to prevent violation of animal rights should therefore take this into consideration, given the positive role that reduction of violence generally and GBV in particular will have on human health and well-being as well as the economic development of the country.

Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 of 2007 explicitly includes animals throughout the act. It also defines the crime of bestiality broadly to mean:

“A person (‘A’) who unlawfully and intentionally commits an act

(a) which causes penetration to any extent whatsoever by the genital organs of

(i) A into or beyond the mouth, genital organs or anus of an animal; or

(ii) an animal into or beyond the mouth, genital organs or anus of A; or

(b) of masturbation of an animal, unless such act is committed for scientific reasons or breeding purposes, or of masturbation with an animal, is guilty of the offence of bestiality.”

Increasingly work is being done in South Africa on the intersection on the rights and interests of womxns and those of animals. In the realm of animal agriculture, this includes in relation to “the
gendered nature of the marketing and consumption of meat in South Africa is evident in multiple media.\textsuperscript{573}

\section*{COMPONENT 2: ROBUST HUMAN AND ANIMAL RIGHTS PROTECTION AND REDRESS MECHANISMS}

\subsection*{I. Select State Institutions Supporting Constitutional Democracy \textit{(Section 9 Institutions)}}

Amongst its other functions, the South African Human Rights Commission ("SAHRC") must receive information from the relevant organs of states on the measures that they have taken towards the realisation of the rights in the Bill of Rights concerning...health care, food, water...and the environment.\textsuperscript{574} This is a pertinent human rights monitoring role of the Commission and it assists in ensuring compliance with these constitutionally protected rights. In this context, the Commission can be requested through advocacy, engagement and filing of complaints to monitor the implementation of these rights in the context of the country’s national food system and sectoral human rights implications. The same provisions can also be utilised to assess the implementation of these rights in relation to animal rights, welfare and protection, particularly in the relation to the rights concerning the environment.

The placement of these rights as requiring specific implementation monitoring by the SAHRC is because socio-economic and environmental rights are often placed on the back-burner since the Constitution allows the government to avail these rights progressively and “within its available resources.”\textsuperscript{575} The non-availability of resources is therefore often used as an excuse for non-implementation, and without monitoring such as from the SAHRC, such rights can remain largely unfulfilled.

The Commission is also required to investigate violations and provide appropriate redress where rights have been violated, carry out research and educate South Africans about their human rights and obligations.\textsuperscript{576} In the context of redress, it is important for animal rights and protection organisations to take steps to report animal rights violations to the Commission in order to build the necessary jurisprudence in the country regarding the needs of animals from a rights perspective. This will also require the Commission to exercise its research mandate into this area of rights and the law, and provide the required information and education to South Africans about the interlinkages between

\textsuperscript{574} Constitution of South Africa, Section 184 (3)
\textsuperscript{575} Constitution of South Africa, Sections 25 (5), 26 (2), 27 (2) and 29 (1) (b)
\textsuperscript{576} Constitution of South Africa, Section 184 (2)
animal welfare and rights and human rights and the law, and the place of animals in the discourse on transforming the country’s food system.

As this report has already shown, the Commission for the Rights of Cultural, Religious & Linguistic Communities (CRL) has an important role to play in the protection of animal rights and welfare in respect of the slaughter of animals for religious and ritual purposes. The last time the Commission made a pronouncement and endorsed the slaughter of animals for ritual and religious purposes, despite the attendant cruelty and welfare concerns in light of the manner of slaughter, was in 2009. A lot has changed since then, regarding public views on the matter and on animal rights. Often law reform is informed by public positions on issues, and it may therefore be an appropriate time for the Commission to revisit the issue and in the process assist in the animal law reform process. This is in line with its mandate “to monitor, investigate, research, educate, lobby, advise and report on issues concerning the rights of cultural, religious and linguistic communities.”577

II. Legal Aid and Rights Organisations

Litigation to protect human rights is often very costly. As a result, the protection of constitutionally protected rights is often hampered by the cost of litigation.578 This has the effect of depriving the poor and vulnerable of access to justice. As such in a country where many people are unable to access justice, it may appear counterintuitive to undertake expensive litigation in protection of principles of animal rights. It is in this context that organisations such as Legal Aid South Africa, the Law Society of South Africa and the Legal Practice Council can provide legal aid and pro bono legal services respectively in order to protect the animal rights and welfare, linking these rights to human rights. This helps in protecting both animal and human rights. This must be done through linking animal rights protection to the protection of human rights so as not to alienate the discourse from the broader human rights and social justice issues.

III. Research, Training and Awareness Raising

Research and Training are critical components in animal law reform and in the development and utilisation of alternative protein sources in South Africa. It is also important in ensuring that citizens have the requisite information about their food sources and the implications of the food they eat on their health and wellbeing, in understanding and addressing attendant human and animal rights protection issues as well as environmental protection.

The Convention on Biological Diversity (“CBD”) for example, enjoins states parties to “Establish and maintain programmes for scientific and technical education and training…Promote and encourage research which contributes to the conservation and sustainable use of biological

577 Constitution of South Africa, Section 185 (2)
diversity.”⁵⁷⁹ The Constitution of South Africa protects the right to access to information.⁵⁸⁰ The Constitution and other legislative provisions such as the Protection of Access to Information Act (2 of 2000) further provide institutional frameworks for the provision of and access to information for members of the public in order for them to have the necessary basis for the protection of their and other people’s rights. These institutions, and non-state and academic institutions must therefore work to provide the requisite information to members of the public to inform their food choices, and their efforts to fight for the protection of animal rights and welfare in the country.

IV. Collaboration across Social Justice Movements

Given the far-reaching consequences and injustices from the current food systems, there exists numerous opportunities for collaboration of organisations across the social justice spectrum. This includes among governmental and non-governmental organisations (NGOs).

Through target and co-ordinated efforts, better protection can be achieved for both human and nonhuman animals and the environment on which they rely.

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⁵⁷⁹ United Nations Convention on Biological Diversity, Article 12 (a) and (b).
⁵⁸⁰ Constitution of South Africa, Section 32
SECTION 4

INITIAL RESEARCH FINDINGS
I. Introduction and Methodology

As part of the development of this Working Paper, ALRSA undertook two methods of data collection from different stakeholders: 1. Key Informant Interviews (“KII”); and 2. A Public Survey.

ALRSA sought input from relevant key stakeholders working on animal law and rights, alternatives, environmental law and human rights amongst others. A key informant guide with key questions for consideration was sent to over 100 stakeholders representing those in the following sectors:

1. Animal Product Alternative Companies / Vegan / Vegetarian
2. Cell-based Companies
3. Food Industry Leaders
4. Meat Production Companies
5. Retailers
6. Animal Rights and Welfare Advocates
7. Lawyers
8. Key International Organisations In Alternative Foods*
9. Key Academic Institutions/Academics In Food, Health, Environment And Animal Welfare
10. Food Systems Organisations
11. Human Rights Advocates
12. Environmental / Climate Change Defenders
13. Agricultural Professors / Academics
14. Human Rights Non-Profit Organisations
15. Restaurants
16. Animal Agricultural Organisations And Associations

Some of the stakeholders responded in writing whilst others provided their responses through online (Zoom) interviews.

The purposes of the key informant interviews were to:

- Identify and understand the current regulatory framework in respect of animal agriculture in South Africa including legislation, policies, standards, practices and customs pertaining to animal rights and welfare, agriculture and food security, consumer protection, environmental law, human health and human rights among others (‘factors’) in South Africa;
- Assess the adequacy, gaps, effectiveness or otherwise of legal, policy and institutional frameworks in South Africa in protecting and promoting the above factors;
- Assess the extent to which various stakeholders (both state and non-state) and their interventions are negatively impacting or helping to transform the country’s food system from animal-based to alternative protein;
Understand the transformation of South Africa’s food system in respect of these factors; and
Obtain specific recommendations on law, policy, institutional and practice reform aimed at transforming the country’s food system, protecting attendant human and non-human animal rights and environmental protection.

Many of the key respondents were generally familiar with the alternatives that are available in the market because they identified as vegan or vegetarian, were food industry players, academics in the area of environmental rights/law and protection, animal welfare/rights advocates or state actors working in the agricultural sector. One respondent noted that wholefood plant protein should actually be viewed as the primary protein (and not the alternative). This includes grains, legumes/lentils/beans (including edamame, tofu, etc), vegetables, nuts and seeds, all of which should form the base of all meals. She noted that plant-based protein products manufactured to mimic meat could be the alternative. Another noted her lack of fondness for what she called the “so-called alternative” preferring instead to eat high protein vegetables, beans and nuts. Respondents were also of the view that there is a growing and glaring trend of food systems not providing nutritious and healthy food, particularly for poor communities, with poverty, waste and distribution at the centre of this reality. The budding middle class in South Africa post 1994 culminated in increased animal food demand and its consumption, with huge impacts on people’s health.

II. General Reflections

There was a view that globally, the reliance on animal protein is unsustainable. In South Africa, the issue is more complex. The long term picture is that if the country stopped animal agriculture it would likely produce enough calories to feed all South Africans purely from plant sources. However, meat is an important part of the diet of many South Africans, culturally. The country therefore needs to find a way to move away from animal protein to plant protein that is sensitive to this. Economics plays a big part in this too as many South Africans live in poverty. Land also plays a part in this discussion and there should be a link between the land question and the issue of alternative sources of protein. Historically, Black South Africans have not had access to land ownership and this has played a massive role in the economics of the country. Conversations about farming and the farming of animals cannot be had without bearing this in mind.

It was also noted that farming is one of the cornerstones of SA’s economy – including animal agriculture, and that the government has a responsibility to support the country’s agriculture industry – most especially because of its importance in relation to food security. As such, the conversations

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581 Anonymous, attorney, 29 June 2022
582 Anonymous, Professor of Law, 30 June 2022
583 Mandla Gqamlana, Programmes Director, Coalition of Animal Welfare Organisations
584 Katrina Lehmann-Grube, 28 June 2022
need to be about finding alternative forms of agriculture that will effectively and sustainably feed the nation.  

Another observation was that there is too much investment, subsidies etc. provided to animal agriculture in the country and that animal agriculture and related industries had a significant hold on the government. Results were that environmental harms are ignored and there was even a movement to actively exclude animal agriculture from environmental regulation, for example from the Carbon Tax Act, despite its impact on the environment, including climate change.  

Respondents acknowledged that in general, there are some good laws, that if applied correctly, could provide many benefits for animals, humans and the environment. However, monitoring and enforcement of the laws are severely lacking with views being that a “free pass” is being given to animal agriculture.  

The intersectionality of issues under consideration was noted. These included the fact that industrial-scale animal agriculture is unsustainable, due to its impacts on land (soil), water (contamination and excess use), and air (particularly greenhouse gas emissions). Animal agriculture, particularly industrial-scale, is cruel to animals, and ignores the inherent dignity and sentience of animals. Animals are part of the environment, such that when they are harmed, the environment is harmed too. Further, harm to animals inherent in animal agriculture is harmful to the broader environment, and represents an environmental rights issue. A well-functioning environment is a necessity for the attainment of social justice, so downscaling consumption of animals is vital, given how harmful animal agriculture is to the environment. To achieve social justice and ensure food security, a just transition towards alternative, healthy, sources of protein, particularly for poor and vulnerable people, must be pursued. Excessive consumption of animal products is not conducive to human health or wellbeing in the long-term, justifying a transition away from animal products towards more sustainable alternatives.  

III. Culture  

Key informants noted that culture has a huge bearing on meat consumption in South Africa, a country that was described as highly conservative, resulting in citizens holding on to conservative views about health, religion and tradition, many of which are premised on animal slaughter and meat consumption. Resultantly, culture, religion and tradition were identified as a barrier to the transformation of the country’s food system.
Additionally in some African cultural mind-sets, beef is for example considered better than beans because it is more expensive than the latter. As such, to have meat on your plate is a sign of prosperity. The entrenched place of the “braai” in many, particularly Afrikaans households and social platforms is also a factor that will play a large role in a transition to plant-based protein in such communities. The number of cattle and other animals that one owns in many Black communities is also a sign of wealth and the attendant respect that one gains in the community.

It was also noted that in South Africa there are deeply traditional and sacred rituals that use animals which are justified because of their cultural and spiritual significance. It is important that this is factored into the understanding of animal law and reform in the country.

IV. Animal Rights/Welfare or Protection

Respondents noted that South Africa largely depends on animal food sources and this dependence permeates into the perception South Africans have regarding animal rights. This perception results in cognitive dissonance relating to the sentience of the animal. Thus, the rights and welfare of animals are recognised to the extent that they do not interfere with the underlying perception South Africans have towards animals. There is however a need to recognise the animals’ rights to dignity and life, even though this may not be specifically mentioned in national legislation and the constitution.

There was also a view that there is a lag between government policy and legislation to guide implementation. For example, the government is pushing the intensive animal farming agenda without putting in place legislative measures to regulate how this should be done. Were such measures to be put in place first, the government would realise the impact of intensive agriculture on animal rights and welfare, the environment and human health and rights, leading to different policy approaches on the matter.

Additionally, the key informant interviews revealed that currently animal rights/welfare and/or protection is under-prioritised in South Africa, and the country can learn from and use efforts that have been employed in other jurisdictions, with a much longer history of animal rights/welfare/protection. Key examples were identified as the United States of America, Europe, and Australia. Developing countries that were identified as leading the way, including through the provision of direct legal rights to animals were Pakistan, Brazil, India, and Colombia amongst others.

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591 Anonymous, Attorney, 29 June 2022
592 Anonymous, Attorney, 29 June 2022
593 Fiona Miles, Four Paws in South Africa, 28 June 2022
594 Tokyo Ndlela, Attorney, 4 July 2022
595 Sheena Swemmer, Centre for Applied Legal Studies, 30 June 2022
596 Tozie Zokufa, Executive Director, Coalition of African Animal Welfare Organisations, 21 June 2022
597 Fiona Miles, Four Paws in South Africa, 28 June 2022
V. Environmental Rights or Protection (Land, water, air; soil)

Environmental rights tend to be seen differently from animal rights. Only when an animal interacts with the environment is it considered to be part of environmental law (e.g. wildlife or game animals). Therefore, environmental rights/protection has the habit of overlooking the environmental impact resulting from farmed animals, such as air pollution from the belching of cattle. Respondents showed concern over the current structure of South Africa’s food systems that is increasing meat consumption focused and increasing agriculture in an industrialised form. There are significant risks associated with these forms of farming and one of the most urgent concerns is the risk associated with climate change. For South Africa, changes in rain patterns, increased evaporation rates, higher temperatures, increased pests and zoonotic diseases and changes in diseases and pest distribution, loss of rangelands, reduced yields, spatial shift in optimum growing regions were seen as issues of critical concern.

One respondent gave statistics to the effect that over the past 20 years, South Africa has increasingly moved away from free-ranging livestock and stated that according to a 2019 World Wildlife Fund report, *Agri-Food Systems: Facts and Futures*, the South African feedlot industry now collectively markets close to 80% of total beef production in the country. In addition, there has been a 45.8% increase in the consumption of processed meat since 1994 and this is indirectly linked to the nature of concentrated animal-feeding operations. The consumption of chicken, beef, lamb and pork has risen since the 1970s, where previously maize and bread had played a more important role in both the South African economy and diets of South Africans. The effects on animal rights and welfare, human health and the environment under these conditions cannot be overemphasised.

In line with available literature, respondents noted that intensive farming and the increase of animal farming has many environmental risks, including increasing greenhouse gas emissions that are much larger than crop farming, hugely increased water and land resource use and increasing risk of zoonotic disease transmission. These all have negative impacts on socio economic development. With climate change impacts worsening, and given South Africa’s water scarcity, the country must seek to reduce intensive livestock numbers, especially as animals may require more water due to rising temperatures. Adaptation plans should also ensure access of herders and livestock to drinking water sources as a priority over increasing industrial farming installations. South Africa’s Nationally Determined Contribution, it was noted, determines the agriculture, forestry, and other land use (AFOLU) sectors to be a carbon sink. Estimates suggest that grasslands and savannas hold three quarters of the country’s carbon stocks, making them significant contributors to the national greenhouse gas budget. However, this does not fully consider the vulnerability of these ecosystems and soils to climate impacts nor that the storage is not always permanent.

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598 Tokyo Ndlela, Attorney, 4 July 2022
599 Tokyo Ndlela, Attorney, 4 July 2022
600 Fiona Miles, Director, Four Paws in South Africa, 28 June 2022
601 Fiona Miles, Director, Four Paws in South Africa, 28 June 2022
One respondent noted further that the FABLE Calculator estimates the land to sequester 127 Mt CO2e in 2050 on a ‘business as usual’ pathway and up to 200 Mt CO2e under a ‘sustainable’ pathway. This increase is based on a scenario where South Africa shifts towards the EAT-Lancet recommended diet and consequent significant decreases in meat and milk consumption that reduces pressure on the land and carbon release through over-grazing or conversion of land into pastures. They therefore urged the promotion of extensive grazing for smaller scale farmers to help sequester carbon, agroecology as system transformation and reducing the overall livestock numbers to reduce emissions in order to maintain this vital carbon stock. Reducing the dependency on animal food sources will be integral to lowering harmful emissions.

There was a view that the animal agriculture sector should be specifically included in South Africa’s just transition framework, which currently focuses on energy.

VI. Human Rights, Constitution and/or Social Justice

Due to the perception South Africans have towards animal food sources and the emanating cognitive dissonance, there is a divide between animal justice issues and social justice issues. This is an area that needs to be addressed through public education and awareness raising.

Respondents noted that the reform of South Africa’s food systems has to happen within the context of South Africa’s history, the massive economic divide and the extreme poverty. An overhaul of the food systems will certainly feed more people, but this cannot happen from a place of privilege. It should be done by engaging with people on the ground, communities, subsistence farmers, community leaders and others.

There was also a view that failure to enforce environmental laws led to lack of environmental justice. It was noted that for example poor people mostly live near concentrated animal feeding operations (CAFOs) and experience water and air pollution from particulate matter (animal waste) as a result. Similarly, other forms of pollution associated with intensive animal farming affect the poor in the country more than the wealthy. Associated challenges included the issues of antibiotics and superbugs and the attendant impacts on animal and human health.

In the context of animal production, respondents noted that there are human rights implications for workers who may experience negative psychological impacts from witnessing violence against animals. Furthermore, there is the issue of workers’ health, as a result of their interactions with animals (zoonotic diseases). In many instances, polluted water and destruction of fertile soil is also a women’s rights issue as women are often in charge of smaller subsistence farming supporting household livelihood.

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602 Fiona Miles, Director, Four Paws in South Africa, 28 June 2022
603 Genevieve Cutts, Fry Family Food Company
604 Joseph Mayson, Humane Society International-Africa, 22 June 2022
605 Professor Joyce Tischler, Centre for Animal Law Studies, Law Professor, 6 July 2022
consumption and thus this affects their livelihoods directly. Where water systems have become polluted due to intensive animal agriculture, this can extend to the reproductive rights of women and girl children. Many women and girl children do not have access to menstruation products and rely on cloths etc. which they have to wash and reuse, and when water is not clean, they then risk infection.

VII. Human Health

Animal sourced foods are perceived to be fundamental to human health. Due to this perception, animal food sources are not critically observed in a social sense, regardless of the medically researched harms of certain popular animal food sources. Respondents noted that varied plant based diets are largely considered to be healthier than diets that are more heavily dependent on meat and that they have been proven to reduce the risk of heart disease. In addition, intensive livestock farming increases the risk of the spread of zoonotic diseases.

A respondent in the alternative food industry noted that there are unreasonably high levels of diabetes and obesity in South Africa. The respondent highlighted further that Stats SA data shows that diabetes is the leading cause of death among South African women, and that 69% of South African women are obese. Their consumer research as a company also revealed that gout is a significant health issue in South Africa, and all these conditions were linked to high levels of animal protein in people’s diets.

VIII. Sustainability

Sustainability is perceived as an environmental initiative, which is exclusive to animals, thereby highlighting the need for increased education to address some of the incorrect views and perceptions. Respondents also noted that using land to grow food to feed to animals to feed to humans, dredging the ocean for every possible edible living creature and disrupting its ecosystem, or dumping food waste is unsustainable, hence the need for adequate regulation and public awareness of these impacts.

The current food system was also seen as not participatory in nature, resulting in lack of investment and support for small scale farmers. This can be seen in the insufficient access small scale farmers have to finance, inputs, capacity building and value chain. This results in general failure to provide food in environmentally sustainable and socially equitable ways.

South Africa’s dependency on animal products was viewed by respondents as an unsustainable food system. They highlighted that the EAT-Lancet recommended diet for human and planetary health, suggests significant decreases in meat and milk consumption that reduces pressure on the land and carbon release through over-grazing or conversion of land into pastures.

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606 Sheena Swemmer, Centre for Applied Legal Studies, 30 June 2022
607 Sheena Swemmer, Centre for Applied Legal Studies, 30 June 2022
608 Genevieve Cutts, Fry Family Food Company
609 Mandla Gqamlana, Programmes Director, Coalition of Animal Welfare Organisations

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IX. Good Governance / Accountability/ Role of Government

Various legislation exists to ensure that animal food sources are produced in accordance with particular standards. If these standards are not upheld then the producing organization is held accountable. The State must be fully open to discussing the health impacts of certain popular animal-based foods and the benefits of their alternatives.610 This should be more reflective in the government's health and food guidelines (echoed within the prescribed food pyramid). Government must also be encouraged to move away from the current focus on increasing production of animals and their use for economic, job creation and food security purposes without critically looking at available alternative options. The focus must be on ensuring that all food systems projects are not only measured economically, but a balanced approach must be used, that is one that looks at the environment/human health and animal health and wellbeing. The benefit of cases such as the recent Shell611 and Liesbeck612 (although based on participation), it was highlighted, was that economic advantage should not always be seen as the most important factor.613

It was also noted that it is not good governance for the same department (DALRRD) that promotes the economic exploitation of animals to also regulate their welfare.

Respondents also expressed the view that there is no transparency and accountability by both government and industry players citing the fact that where regulations are in force, they are not implemented by industry and government enforcement is weak and in some instances non-existent.614 Lack of coordination between and amongst different government departments was also identified as a problem leading to lack of compliance where laws and regulations are available, and failure to create relevant, appropriate and comprehensive legal frameworks.615

Respondents noted that the South African Government needs to stop promoting harmful agricultural practices and commit to ending factory farming and instil targets to decrease the consumption of animal products in the country.616 This can be done by promoting plant-based alternatives, whilst ensuring that South Africa stops supporting and subsidising some of the cruellest practices that cause animal suffering, by taking action such as banning sow stalls, veal crates and battery cages.

610 Tokyo Ndlela, attorney, 4 July 2022
611 Sustaining the Wild Coast NPC and Sixth others v Shell Exploration and Production South Africa BV and Four Others, case number 3491/2021 Easter Cape Division of the High Court
612 Observatory Civic Association and Another v Trustees for the Time Being of Liesbeek Leisure Properties Trust and Others (12994 of 2021) [2022] ZAWCHC 2 (18 March 2022);
613 Sheena Swemmer, Centre for Applied Legal Studies, 30 June 2022
614 Tozie Zokufa, Executive Director, Coalition of African Animal Welfare Organisations, 21 June 2022
615 Sheena Swemmer, Centre for Applied Legal Studies, 30 June 2022
616 Leozette Roodt, Humane Society International-Africa,
Consumer Protection

The biases attached to animal food sources cause a disregard of research concerning the harms of certain animal food sources, which does not favour the consumer’s well-being. It was also noted that members of the public are generally unaware of the practices and/or harms associated with industrial animal production and as a result are unable to make decisions on the consumption of meat produced in this manner. There is minimal to no information on this topic in the shopping environment where consumers primarily buy these products, so it must be understood that consumers are largely unaware of the consequences of such reliance and dependence on meat products. Instead, consumers opt for options that are readily available/affordable and products that they have deemed culturally and traditionally important for decades i.e. meat.

One respondent aptly described the information gap thus:

“I believe that much of the battle for animal liberation is a battle over information. Most people care deeply about their food choices and many care deeply about animals. This concern is leading to increased demands for food transparency. The animal industrial complex is in turn responding to this unease through increased means of obfuscation and deception. Their tactics are working. Humane-washing is everywhere and the animal agriculture industry spends millions on advertising.

Research has proved that the majority of consumers trust labels as an important source of information, yet a 2018 survey by The Sentience Institute revealed surprising results in that almost half of its participants agreed with the banning of slaughterhouses, and a third agreed with banning animal farming altogether. In contradiction, 75% of those same respondents thought that the animals they consumed were “treated humanely.”

It seems we have a conflict between consumer values and actions. I believe effectively utilising humane-washing techniques has been one of the animal industry’s greatest success stories. The link between the products people purchase and the suffering incurred to procure those products has been almost entirely severed. Harmful practices and consumer purchasing patterns do not match consumers’ moral preferences regarding animals. I would like to see how we can empower consumers to make truly informed and authentic choices.

There was a view that whilst the Government has raised taxes, and consequently prices on items such as sugar, cigarettes and alcohol, it is not doing the same with other equally or more harmful animal products.

Respondents noted that dependency on animal food sources poses more health risks to some sectors of society than others, particularly the poor, women and children amongst others. This was revealed by the 2017/2018 listeriosis outbreak in the country, which was linked to low cost products containing poultry meat as a result of poor food safety monitoring systems.
XI. Alternatives/Barriers

It was noted that plant-based proteins have been shown to be both good sources of protein and less harmful to the climate and integral to eliminating animal suffering in the farming industry. In addition, cultivated meat technology was seen as a potential alternative to traditional meat by reducing and possibly eliminating the suffering of farmed animals in intensive farming systems and radically reducing the number of slaughtered animals in the long run.

Respondents noted the general availability of alternatives in South Africa’s food stores, although they are allocated small spaces. Large corporations were urged to increase the amount of plant-based alternatives (e.g. supermarkets, fast food outlets, restaurants) and this should be promoted by Government. However, it also emerged that there is currently significant stigma that is attached to alternatives (given their association with veganism), leading to the view that they are expensive and specifically in the context of South Africa that they are for white people.620 One way to counteract this stigma (which in turn would serve as a promotion for alternatives), would be to educate people residing in poorer communities about alternatives and their associated health benefits. There is no education in schools on the impacts of climate change from industrialised farming systems and minimal, if any, education on the benefits of a primarily plant-based diet for personal and planetary health.621

Resultantly, the public grow up believing that the existing food systems and meat-based diets are integral and it becomes very difficult to change their minds as they get older.622 There should therefore be education at school level on the benefits of plant-based diets for the climate and health, and on the dangers of industrialised farming to help in transforming public perceptions. This would be augmented by efforts to make alternatives more accessible in townships and rural areas, including ensuring that grocery stores (within townships and rural areas) have alternatives at affordable prices. This helps to ensure that when people are educated about the benefits of alternatives, they have them readily available within their communities, including at spaza shops623 and in rural community shops.624 This is important because lower income groups are more concerned about meeting their basic food needs before they can worry about the environment, animal cruelty and health.625 Without such initiatives, only “hardcore” vegans would make an effort to look for and consume alternatives.626

Related to this was the view that although there is increasing information available on alternative proteins as a result of advocacy groups, the platforms in which this information is made available is not necessarily accessible to everyone, particularly the poor segment of the South African population,

620 Tokyo Ndlela, attorney, 4 July 2022
621 Fiona Miles, Director, Four Paws in South Africa, 28 June 2022
622 Fiona Miles, Four Paws in South Africa, 28 June 2022
623 Tozie Zokufa, Executive Director, Coalition of African Animal Welfare Organisations, 21 June 2022
624 Katrina Lehmann-Grube, 28 June 2022
625 Dimitri Gutjahr, Green Guru Mother Earth Food
626 Elize van Vollenhoven, 27 June 2022
who happen to be the majority. Currently this debate seems to be mostly an upper- and middle-class one. This has the potential to strip the initiative of any form of legitimacy and render it a class issue. Respondents noted that the shift to alternatives must therefore be driven from the bottom up and it has to resonate with every sector of the South African Society.

The cost of plant based protein products was seen as a big consideration for the majority of South Africans on whether they embrace plant-based protein. For example, it was noted that quinoa costs ten times more than the cheapest chicken. In terms of dairy products, the chemical reward feeling when consuming cheese is something many find difficult to give up – hence the larger number of vegetarians as opposed to vegans. It was also noted that there are no alternatives for eggs and therefore people end up eating the actual eggs. As such, there are many complex issues that will influence mass uptake of “alternatives”.

The issue of taste was also identified as a barrier in that when consumers first eat the alternatives, they expect them to have the same taste as the animal equivalents. They are also viewed as not appetising. Efforts to match that taste with that of meat and other animal products can therefore go a long way in increasing buy-in. The provision of vegan recipe books was also viewed as important.

It was also noted that the meat industry/livestock industry lobby is very strong in the country, and would therefore likely scupper any efforts for the country to reduce or eliminate meat consumption. As a result, government was likely to just focus on regulating the alternatives at this stage and support the innovation. However, it was unlikely that government would promote alternatives as that could be construed as being ‘anti-meat’ by the farming community. Government was however encouraged to be influenced more by the science and not the politics, including the impact of CAFOs on both animals and human health and create appropriate frameworks to address this.

**XII. Legal Framework**

A critical issue to emerge from the KIIIs was the fact that laws such as the Animal Protection Act fail to recognize the sentience of animals and treat them as legal objects or property. The Act therefore only protects animals to an extent as they are still required to be used for the benefit of human beings. The National Environmental Act (NEMA) and its framework was criticised for its command and control style and its reactive as opposed to a proactive environmental management approach. The licensing framework associated with this legislative bundle also means that pollution and

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627 Mandla Gqamlana, Programmes Director, Coalition of Animal Welfare Organisations
628 Elize van Vollenhoven, 27 June 2022
629 Tozie Zokufa, Executive Director, Coalition of African Animal Welfare Organisations, 21 June 2022
630 Elize van Vollenhoven, 27 June 2022
631 Anonymous, Professor of Law, 30 June 2022 and Katrina Lehmann-Grube, 28 June 2022
632 Tozie Zokufa, Executive Director, Coalition of African Animal Welfare Organisations, 21 June 2022
633 Professor Joyce Tischler, Centre for Animal Law Studies, Law Professor, 6 July 2022
634 Anonymous, Professor of Law, 30 June 2022
environmental degradation are essentially allowed as long as they are within the set thresholds. This gives polluters and industry actors no incentive to prevent pollution but encourages them to pollute within a set limit. Their efforts in this regard are therefore not to protect the environment, but to comply with regulatory pollution limits. Resultantly, the legislative framework is not capable of addressing the root causes of the pollution and environmental degradation that the country is experiencing.

Similarly laws such as the Meat Safety Act, Foodstuffs, Cosmetics and Disinfectants Act and Health Act were seen as furthering dependency on animal food sources and other products as long as human health imperatives were somehow addressed. As such, instead of encouraging the use of alternatives, they encourage the production and use of animals and their products so that they meet the human consumption needs with a focus on ensuring that as humans consume these products, their health is not compromised or that negative effects are mitigated.

Respondents noted the contestations between technocratic fixes as opposed to working for systemic changes in the alternatives arena, with a significant portion of the research in South Africa being influenced by funding issues and sources as opposed to authentically producing and marketing the alternatives as the solution they should be. The problem with techno-fixes, as was noted, is that they are only being viewed from one lens, yet the brokenness of South Africa’s food system needs a holistic view and combined solutions. South Africa in particular has to tread cautiously so as not to repeat the mistakes of its apartheid past and ignore the issues of food sovereignty and the impact on rural communities.

XIII. Role of Civil Society

Many of the key informants that were engaged work in civil society in the areas of animal health/welfare and the protection of the environment. The benefits and impact of their work included the following:

- Researching and communicating on the risks of animal product dependency and increased meat consumption from an environmental and climate change lens;
- Making submissions during public consultations, that included responding to the public consultations by the Department of Forestry, Fisheries and Environment’s 2022 Climate Change Bill. Responses focused on how sustainable agriculture can help sustainable development, adaption, moving towards achieving sustainable agriculture, sectoral emissions targets and carbon budgets;
- Engaging and encouraging corporations to reduce the amount of meat in their products and to better the welfare of animals used in their supply chains. This includes targeting international fast food chains with headquarters in South Africa; and
- Educating consumers and helping them to reduce their meat intake.
PART II: PUBLIC SURVEY COMPONENT

I. Introduction and Methodology

The Public Survey was aimed at capturing trends and barriers to transitioning from animal to alternative meats. The survey investigated the public’s perception on animal meats and proteins vis a viz alternative meats and the implications on the acceptability of alternative meats focusing on plant-based and cultivated meats.

A structured questionnaire was developed for the purpose of capturing information on:

1. **Consumption of animal sourced meats, the factors influencing the decision to consume or not consume animal sourced meats, the flexibility of consumers in trying new foods as well as public perceptions on South African animal farming practices and animal welfare issues associated with animal sourced foods:**

To achieve this, information was captured on the dietary regimes of participants, the food items consumed by participants and frequency of consumption of meat or animal protein. Participants were also asked questions on reasons why they consume or did not consume meat and animal proteins including their perception on the benefits of consuming meat and animal proteins. Additional information was captured on the source of food. Lastly, the survey captured information on the participants’ familiarity and perception about animal farming practices and animal welfare issues associated with the production of animal sourced foods.

2. **Consumer understanding and familiarity of plant-based meats and milk, acceptability of plant-based meats and milk as alternatives to animal sourced foods as wells as factors that either promote or hinder consumption of plant-based meats:**

This was achieved by capturing information on whether participants knew of or had consumed plant-based meats, whether they would be willing to consume plant-based meats and the reasons behind the acceptability or unacceptability of plant-based meats. The survey investigated the perception of participants on plant-based meats in terms of whether they should be labelled differently from animal sourced meats and the effects of consumption of plant-based meats on human and animal health and welfare, and the environment. Lastly, the survey investigated the willingness of consumers to pay for plant-based meats as alternatives to animal sourced meats and proteins.

3. **Consumer understanding and familiarity with cultivated meats, acceptability of cultivated meats as alternatives to animal sourced foods as wells as factors that either promote or hinder consumption of cultivated meats:**

This was achieved by capturing information on whether participants had heard about cultivated meats, whether they would be willing to consume cultivated meats and the reasons behind the acceptability
or unacceptability. The survey investigated the perception of participants on cultivated meats in terms of whether they should be labelled differently from farmed animal sourced meats and the effects of consumption of cultivated meats to human health, animal health and welfare and the environment. Lastly, the survey investigated the willingness of consumers to pay for cultivated meats as alternatives to animal sourced meats and proteins.

4. **Relevance and importance of different characteristics of alternative meat products:**

II. **Survey Reach Out**

The Public Survey was administered via a virtual platform reaching out to 519 participants distributed across the country and representative of the South African population. The 519 participants included 283 females, 236 males and represented participants between 18-34 years (n=218); 35-44 years (n =224); 45-54 years (n = 62); 55-65 years (n =10) and above 65 years (n =5). Africans constituted 72.8% (n =378) of the participants, while 13.3% (n=69) white, 8.5% (n=44) Coloured/mixed race, 5.2% (n=27) Indian, and 0.2% (n=1) of the Asians, were interviewed. The participants were from the nine provinces of South Africa with 273 (41%) participants coming from Gauteng; 88 (17%) from KwaZulu-Natal; 79 (15.2%) Western Cape; 36 (6.9%) Eastern Cape; 29 (5.6%) Mpumalanga; 26 (5.0%) Limpopo; 24 (4.6%) Northwest; 15 (3.1%) Free State and 8 (1.5%) Northern Cape. Participants were predominantly from the Christianity religion (n =428: 82.5%). Twenty-nine (5.6%) follow African traditions; 14 (2.7%) Islam; 11 (2.1%) Hinduism and 5 (1.0%) are Atheists. The remaining percentage were from Agnosticism (2: 0.4%) and Buddhism (1: 0.2%); Plentian (1 (0.2%). Twenty-five (4.8%) of the participants considered themselves just spiritual while 3 (0.6%) claimed no religion. The participants were coming from large cities (n=237: 45%); towns (n =149: 28.7%); small cities (n =91: 17.5%) and rural areas or villages (n =42: 8.1%). One hundred and eighty-seven (36.0%) of the participants had completed their high school education; 186 (35.8%) with college or undergraduate degree; 65 (12.5%) with a technical qualification or trade certificate and 58 (11.2%) with a postgraduate degree. A minority number had some high school education (n =22: 4.2%) and one participant (0.2%) had no formal education at all. The 519 participants consisted of 259 (49.9%) with fulltime employment; 118 (22.7%) unemployed; 91 (17.5%) with part-time employment and 15 (2.9%) each with contract employment 14 (2.7%) on government or social services and 6(1.2%) retired. 123 (23.7%) of the participants have a monthly income of less than R4500; while 130 (25%) had less than R10 000/month, 147 (28.3%) with an income of less than R25 000/month; 94 (18.1%) of less than R50 000/month and 25 (4.8%) of higher than R50 000/month.

Overall, the survey was representative of the South African population reflecting on the socio-economic and cultural diversity of the country.
III. Survey Results and Implications

A. Diets, food consumption patterns and flexibility to adopt alternative meats and understanding of animal farming practices and animal welfare concerns

Majority (n = 446: 85.9%) of the participants indicated that they have an omnivorous diet of eating everything (animal, plants, etc) while six (1.2%) were pescatarians (eating only fish as meat/animal protein). Fifty-six (10.8%) participants were flexitarian/reducetarians, trying to reduce meat consumption. Seven (1.3%) were vegetarians whilst only 4 (0.8%) had other diets that included high protein diets. Humans are generally regarded as omnivores with a biological digestive system that is aligned with consumption and digestion of plants and animal foods to meet nutritional needs, which explains the higher percentage of participants with dietary alignments of omnivores. The proportion of omnivores captured in this survey, tends to be slightly higher than reported in Europe\(^{635}\) were 48–74% of respondents were identified as omnivores whilst on the other hand more flexitarians, vegetarians and vegans were observed in Europe compared to South Africa. In India\(^ {636}\), a similarly developing country like South Africa, the share of omnivores was reported to be 80% with almost 15% vegetarian, while the rest were vegan or pescetarian. A previous study in South Africa\(^ {637}\) reported that the proportion of omnivores was above 90%, while the proportion of pescatarians, vegans, or vegetarians remained under 10%. The high number of participants on omnivore diets and very low number on vegetarian and vegan diets demonstrates the need for more and concerted efforts to transform and shift consumers towards plant-based diets. The proportion of flexitarians and reducetarians points to the possibility and feasibility of transitioning diets and food systems. According to previous reports\(^ {638}\), the role of flexitarians in dietary change is expected to be large, thus greater focus should be placed on consumer-based initiatives to transform food systems.

In terms of the actual food consumed, 488 (94%) participants consumed chicken; 373 (71.9%) pork; 455 (87.7%) beef; 88 (17.0%) veal; 124 (23.9%) duck; 140 (27%) game meat; 216 (41.6%) goats. Four hundred and seventy-one (90.8%) participants consume milk, 448 (86.3%) consume dairy and cheese and 430 (82.9%) fish and seafoods and 391 (75.3%) and 35 (6.7%) insects’ group of animal sourced foods. Analysis of consumption of plants indicated that 352 (67.8%) consume grains; 482 (93.1%) fruits. Two hundred and eighty-one (90.8%) participants consume fungi or mushroom foods. The results agree with the resent findings from the survey.

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\(^ {635}\) Smart Protein. What Consumers Want: A Survey on European Consumer Attitudes towards Plant-Based Foods with a Focus on Flexitarians. Available online: https://smartproteinproject.eu/ (accessed on 10 June 2022)


undertaken by Knorr, that demonstrated the high consumption of animal sourced foods in South Africa. Coupled with this is the moderate to high frequency of consumption of meals with meat per week illustrated in Figure 8. According to this figure, 184 (35.5%) consume 1-2 meals with meat per week while 137 (26.4%) consume 5-6 meals with meat per week. A proportion of 22 (4.2%) participants consume more than 14 meals with meat per week. Together, these results highlight the elevated pressure on animal agriculture as a source of food in the country. The animal sources consumed consist of animals that are currently intensively farmed under factory farming practices in the country.639

Figure 8: Frequency of consumption of meat with meals per week.

Three hundred and ten (59.7%) of the participants are flexible to try any food, while 204 (39.3%) are moderately flexible and are willing to try only some foods. Five (1.0%) were not flexible to try new things. Although there is heavy consumption of meat and animal sourced foods in the country, these results on consumers’ willingness to try new foods present an opportunity to transform the food system of consumers. Those that were not flexible to try new foods cited health reasons (1: 0.2%); costs (3: 0.6%); taste (4: 0.8%) and product uncertainty (3: 0.6%) as reasons that they are not willing...
to try new foods. Product awareness campaigns and the anticipated move towards price parity of alternative meats that was reported in the GFI state of the sector report could contribute to greater flexibility amongst consumers to shift to alternative meats and other sustainable food sources. The perception of consumers on the importance of animal meat and protein sources in human diets and nutrition was also encouraging, with only 63 (12.1%) of the participants considering meat and fish as the only source of protein whilst majority (n=391: 75.3%) did not consider meat and fish to be the only source of protein. The remaining 13 % were either not sure (9.1%) or did not know (3.5%) if meat and fish could be the only source of protein and these are the groups of consumers that should be targeted by information awareness campaigns. Two hundred and seventy-eight (53.6%) of the participants indicated that humans could live healthy lifestyles without meat, whilst 106 (20.4%) indicated that humans cannot live healthy lifestyles without meat. 122 (23.5%) of the participants indicated that maybe humans can live healthy lifestyles without meat while 13 (2.5%) did not know. Overall, the meat and animal source food consumption and perceptions present a positive outlook towards shifting to plant based and other alternative meats.

Of the 169 participants that did not consume meat and animal proteins, the reasons for not consuming meat ranged from health reasons (n =117); religious reasons (n =50); environmental reasons (n =37); animal welfare (n =29); personal belief (n =54), and ethical reasons (n =19) and that meat is expensive (n =3) as illustrated in (Figure 9).

**Figure 9: Reasons for non-consumption of meat**

![Reasons for non-consumption of meat graph](image-url)
Three hundred and eighty-three (73.8%) think that consuming meat and animal protein including fish has a positive effect on the human health. Forty-seven (9.1%) thought that consumption had a negative effect on human health whilst 51 (9.8%) thought it had no effect. Thirty-eight (7.3%) did not know if consumption of meat will have negative or positive effects on human health. The major reason for not consuming meat was for health reasons. However, majority of the participants believe that consumption of meat has a positive impact on human health. Such contradictory responses could be due to a poor understanding of the general population on the impacts of animal sourced foods on human health or potentially a tendency of humans to not act according to their understanding.

According to the Knorr survey report, South Africans have a tendency of consuming bad food despite a good understanding of the ideal dietary compositions. South Africa has major problems of dietary/lifestyle diseases of diabetes, heart conditions and obesity. Meat diets are associated with a number of these diseases. The WHO associated overconsumption of meat particularly processed meats to cancer. It is therefore important to educate and bring awareness to the public on the risks associated with overconsumption and dependency on meat diets on the general health.

One hundred and seventy-nine (34.5%) think that consuming meat and animal protein including fish has a positive effect on the environment. One hundred and thirty-six (26.2%) thought that consumption had a negative effect on the environment whilst one hundred and sixteen (22.4%) thought it had no effect. Eighty-eight (17%) did not know if consumption of meat will have negative or positive effects on the environment. As with impact on human health, the results on perception on the impact of meat consumption on the environment demonstrated a poor and divided understanding on the roles of animal farming practices on the environment, calling for education and awareness campaigns to facilitate consumer driven transformation of the food systems.

Participants considered aspects of taste (399: 76.9%); price/cost (407: 78.4%), availability (189: 36.4%) nutritional content (208: 40.1%); brand (291: 56.1%); health (279: 53.8%); production systems of grass-fed (57: 11.0%); organic (119: 22.9%), free range (101: 19.5%); whether the meat product has a label (117: 22.5%) and the nutritional content (208: 40.1%); Halaal (1: 0.2%) of the meat product when purchasing meat and animal products such as meat, eggs, and dairy. Majority of the participants purchased their food from the supermarkets (510: 98.3%); Street/informal vendors (150: 28.9%); restaurants (241: 46.4%); Fastfoods (262: 50.5%); Farms (111: 21.4%).

An analysis was done to investigate the consumer understanding and perception of the animal production systems as well as the associated animal welfare issues. Three hundred and twenty-seven (63%) of participants indicated that they are familiar with animal farming practices. Two hundred and eighty-one (56.1%) considered that animals in South Africa that are used for food live happy lives, whilst 303 (58.4%) believed that these animals are humanely treated and 478 (92.1%) that there should be laws and standards that regulate how animals on farms are treated. Three hundred and sixty-five (70.3%) believed that adequate laws and standards regulating how animals should be treated existed in South Africa. 358 (69%) of the participants would where possible try and purchase products labelled

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as free-range and 386 (74.4%) are willing to pay more for foods where animal welfare is prioritized. 305 (58.8%) of the participants have heard of the term “factory farming”, 413 (79.6%) believed farmed animals such as cows, pigs, goats, sheep, and chickens can suffer. Overall, 432 (83.2%) of the participants believed eating meat is healthy or good for them.

293 (56.5%) of the participants agreed with the statement that cows need to have recently fallen pregnant and given birth to produce milk. Four hundred and seventy-one (90.8%) considered it true that companies can only say their products are “humane” if they follow certain legal standards. Two hundred and fifteen (41.4%) considered it true that male baby chickens are often killed because they do not produce eggs in the egg industry. Four hundred and seventy-one (90.8%) considered it true that baby chickens are often killed because they do not produce eggs. The remainder of the results on consumer understanding and perception about the sector are presented in Table 3.

Table 7: Consumer understanding and perception of the animal farming practices in South Africa.

<table>
<thead>
<tr>
<th>Perception on Sector</th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To produce milk, cows need to have been recently pregnant and given birth to a calf</td>
<td>293 (56.5%)</td>
<td>226 (43.5%)</td>
</tr>
<tr>
<td>2. Companies can only say their products are “humane” if they follow certain legal standards</td>
<td>471 (90.8%)</td>
<td>48 (9.2%)</td>
</tr>
<tr>
<td>3. In the egg industry, male baby chickens are often killed because they do not produce eggs</td>
<td>215 (41.4%)</td>
<td>304 (58.6%)</td>
</tr>
<tr>
<td>4. Dairy is healthy and good for you</td>
<td>471 (90.8%)</td>
<td>48 (9.2%)</td>
</tr>
<tr>
<td>5. Veal comes from baby cows which are not older than 18 weeks old</td>
<td>317 (61.1%)</td>
<td>202 (38.9%)</td>
</tr>
<tr>
<td>6. Most animals farmed in South Africa are free range</td>
<td>263 (50.7%)</td>
<td>256 (49.3%)</td>
</tr>
<tr>
<td>7. Animals in farms are given antibiotics to keep them from getting sick</td>
<td>436 (84.0%)</td>
<td>83 (16.0%)</td>
</tr>
<tr>
<td>8. Humans can get infected with diseases from eating products from animals that were infected with such disease</td>
<td>458 (88.2%)</td>
<td>61 (11.8%)</td>
</tr>
<tr>
<td>9. The World Health Organization has linked the consumption of processed meats to cancer</td>
<td>355 (68.4%)</td>
<td>164 (31.6%)</td>
</tr>
<tr>
<td>10. It is illegal to mutilate farmed animals without anesthetic</td>
<td>365 (70.3%)</td>
<td>154 (29.7%)</td>
</tr>
<tr>
<td>11. There are proper welfare standards in place to protect animals farmed for food in South Africa</td>
<td>409 (78.8%)</td>
<td>110 (21.2%)</td>
</tr>
<tr>
<td>12. Animals used for food are stunned, or rendered unconscious before they are killed to ensure they do not suffer any pain</td>
<td>337 (64.9%)</td>
<td>182 (35.1%)</td>
</tr>
<tr>
<td>13. Most animals used for food in South Africa are pasture raised</td>
<td>367 (70.7%)</td>
<td>152 (29.3%)</td>
</tr>
<tr>
<td>14. Majority of the eggs consumed in South Africa are from chickens raised in cages</td>
<td>421 (81.1%)</td>
<td>98 (18.9%)</td>
</tr>
</tbody>
</table>
The results on the consumer understanding and perception of both the animal welfare issues and animal farming practices demonstrate that there is no clear consensus and understanding of the animal farming practices and animal welfare issues in South Africa. The ideal scenario will be one where the public is educated and capacitated to make informed decision on their eating habits.

In their review, Alonso and co-authors point out to the differences in definitions of animal welfare that make perceptions about this complex subject extremely variable and poorly reflected. In this survey we observe a variable understanding of both the animal welfare issues and the animal farming practices and the honours is on the government and other civic organisations to make that information transparent and available to the general public in order to facilitate informed evaluations and corrective actions. The quest is for food business to enhance transparency, labelling and consumer education in order to achieve broader understanding of food systems, which is required for any transformation.

**B. Familiarity, Perception, and Flexibility to Transition to Plant-based Meats and Plant-based Milks**

Two hundred and sixty-four (50.9%) of the participants indicated that they have heard and are familiar with plant-based meats while 177 (34.1%) have heard of them but are not familiar with what they are. Seventy-eight (15.0%) participants had never heard of plant-based meats. Two hundred and ninety-three (56.5%) had not consumed plant-based meats while 226 (43.5%) had consumed plant-based meats. Of those who had not consumed plant-based meats, 248 (47.8%) are willing to try consuming plant-based meats whilst 47% are not willing to try. Those who would want to try or had consumed plant-based meats would do it out of curiosity (338: 65%); health reasons (235: 45.3%); religious reasons (42: 8.1%); personal beliefs (73: 14.1%); Ethics (51: 9.8%); animal welfare (86: 16.6%); environmental concerns (99: 19.1%) and other reasons (8: 1.6%) that included circumstances, costs implications, and the fact that they are vegans. The reasons why those who are willing had not tried plant based meats ranged from unavailability within their areas (145: 27.9%); that plant-based meats are expensive (185: 35.6%); that they are concerned about the taste (134: 25.8%); concerned about the...
ingredients (72: 13.9%); concerned about the health effects (62: 11.9%); don’t know how to prepare plant-based meats in their usual meals (85:16.4%) and think that eating plant-based meats is strange (48: 9.2%). Others had not consumed plant-based meats because they enjoy eating normal animal meat (93: 17.9%). Those who will not want to try plant-based meats felt that because they are concerned about the nutritional composition of plant-based meats (122: 23.5%); are concerned about the health effects (118: 22.7%); feel that plant-based meats are expensive (163: 31.4%); are concerned about the taste (170: 32.8%); are concerned about the ingredients (84: 16.2%) and enjoy eating normal animal meat (127: 24.5%). Limited knowledge and the feeling that nothing was wrong with consumption of “normal” animal meat are other aspects that hindered participants from consuming plant-based meats.

As comprehensively discussed in the earlier sections, there has been a recent and significant increase in product range, availability, and accessibility of plant-based meats globally and including in South Africa. Plant-based meats are now available and accessible in South African retail, restaurant, and fast-food chains. The GFI report foresees massive growth in the sector. The survey results reflect a fair understanding and familiarity of the South African population to plant-based meats. The results also present a good understanding of the benefits of consuming and the willingness of the population to consume plant-based meats including benefits to human health, animal health and welfare and environment. On the other hand, the survey points out the major factors that might hinder the acceptability and adoption of plant-based meats as an alternative to animal sourced foods, factors that include, availability, costs and limited knowledge and concerns about the taste, nutritional composition, and health benefits to humans. Like the animal-farming systems, the disparity in information and awareness of plant-based meats can lead to unwillingness of the consumers to transition to such alternative food choices. There has been very limited and fragmented information dissemination and awareness campaigns around plant-based and other alternative meats in South Africa, most of it driven by civic bodies with limited to zero participation by government institutions. There is therefore a call on all relevant stakeholders to play their part in bringing awareness and facilitating accessibility of plant-based and alternative meats to South Africa public.

Three hundred and seventy-nine (73%) of the participants think that plant-based meats should be named or labelled differently from animal-based meats, 56 (10.85) felt that they should not whilst 84 (16.2%) were indifferent to the naming and labelling of plant-based meats. The reasons why those participants felt they should be named differently included the thinking that they are not real meat (146: 28.1%); that it is confusing to consumers (147: 28.3%); that it is misleading to consumers (62: 11.9%); and other reasons (4: 0.8%) of wanting to inform the consumer and to differentiate them from other meats as illustrated in Figure 10.

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Figure 10: Reasons participants considered why plant-based meats should be named differently

![Pie chart showing reasons for naming plant-based meats differently]

Overall, the dominating reason for wanting to name plant-based meats differently is really to inform and not mislead consumers. As for what consumers think plant-based meats should be named, several diverse responses were provided but predominantly highlighting the need to reflect that they are plant-based (e.g. names such as plant-based meats, plant-based foods, plant derived foods, plant meat, plant beef etc.); are vegetarian or vegan type foods (e.g. names such as vegetable burgers, vegetable patties, vegan meaty, vegetarian meat, vegan meat etc.); names that focused on the healthy aspects (e.g. healthier meat, healthy living meat, better living meat, green meat). Overall, the possible names suggested by participants indirectly reflected their perception on these plant-based meats.

The request for proper labelling is a fair request considering that consumers need full information to inform their eating habits that are guided by various reasons ranging from health, religion, ethical and other reasons as discussed in earlier sections.

Plant-based milk have been on the market for quite some time now, mostly to address health issues of consumers allergic to cow or other animal milk. This explains the relatively low consumption of plant-based milk in South Africa and mostly for health reasons. One hundred and seventy-three (33.3%) of the participants had consumed plant-based milk with 113 (21.8%) having consumed soya
milk; 35 (6.7%) rice milk; 109 (21.0%) coconut milk; 100 (19.3%) Almond milk; and 60 (11.6%) oat milk. Approximately 262 (50.5%) would want to try plant-based milk but had not done so because it is not available in their area (155: 29.9%); that they are expensive (156: 30.1%); that they are concerned about the taste (138: 26.6%); concerned about the ingredients (67: 12.9%); concerned about the health effects (57: 11.0%); don’t know how to prepare it in their usual meals (53:10.2%); think consuming plant-based milk is strange (46: 8.9%) and enjoy consuming normal animal milk (110: 21.2%). Those who will not want to try plant-based milk felt that way because they are concerned about the nutritional composition of plant-based milk (107:20.6%); are concerned about the health effects (95: 18.3%); because they are expensive (168: 32.4%); are concerned about the taste (166: 32.0%); are concerned about the ingredients (69: 13.3%); enjoy consuming normal animal milk (106: 20.4%) and other reasons that included the association with allergies (10: 1.9%).

C. Familiarity, perception, and flexibility to transition to cultivated meats

Cultivated meats is a relatively new concept in South Africa and globally, with two companies currently involved in cultivated meats and one with cultivated seafood and fish. It was on that understanding that the survey did not investigate whether and how many South African had consumed cultivated meats. Two hundred and forty-six (47.4%) of the participants indicated that they have heard about cultivated meats, whilst 273 (52.6%) participants had never heard of cultivated meats. Two hundred and three (39.1%) are willing to try consuming cultivated meats whilst 171 (32.9%) are not willing to try and 145 (27.9%) might try. Those who would want to try consumed cultivated meats would do it out of curiosity (280: 53.9%); health reasons (118: 22.7%); religious reasons (29: 5.6%); personal beliefs (57: 11.0%); Ethics (36: 6.9%); animal welfare (67: 12.9%); environmental concerns (65:12.5%) and other reasons (3: 0.8%) that included wanting to try and enjoy something they are not sure of. Those who will not want to try cultivated meats felt that way because they do not eat any meat whether it is cultivated or grown on farms (40: 7.7%); they think that it is not natural (195: 37.6%); are concerned about the taste (66: 12.7%); are concerned about the ingredients (90: 17.3%); do not like the idea that it is grown in a laboratory (127: 24.5%); are concerned about how expensive it is (75: 14.5%); are concerned about the health effects (93: 17.9%); would not know how to prepare it in their meals (29: 5.6%) and enjoy eating normal meats (90: 17.3%). The results on knowledge and familiarity and preparedness of participant to try cultivated meats follow a similar trend as that of plant-based meats although the actual figures are slightly lower. There could be several reasons for this including the fact that cultivated meats are relatively new globally and really at their infancy in South Africa.

Whilst a significant proportion of participants were drawn to plant-based meats in search of vegetarian and vegan alternatives in addition to other reasons alluded to, this is not the case with cultivated meats, which are animal meats that are just produced differently. As such cultivated meats do not appeal to vegetarian and vegan participants contributing to the observed lower numbers of participants willing to try them. The method of production or the perception on the method of production might also be a hindrance to acceptability of cultivated meats. As one of the reasons of not wanting to try cultivated meat was the idea that it is grown in a laboratory and considered unnatural. This will be a significant perception that needs to be addressed to improve on the acceptability of cultivated meats.
Two hundred and sixty-two (50.5%) of the participants think that cultivated meats should be named or labelled differently from farmed animal-based meats, 137 (26.4%) felt that they should not whilst 120 (23.1%) were indifferent to the naming and labelling of cultivated meats. The reasons why those participants felt they should be named differently included the thinking that they are not real meat (73: 14.1%); that it is confusing to consumers (97: 18.7%); that it is misleading to consumers (72: 13.9%); and other reasons (6: 1.2%) of wanting to inform the consumer and to differentiate them from farmed meats as illustrated in Figure 11.

Again, the need to name them differently was driven, as with plant-based meat, by the need to inform and not mislead consumers, the thinking that it is not real meat emanating from its production method.

Figure 11: Reasons participants considered why plant-based meats should be named differently

Participants thought cultivated meats should be named as cultivated meats (192: 37.0%); cellular meats (28: 5.4%) lab grown / laboratory meats (126: 24.3%); cell-based meats (58: 11.2%) amongst other names as illustrated in Figure 12. The proposed names generally refer to the production method and although this could be a true reflection and preferred by consumers, might be a deterrent to potential
uptake of cultivated meats as an alternative source of meat and animal protein. According to a review, consumer acceptance of cultivated meats will be strongly influenced by many factors with consumers seeming to dislike unnatural food. In addition to the education and awareness expected for cultivated meats just as with plant-based meats and milk, additional efforts are required to break the myths attached to cultivated meats emanating from their production methods.

Figure 12: Proposed alternative names for cultivated meats

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D. Overall Perception on Alternative Meats

The advantage of cultivated meats over plant-based meats might be in their inherent similarity to farmed animal meats making it relatively easier to mimic them in the desired aspects. When asked to rank characteristics of importance for alternative meats, participants, 321 (61.8%) ranked taste while 200 (38.5%) ranked texture as most important characteristic.

Two hundred and eighty-six (55.1%) ranked cost while 209 (40.3%) ranked availability as most important. Ease of preparation was ranked more important by 181 (34.9%) of the participants; fit with meals by 190 (36.6%); nutrition by 287 (55.3%); similarity with normal meals by 180 (34.7%) and novelty by 94 (18.1%).

A review undertaken in 2020 indicated that the palatability, including appearance, flavour, and texture of alternative meats was still different from the consumers’ standard established from livestock-based traditional meat and were deterrents to their acceptability as alternatives.

Two hundred and twenty-two (42.8%) indicated they would most likely try alternative meats at a restaurant, 126 (24.3%) at their homes; 93 (17.9%) at a grocery store and 23 (4.4%) at a catered party amongst other sources as indicated in Figure 13. The importance of these potential places where participants can try alternative meats is that they demonstrate the need for a population and sector wide education and awareness campaign to promote alternative meats. The role of spaza shops, family members’ homes and street food vendors demonstrate that if properly presented, alternative meats can be widely accepted and adopted by the greater public and not be restricted to elite classes.

In an interview with MIT Technology Review, Mr Gates said he did not think the poorest 80 countries in the world would be eating synthetic beef in future. On the other hand, Mogale Meat, a start-up business in South Africa, states that its vision is to make healthy and nutritious cell-based meat accessible to all in Africa.

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646 https://www.bizcommunity.com/Article/196/162/226971.html
Participants generally felt that consumption of alternative meats will have positive effects on animal welfare with 288 (55.5%) considering that for plant-based meats and 218 (42%) for cultivated meats. A proportion of 46 (8.9%) and 76 (14.6%) felt that the consumption of plant-based and cultivated meat had no effect on animal welfare respectively. Just about 15% felt such consumption of either plant-based or cultivated meats had no effects on animal welfare. Similarly, participants generally felt that consumption of alternative meats will have positive effects on human health with 261 (50.3%) considering that for plant-based meats and 175 (33.7%) for cultivated meats. 64 (12.3%) and 55 (10.6%) felt that the consumption of plant-based and cultivated meat had no effect on human health respectively. Just about 13% felt such consumption of either plant-based or cultivated meats had no effects on animal welfare. A similar trend was observed on the impact of alternative meats on the environment and climate change. Two hundred and seventy-two (52.4%) considered that consumption of plant-based meats and 175 (33.7%) for cultivated meats had a positive effect on the environment and climate change. About 55 (10.6%) and 103 (19.8%) felt that the consumption of plant-based and cultivated meat had negative effect on the environment and climate change respectively. Just about 13% felt such consumption of both plant-based (69: 13.3%) and cultivated meats (72: 13.9%) had no effects on animal welfare.
The sectoral impacts of transitioning to alternative meats on animal health and welfare, human health and climate change were reviewed in the earlier section. Results from this survey demonstrate that the perception of majority of the participants aligned with the impacts reported in literature, which is a positive response that should be used to facilitate wider acceptance and adoption of alternative meats.

Cost is a major variable in any product development and successful roll out. According to the GFI report, the cost of meat alternatives is a major deterrent with hope that price parity will be achieved in the immediate future. Across both plant-based and cultivated meats products, majority of 171 (55.5%) and 152 (29.3%) participants indicated they would want to pay the same price for plant-based and cultivated meats as they do for “normal” meats respectively. One hundred and forty-two (27.4%) and 127 (24.5%) of the participants are prepared to pay less for plant-based and cultivated meats, respectively. The results are illustrated in Figures 14 and 15 below.

**Figure 14: Price participants are willing to pay for plant-based meats compared to “normal” meats**

![Price participants are willing to pay for Plant-based meats compared relative to "normal" meats](image)
IV. Summary of Findings

In summary, the survey demonstrated the following:

(i) That South African consumers are predominantly on omnivore diets with a considerable proportion of flexitarian / reducetarian that present an opportunity for adoption of alternative meats and transformation of food systems.

(ii) The consumers are widely flexible and ready to try different foods including plant-based meats and milk and cultivated meats. This is an important positive observation that will facilitate relatively easy transition to alternative meats.

(iii) There seemed to be a poor and divided understanding on the roles of animal farming practices on the environment, calling for education and awareness campaigns to facilitate consumer driven transformation of the food systems.

(iv) There is a fair knowledge and familiarity for both plant-based and cultivated meats. This a positive thing as it demonstrate that alternative meats are not a totally new concept in South Africa. Coupled to this was the fair number of participants that are willing to try both plant and cultivated meats.
Animal health and welfare, human health, ethics, personal beliefs, environmental concerns, cost and availability are factors that can either promote or deter transition to plant-based and cultivated meats and should be the focus of strategies to improve public acceptance of alternative meats and transformation of food systems.

There is a potential that alternative meats will be a solution that reaches out to the broader public of South Africa and not restricted to elite classes or other demographic categories of the country. The response by participants that alternative meats can be sourced outside restaurants setting in family homes and spaza shops is reflective of the broad market and potential acceptability of such products.

A fair number of participants indicated their desire to have the alternative meat products differently labelled. There was a tendency of participants to suggest names that reflect on the product composition, presumed healthiness and production method. This demonstrates the need by the consumer to stay informed on product composition and other attributes something that producers and retailers should pay attention to and respect.
SECTION 5

INITIAL RECOMMENDATIONS
I. Introduction

There are growing calls to end, reduce or even ban the consumption of ASFs including animal-based protein (meat), fish, insects given their impacts on animal welfare and rights, the environment (including contributing to climate change) and the health of human beings, among other issues. However, despite these calls, the reality on the ground is that consumption levels remain high and such proposed actions are still far from being realised. Research shows that animal protein consumption is set to increase over the next decades, with governments putting measures in place to increase the production of animals and related products for human consumption.

In South Africa, government policies such as the National Development Plan, the Poultry Sector Master Plan, Livestock Development Strategy for South Africa 2006-2015 and the National Agricultural Strategy, all of which recognize agriculture, including animal production as a means to achieving economic growth, food security and poverty reduction. Draft regulations around aquaculture and the live export of animals by sea further illustrates this. It is also important to acknowledge that animal food producers are business people whose focus is on profits and not necessarily the rights and welfare of animals, of people or on environmental protection.

Targets set within the Poultry Sector Master Plan for example include increasing broiler production by 1.7 million by 2023 which translates to a 9% increase in 3 years. The plan also seeks to increase the number of new emerging commercial farmers who will be contracted by the bigger companies to supply chickens. Overall, such a strategy will see massive increase in poultry production, coupled with decrease in the prices of poultry and poultry products, which will in turn increase local poultry consumption. In relation to livestock, at its adoption in 2006, the Livestock Development Strategy of South Africa’s strategic focus areas included improving the participation of poor rural communities in livestock farming, facilitating market access both inside and outside the country, improving income and food security and improving economic development, value chain and food processing development amongst others.

With these objectives in mind, government focus has therefore on increasing production and consumption of ASFs and animal products such as meat, milk, and hides, resultanty increasing demand. To its credit, government and other industry actors in the animal production sectors have also increasingly recognised the importance of animal welfare, although this relates mostly to the realization that healthy and well-looked after animals provide a good return to the farmers. The animal welfare focus therefore is not necessarily for the protection of animals per se but is informed mainly by economic and profitability considerations.

With this realization, the transition from ASFs to alternatives is not expected to be easy or smooth, but will face resistance from various angles and stakeholders, in particular government, animal producers, animal products processing industries, the retail and restaurant sector amongst others.
Members of the public are also likely to resist such efforts for many reasons including the marketing and advertising efforts of big industry, affordability and accessibility of the alternatives, socialisation as well as religious and cultural considerations, amongst others.

Based on this reality, any efforts and targets to improve animal welfare and rights, environmental protection and human health through the reduction of the production and consumption of ASFs in order to achieve a shift from animal to alternatives must have short-, medium- and long-term targets and strategies to achieve these objectives.

The law, in particular, is an important tool to be used in this regard, coupled with education and awareness raising amongst the citizens and different actors and decision makers in government, industry and community leadership structures. There are several existing legislative provisions, which if used and implemented appropriately can play as a first line of action in this regard. These need where appropriate to be supplanted by law reform and enactment of new legislation that is informed by current and emerging research on the benefits of shifting from animal-based to plant based protein for the benefit of animals, the environment and human health.

II. Initial Recommended Strategies

The following overarching regulatory strategies are critical:

A. Compliance and Enforcement:
   1. A review of the compliance with and enforcement of existing relevant laws particularly ones with robust protection for animals, humans and the environment across the issue identified above.

B. Definitive and Holistic Regulation
   1. Specific legislation and regulations which holistically regulate specific uses of animals in terms of animal agriculture including aspects pertaining to animal welfare, environmental, food safety and health, consumer protection and other social justice aspects.
   2. Introduction of new policies and legislation or extension of existing laws aimed at reducing intensive animal agriculture.
   3. Introduction of new policies and legislation aimed at regulating alternatives.

C. Resources:
   1. Increased / mandatory allocation of resources and investment in research and development into shifting away from intensive animal agriculture.
   2. Increased / mandatory allocation of resources and investment in research and development into shifting towards alternatives
D. Research:
1. Research into other important areas of current ASFs and alternatives including in respect of social and economic impacts and realities (for example externalities and harms relating to intensive animal agriculture).
2. Engagement with relevant academic institutions and associations representing relevant professionals.

E. Transparency:
1. Requiring mandatory reporting on matters of the public interest as further contemplated in this Working Paper and access to information by the public.
2. Transparency in terms of the considerations used in drafting the laws and policies, more so to determine the kind of research used when determining the way forward for South Africa’s food system. This will assist us in weighing the validity and justification for any changes made to any law, policy or institutional framework pertaining to South Africa’s food system.

F. Public Participation:
1. Public participation in law-making in this regard must be paramount with consultations targeting all South Africans including the most vulnerable and marginalized, i.e. people living in poor neighbourhoods, informal settlements, on farms and with consideration being given to key vulnerability factors such as age, gender, disability, education levels and income levels amongst others. The view of Civil Society Organisations (CSOs), Faith Based Organisations (FBOs) and Community Based Organisations (CBOs) must also be considered.

G. Consultation:
1. Consultation with relevant groups including NGOs, specifically in areas identified in this Working Paper.
2. There should be full and transparent participation by animal welfare groups from the inception of law-making processes. For example, in the drafting of the new Animal Welfare Bill.

III. Initial Recommendations: Broad Constitutional and Legal Areas for further Exploration / Utilisation

South Africa’s constitutional and legal framework has numerous provisions that can be used in transforming South Africa’s food system with a focus on protecting animal welfare and rights, people’s health and other rights and the country’s environmental protection imperatives. The legal system is however very wide and is distributed across different sectors, often making it difficult for the end users to fully understand or even have knowledge of its existence.
Whilst this Working Paper has attempted to compile some of the key legal and constitutional provisions, this is not exhaustive, and significant research still needs to be undertaken to provide a fuller picture of these provisions. In the final analysis, it is recommended that South Africa develop a single comprehensive law that is specifically aimed at transforming the country’s food system by encouraging the consumption of plant-based protein and a departure from animal-based protein.

Several rights in the Bill of Rights are impacted by our use, exploitation of and relationship with animals. The Constitution presents significant and vast opportunities to challenge the current paradigm and shift away from ASFs towards alternatives.

Similarly, as expanded on in Section III, there are legal areas that provide critical opportunities and within these, specific tools and provisions which were highlighted:

A. Administrative Law
B. Environmental Law
C. Consumer Protection Law
D. Criminal Law
E. Corporate Law
F. Competition Law
G. Business and Corporate Law
H. Tax Law
I. Property Law
J. Nuisance Law
K. International Law
L. Foreign Law
M. Other Legal Areas

IV. Initial Recommendations: Examples of Specific Proposals for Law Reform

Below are a few examples of more specific regulatory reforms that could be considered:

A. Animal Welfare, Wellbeing and Protection Related Recommendations:

1. Cruelty to Animals:
   a. Phasing out and ultimate banning of inherently cruel practices in animal agriculture.

2. Enforcement:
   a. More animal welfare organisations should have power to monitor and ensure compliance with laws, in addition to the national and provincial SPCAs for example.
   b. Dedicated resources towards enforcement of relevant animal legislation including inspectors as well as prosecutors and other legal enforcement.
3. **Animal Welfare Regulation:**
   a. Promulgating legally binding standards for animal welfare that are species specific which are enforceable.

4. **Engagement:**
   a. Developing an advisory body for animal welfare which is independent from government and which includes NGOs working in animal welfare and animal protection. Recently, the DFFE has established a “Wildlife Welfare Forum” which can serve as a benchmark but for true engagement with relevant stakeholders.

5. **Animal Welfare Authorisations:**
   a. Animal welfare authorisations, similar to environmental authorisations, waste management licences, etc. should be required for all new concentrated animal feeding operations (CAFOs) and expansions of CAFOs

6. **Stakeholders:**
   a. Vets and para-vets should be incentivised to improve animal welfare outcomes on industrialised animal agriculture.

7. **Transparency:**
   a. Animal operations – which can be achieved through various means which includes for example:
      i. representatives being able to represent facilities (taking into account biosecurity and other regulations)
      ii. cameras in farmed operations
      iii. cameras in slaughterhouses
   b. Monitoring and evaluation records should be made immediately publicly available.

8. **Transformative Shift:**
   a. Whilst there are laws that can be used to protect animal welfare, environmental rights and human health in the context of the country’s food system, they are inadequate. The paradigm remains that of commodification and exploitation of animals. A harmonious coexistence paradigm founded on rights of nature could be an important way of advancing reform.

**B. ASF’s Recommendations**

1. **Welfare Labeling:**
   a. Mandatory labeling on meat and animal products of production systems in terms of welfare. This includes mandatory labels indicating whether the animals within the production system are caged, free range or otherwise and such terms to be clearly defined.
2. **Health:**
   a. Mandatory labelling on use of antibiotics on packaging of meat and animal products.
   b. Laws should regulate the carcinogenic and heart/other disease-causing effects of animal products.

3. **Environmental:**
   a. Adding ASFs reduction as a mandatory public action listed in the Climate Change Bill.
   b. Mandatory labelling of environmental resources used for production of product (including water, land, feed).
   c. Mandatory labelling of emissions and pollutions caused by production of product (considering totality of production system).
   d. Carbon Tax application to industrial animal agriculture.
   e. Environmental Management Inspectorates (EMIs) should pay greater attention to CAFOs and an Animal Welfare inspectorate should be set up to monitor and enforce compliance with animal welfare laws in CAFOs.

4. **Industry:**
   a. Government must adequately regulate certain animal/meat related industries in order to break powerful monopolies and lobbies that influence government decisions and regulatory space.

5. **Transitionary:**
   a. The animal agriculture sector should be specifically included in South Africa’s just transition framework, which currently focuses on energy.

6. **Financial:**
   a. The cost of meat and animal products to reflect the true cost of producing such products (this needs to be carefully considered due to the impact this will have on the population and in particular, vulnerable populations).
   b. Meat Tax.
   c. Including externalities within the cost of meat.
   d. Reduction of subsidies by government.
   e. There should be a push by the government to divest from industrialised animal agriculture.

7. **Institutions:**
   a. Meat reduction in educational institutions, healthcare and correctional services and other public and private institutions housing large numbers of people at a time must be a mandatory policy measure.
C. Alternatives Recommendations

1. **Research:**
   a. Establishment of dedicated cultivated meat centres and programs within universities, academic institutions and other research facilities in South Africa
   b. Government should designate public funding to invest in and fund the research and development of alternatives.

2. **Financial:**
   a. Making alternatives more accessible financially.
   b. Tax relief on alternatives to be provided by government.
   c. Providing economic benefits to the supply and demand of alternatives.
   d. Subsidising alternatives and their production.
   e. Incentivise investment in alternative proteins including financial support to start-ups and scientists to help its introduction within the food market at low prices and with low taxes.

3. **Regulation:**
   a. The relevant government departments should work with the alternatives industry to create regulations that pertain specifically to this sector. This is essential for the growth of this food category.
   b. Regulating and understanding the nutritional value of processed proteins.
   c. Proper regulation of emerging industries and products such as cell-based foods and removal of problematic barriers.

4. **Social:**
   a. Including alternatives in social welfare programs including providing vouchers for alternatives and including alternatives in other programs of the Department of Social development.
   b. Forming consumer groups, especially in under-privileged communities, that can buy alternative proteins in bulk – sharing costs and accessing economies of scale.

5. **Nutritional Guidelines and Qualified Dietary Recommendations:**
   a. Medical research on food products should be included in qualified dietary recommendations as part of access to information by consumers to protect their consumer rights. In this regard, the medical profession and medical associations must be engaged to get their support and to ensure that law reform is based on emerging and up to date medical research, to strengthen recommendations about animal law reform and the transformation of the country’s food system.
   b. The food pyramid should be reviewed in light of scientific research and potentially redesigned to include alternatives.
c. Education at school level on the benefits of plant-based diets for the climate and health, and on the dangers of industrialised farming to help in transforming public perceptions.

d. Education of consumers about potential harms of industrialised animal agriculture as well as education on alternatives.

e. People should be encouraged to buy local.

f. Promoting small-scale agriculture in alternative proteins e.g., legumes.

g. Promoting health, economic and environmental benefits of alternatives.

D. Government Action

1. **Governmental Separation:**
   a. Government must consider separating the animal use and animal welfare regulatory issues and ensure that they are regulated by different departments, as it creates challenges when the same department that promotes the economic exploitation of animals also seeks to regulate their welfare. In this regard, the Department of Justice and Correctional services should be tasked with the enforcement of the Animal Protection Act and the proposed Animal Welfare Act as a starting point.

2. **Governmental Co-operation:**
   a. Different government departments must collaborate and coordinate with each other to ensure regulatory compliance/implementation and where no regulations are in place, creation of coherent, complementary and reinforcing legislative frameworks.

3. **Government Internal Policies**
   a. Government should lead by example in its own behaviours by promoting change. At government events and lunches, specific effort should be put into reducing meat consumption and the food served should follow the EAT-Lancet diet for personal and planetary health. This will be particularly important in the context of South Africa, where traditionally, meat is heavily consumed.

V. **Initial Recommendation: Exploring Litigation and Strategic**

In addition to positive legal reforms proposed above and throughout this Working Paper, strategic litigation is another area which can be used. While there are challenges with the court system in South Africa, the judiciary has made progressive rulings for animals and in the interests of social justice and the environment.

This avenue should be further researched as, together with the guaranteed rights in the Constitution, it provides ample opportunities to challenge the current paradigm and transform the South African food system.
SECTION 6

ISSUES FOR FURTHER RESEARCH & NEXT STEPS
**WORKING PAPER** AS AT 18 JULY 2022

I. Introduction

This Working Paper aimed to provide an introduction into complex issues relating to the food system in South Africa particularly as it related the Avenues explored. The next phase of the Project is the compilation of a White Paper to be released in October 2022.

The White Paper will aim to take into account further input from relevant stakeholders including any comments, corrections, suggestions or other input into this Working Paper. ALRSA and the authors welcome input from all interested in this area to provide such insights in order to provide a more holistic and succinct White Paper.

Below are certain areas identified for purposes of the next steps of the Project and particularly to be considered for the White Paper.

II. Stakeholder Consultation

1. New Stakeholders not yet consulted for the Working Paper
   a) Workers
   b) Unions
   c) Farmers
   d) Government
   e) Others

2. Follow up with stakeholders who were contacted for the Working Paper but who have not yet responded.

3. Reach out to additional stakeholders in the aforementioned categories who were not yet contacted.


5. Provide Working Paper to stakeholders who have already provided input to receive additional inputs, comments or amendments.

III. Updates on DALRRD Action in respect of Meat Analogues

1. Continue to follow updates in respect of DALRRD’s actions relating to meat analogues, particularly as it relates to the Communique.
IV. Updates on other Legislative Matters

1. Live Export Guidelines
2. Aquaculture Development Bill
3. Draft White Paper on Conservation and the Sustainable Use of South Africa’s Biodiversity
4. Any other updates to legislative efforts mentioned in this Working Paper relevant to the context

V. International and Foreign Examples

Review progressive law reform initiatives and other non-legal efforts with regulatory consequences in other countries and consider application to South Africa.

VI. Consider Compilation of Existing South-African Research

Consider compilation of resources and resources used for purposes of this Working Paper as well as additional resources and research relevant to the Project, with particular focus on SA-based research.

VII. List of Items for Further Research

Identify gaps in compilation of existing SA research and compile list of issues requiring further research.

Certain sections in this Working Paper have identified areas which warrant further research and consideration, either as part of this Project or more generally.

VIII. Other

Other matters raised in response to the Working Paper or initiatives or non-legal developments post-publishing of the Working Paper.

Continue to monitor comments and input from the Working Paper and determine additional further actions.
ACKNOWLEDGEMENTS AND LEGAL

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RESEARCH ASSISTANCE

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KEY INFORMANT INTERVIEWS & ASSISTANCE

Key Informant Interviews and contributed who provided expertise, information, resources and/or other assistance into this Working Paper (in alphabetical order, with affiliations at the time of the Interview. Inclusion of affiliations does not represent the views of the organisations represented):

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This Working Paper is as a result of the preliminary research and the review performed by ALRSA and the co-authors as at the published date. It is a high-level review intended to provide only a summary of certain issues which may be relevant to the topic. It is limited in scope based on various factors. This is a non-exhaustive Working Paper requiring further context and information in relation to all of the issues included herein.

ALRSA has focused on selected regulatory aspects and has not considered all legal, economic, political, social, environmental, technological, and other relevant aspects pertinent to some of these issues. All such factors should be considered when pursuing any further work or research.

It is also important to note that the focus of this Working Paper is on highly industrialised animal agricultural practices. Given the various types of systems, these all have different considerations and consequences. Certain of the statements, observations and recommendations do not and will not apply to small scale farming nor to other less harmful methods of animal agriculture and do not constitute allegations. Many of practices mentioned relate to large scale industrialised animal operations and do not necessarily apply to all animal farming facilities, operations or activities.

Not all animal agriculture is conducted in the same manner, and it is dependent on the particular farmer, facility, method of farming, geographic location and various other factors. Therefore, only generalised statements and recommendations are made focusing on harmful industrialised animal agriculture which may not be applicable to or appropriate for all animal agriculture.

In relation to alternatives to animal agriculture, not all alternatives are the same and all have different consequences and considerations. Given that many of these are new and emerging, much more work and research needs to be done to properly understand these. This is particularly true for products such as cultivated meats.

This Working Paper does not contain a detailed description of all relevant laws and policies, papers and each document reviewed. Its purpose is to set out those legal issues which we consider, in our absolute discretion, to be material. Reliance should not be placed solely on any of the summaries contained in this Report, which are not intended to be exhaustive of the provisions of any document or circumstances. ALRSA reserves the right to amend this Working Paper.

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