

Regulatory Frameworks Governing Wet Markets, Wildlife, and Zoonotic Disease

RAPID SURVEY OF 37 JURISDICTIONS – Preliminary Results

Legal Atlas® Research Paper

INTRODUCTION

The coronavirus pandemic (COVID-19) has diverted the world's attention to wildlife trade to a degree never experienced before. Suddenly, the wildlife trade crisis has become a health, human, economic and social crisis attacking societies at their core and across the globe.¹ We are no longer only talking about the value and volume of illicit trade and the damage it causes to wildlife and ecosystems, but also occupied with its cost in human lives and livelihoods.

Among the constant news items, there have been numerous articles expressing the need to engage in legal reform, and at least one article highlighting how laws currently fail to address this particular problem.² Some argue that all forms of wildlife trade must be banned;³ whereas others propose a more nuanced approach and call for better regulation and management.⁴ Regardless of the approach taken, so far there has been little information concerning the actual legal approaches to regulate markets where wildlife is sold. Which laws and which agencies are responsible? What mandates do they have? Are the markets themselves identified and directly regulated? Do the laws cover wildlife and zoonotic diseases? What are the implementing mechanisms? Are there adequate monitoring and enforcement powers?

This brief survey conducted by the Legal Atlas team cannot answer all of these questions, but it begins the discussion by assessing whether primary mandates in certain types of laws would apply to the sale of wildlife in wet markets. The goal of this survey is to shed some light on how these markets are regulated and whether there are controls in place that might prevent the emergence and spread of zoonotic disease.

METHODS

The regulation of wet markets is complex, potentially touching on as many as 10 different types of law and, depending on the jurisdiction, any number of regulations. Those found in the context of this research include laws directed at wildlife conservation and trade, fisheries

1 United Nations: Department of Economic and Social Affairs. (2020). Everyone Included: Social Impact of COVID-19. Available at <https://www.un.org/development/desa/dspd/everyone-included-covid-19.html>.

2 Broad, S. (2020) Wildlife Trade, Covid-19, And Zoonotic Disease Risks. TRAFFIC.

3 Trent, S. (2020) How COVID-19 Took Hold and Why We Must End the Wildlife Trade. The Revelator. Available at <https://therevelator.org/coronavirus-wildlife-trade/>.

4 Position Statement: Managing Wildlife Trade In The Context Of Covid-19 And Future Zoonotic Pandemics, Oxford Martin Programme on the Illegal Wildlife Trade and the Interdisciplinary Centre for Conservation Science, University of Oxford.

management, animal health and welfare, public health, food safety, meat industry, import/export, and markets. There are likely more.

Given this complexity and to limit the scope of the survey, only some laws and only national level mandates were considered. In most jurisdictions, lower level regulations (at the national and provincial level) follow national mandates and are therefore less likely to govern the issue on their own. The existence of applicable lower-level regulations of course cannot be excluded and further research into both national mandates and regulations, as well as sub-national legislation will certainly provide further insights into how this critical issue is governed.

The types of law reviewed include those that, based on prior experience researching wildlife trade legislations and confirmed through initial inquiry, were deemed most likely to regulate some part of the problem: e.g., either wildlife trade generally, the health and welfare of animals, or the sale of foods, and in particular meat. For the most part, the research scope excluded a review of marine fisheries-related legislation with the exception of the island nations included in the survey where these constituted the main wildlife trade laws.

Over a period of two weeks, analysts canvassed legislation in 37 jurisdictions. These were selected to ensure a mix of legal systems but also to target jurisdictions with varying levels of wildlife trade and known or suspected wet market operations. Most of the jurisdictions (*n.* 22 of the 37) are regularly highlighted in the news and enforcement data as wildlife trade sources and hubs. Many are also known to have actively operating wet markets. To provide as much of an overview as possible, nine (*n.* 9) of the jurisdictions were selected because they have lower reported levels of wildlife trade and eight (*n.* 8) have no known wet markets operating.

The list of jurisdictions is as follows:

- Antigua and Barbuda
- Australia
- Bangladesh
- Belize
- Botswana
- Brunei
- Cameroon
- Canada
- China
- Dominica
- Fiji
- Gambia
- Ghana
- Grenada
- Guyana
- India
- Jamaica
- Kenya
- Malawi
- Malaysia
- Mauritius
- Mozambique
- Nauru
- New Zealand
- Pakistan
- Papua New Guinea
- Samoa
- Seychelles
- Sierra Leone
- Singapore
- South Africa
- Sri Lanka
- Tonga
- Tuvalu
- Uganda
- Tanzania
- Zambia

For each jurisdiction, researchers noted the law and the specific provisions, including a short analysis of their potential application to the question of wet markets, the sale of wildlife and control of zoonotic diseases. Laws that govern all three elements are the only ones deemed as

having an existing regulatory approach, without yet commenting on how strong the approach actually is. Where laws govern wildlife and the sale of meat, but do not expressly cover diseases, they were marked as having a partial approach. Laws covering the sale of meat and zoonotic disease, but which excluded all wildlife, were recorded as a gap.

Marking a law as having a partial approach or a gap is not intended to say that wildlife and zoonotic diseases must be regulated by the type of law being reviewed. Ultimately, the assessment of each jurisdiction's approach is a function of all laws that apply. In some instances, there is more than one law and certainly, there can be more than one approach.

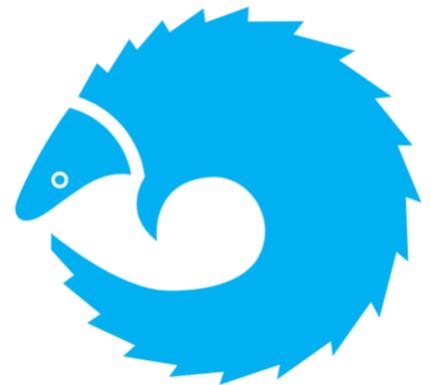
WILDLIFE LAWS

Of the 37 jurisdictions reviewed, none have specific provisions in their Wildlife Laws that regulate all three elements - the sale of wildlife, including meat, *and* the control of zoonotic disease. There are, however, several (*n.* 18 of those reviewed) that provide some basis for this either by:

- 1) prohibiting most or all forms of wildlife trade;
- 2) directly regulating, or delegating the authority to regulate, the sale of wildlife and game meat; or
- 3) instituting some form of permitting requirement for commercial trade and the sale of meat in particular.

The **first approach** obviates the need for more detailed regulation but appears to be in the minority, at least for the review conducted so far. It also does not necessarily apply to all species or provide for monitoring and enforcement actions that would still be required to effectively implement the ban. The Gambia's Wildlife Conservation Act is an example, prohibiting the commercial sale of any wild animal, meat or trophy, with the exception of bush pig.⁶ Mauritius takes a similar approach by prohibiting trade in all prescribed and scheduled species, including selling it for consumption by human beings.⁷

Zambia is an example of the **second approach**. Its Wildlife Act covers all wildlife under the definition of "animals" and all wildlife meat under the definition of "meat."⁸ The same law further empowers the Minister, on the advice of the Director, to regulate trade or movement of



⁶ The Gambia, Wildlife Conservation Act, sec 36(1)

⁷ Mauritius, Wildlife and National Parks Act, Section 17, 1993.

⁸ The Zambia Wildlife Act, Section 2, 2015.

meat of game or protected wildlife.⁹ The law falls short, however, of addressing the control of zoonotic disease. This is true for other jurisdictions listed as having a partial approach.¹⁰

Sierra Leone is an example of the **third approach**. The Wildlife Conservation Act, 1972 defines animals to cover all wildlife and also defines meat which includes meat of all wildlife.¹¹ Section 37 of the Act requires a permit to be obtained from the respective Minister in charge in order to sell wild game meat.

In all of these, the opportunity to develop appropriate regulations is at least theoretically immediate, as the Ministry responsible for this form of trade already has a mandate that, in the absence of laws to the contrary, could be extended to support this form of regulation.

The remaining 19 jurisdictions have no provisions in the wildlife law regulating the sale of wild game, per se, although wildlife is generally regulated in some way. All of these are considered to have a gap in their wildlife law for purposes of this review.

ANIMAL HEALTH AND WELFARE LAWS

Most jurisdictions have some form of Animal Health and Welfare Law. Sometimes they have a more specific Animal Disease Act, or a Public Health Act. For this type of law, the picture is almost entirely reversed compared to Wildlife Laws. Of the 37 jurisdictions reviewed, the majority (*n.* 23) have specific provisions in their Animal Health and Welfare Laws that regulate all three elements - the sale of wildlife, including meat, and the control of zoonotic disease. Far fewer have a partial approach (*n.* 6); and only six (*n.* 6) were judged as not applicable. Two (*n.* 2) jurisdictions (Australia and Tuvalu) were not assessed for this law type.

However titled, and whether broad or narrow in scope, these laws tend to include wildlife under their definition of 'animals.' They also often contain provisions directed at animal disease control, import, export and transit of diseased animals, animal quarantine for diseased animals, animal welfare and sanitary measures for diseased animals, as well as enforcement powers.¹²

There is however no standard for what mechanisms are used and there are certainly differences in the approach that likely present hidden gaps not yet assessed. It should be noted that in none of these laws, is the term 'wet market' used or defined. The reference is more



⁹ Id. at Section 100.

¹⁰ E.g., Malawi,

¹¹ Sierra Leone, Wildlife Conservation Act, Section 2, 1972

¹² See for example Antigua and Barbados, Animal Health Act, 2017

general. Of the jurisdictions reviewed, Kenya provides an example of law that expressly regulates markets in the context of wildlife trade.¹³

A few jurisdictions were labelled as having a partial approach. In one instance, Pakistan, this was based on having found only sub-national legislation applicable to the issue.¹⁴ For another, Malawi, the designation is due to the law's limitation only to game animals.¹⁵ Jamaica, takes a similar approach limiting the application of the law to wildlife, but excluding marine wildlife.

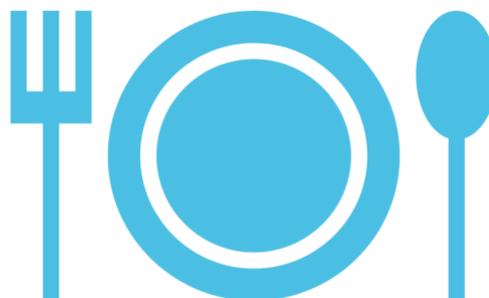
For the remainder, either no animal health and welfare law was found in this brief effort;¹⁶ or the law is focused on animal suffering, as opposed to the regulation of disease;¹⁷ or the law covers only domestic species.¹⁸ In all of these cases, analysts recorded this as a gap.

FOOD LAWS

Food laws are similar to Animal Health and Welfare laws in their level of applicability but tend to differ in their content, as well as their tools and implementing mechanisms. Analysts were able to find food laws for 35 of the 37 jurisdictions. Of these, 21 have applicable provisions regulating all three elements of concern - the sale of wildlife, including meat, *and* the control of zoonotic disease; eight (*n.* 8) have a partial approach; and six (*n.* 6) were judged as not applicable.

Many of the food laws reviewed cover wildlife in the same way as Animal Health and Welfare Laws by including wildlife in their definition of 'animals.' Fiji's Food Safety Act, for example, defines 'animal' to include all wildlife and products derived from them.¹⁹ New Zealand's Animal Products Act takes a similar approach.²⁰

However, food laws can be more selective in the species they cover, resulting in partial approaches. Intended to regulate food, they are more likely to exclude certain domestic animals and at least some forms of wildlife. Antigua and Barbuda's Food Safety Act, for example,



¹³ Kenya's Animal Diseases Act includes wildlife (Art. 2); markets are expressly regulated (Art. 9(h)); gov. officials have power to inspect premises (Art.14); to search and detain suspects (Art. 17).

¹⁴ For Pakistan, only subnational legislation could be located.

¹⁵ Malawi, Control of Diseases of Animals Act, 1967.

¹⁶ Tuvalu

¹⁷ India, Prevention of Cruelty to Animals Act, 1960

¹⁸ Tanzania, Animal Welfare Law, 2008.

¹⁹ Fiji, Food Safety Act, Section 2, 2003.

²⁰ New Zealand, Animal Products Act, Section 4, 1999.

expressly excludes dogs, cats, birds and turtles.²¹ Similarly, the Food Act in Mauritius only includes wildlife that is normally consumed by human beings and does not apply to all wildlife.²²

That said, some food laws include all forms of meat (and fish) without limitation and therefore, at least in theory, apply to game meat. In Tonga, the Food Act probably covers wildlife as it would fit within the Act's definition of "Food", described as any processed, semi-processed or raw substance intended for human consumption.²³

For others, the scope is ambiguous. India's Food Safety and Standards Act, for example, defines "food" to include animals prepared or processed for human consumption in the market. It is not clear, however, whether this is intended to also cover wildlife that are not a part of the formal market.²⁴

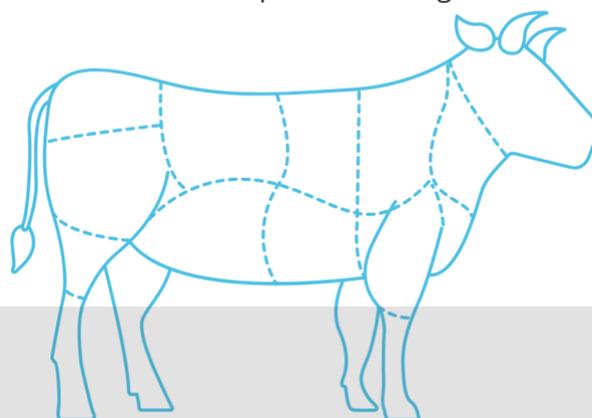
MEAT INDUSTRY LAWS

Not all jurisdictions have a law dedicated solely to the control of meat products in the meat industry, although it is fairly common. In this survey, 33 of the 37 jurisdictions have this type of law. Some jurisdictions have incorporated meat control regulations within their food safety law, eliminating the need of a separate meat control law.

In general, these laws are concerned specifically with the sanitary conditions involved in the processing, storage, and sale of meat. They regulate in detail the processes associated with meat production for market and cover zoonotic diseases.

By their terms, however, they most often exclude wildlife. As a result, the majority (*n.* 22) are listed as having a gap; with only eight (*n.* 8) being applicable and three (*n.* 3) having a partial approach.

Those jurisdictions recorded as having a gap in this particular type of law only refer to domestic livestock.²⁵ Partial approach countries make them applicable to a set list of species including domestic species and some wildlife.²⁶



²¹ Antigua and Barbados, Animal Health Act, Seventh Schedule, 2017

²² Mauritius, Food Act, Section 2, 1988.

²³ Tonga, Food Act, 2014.

²⁴ India, Food Safety and Standards Act, Section 3(j), 2006.

²⁵ Tanzania, Animal Diseases (livestock markets) Regulations, 2001; Papua New Guinea, Slaughtering Act, Section 1, 1964.

²⁶ South Africa, Meat Safety Act, Section 1 and Schedule I, 2000.

CONCLUSION

Out of all 37 jurisdictions, the majority (*n.* 28) had at least one or more of the assessed laws with relevant content. At a minimum, these jurisdictions have a strong starting point for further regulatory development. Some may already have the legal foundation they need (e.g., Kenya) and instead may need to focus more on implementation and enforcement.

Only nine (*n.* 9) had none of the assessed laws fully applicable to the regulation of zoonotic diseases for wildlife sold in markets. These include Belize, Cameroon, The Gambia, Malawi, Pakistan, Samoa, Tuvalu, Tanzania, and China. This review does, however, not exclude the possibility that there are other laws that may apply.

For all jurisdictions, further research is needed to not only compile full frameworks of applicable laws, but to then assess the practices and tools used and their ability to prevent zoonotic diseases from spreading. To do this well would require a multidisciplinary team consisting of zoonotic disease specialists, legal professionals, and government staff with experience in monitoring and enforcing related legislation.

Of the jurisdictions reviewed, Kenya's Animal Diseases Act provides one of the strongest regulatory examples.

Legal Atlas

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Legal Atlas Researchers and Authors

James Wingard, JD (US), *Lead Author*

Sofija Belajcic, Attorney (Australia)

Maria Heise, Attorney (Kenya)

Manohar Samal, Law Candidate (India)

Sicily Fiennes, Wildlife Trade Specialist (UK)

Kathy Rock, Wildlife Trade Specialist (UK)