The Need to Reconceptualize Wild Animals Post-COVID 19: Miscoordination of Wildlife Regulations in China’s Food Legal Order

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ARTICLE

The Need to Reconceptualize Wild Animals Post-COVID-19: Miscoordination of Wildlife Regulations in China’s Food Legal Order

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ABSTRACT

Today, China is one of the largest markets for wild animal trading. Yet, wild animals are in a regulatory grey area. There is an increasing need to revisit how wild animals are simultaneously but differently regulated in the food and wildlife protection regimes. Rarely do attempts to understand these two regimes occur, making this article’s analysis of miscoordination in these bodies of law crucial in addressing the hindrance of nationwide food safety improvement efforts.

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INTRODUCTION

Wild animals highlight the interesting conflict between the food and wildlife legal systems in China. As per the Wildlife Protection Law of the People’s Republic of China, wild animals are referred to as species “both terrestrial and aquatic, which are rare or near extinction and terrestrial species which are of important ecological, scientific and social value.”\(^1\) While defined quite broadly, they are prescribed special treatment as a subject of protection under the Wildlife Protection Law.\(^2\) At the same time, whether processed or not, wild animals fall under the legal definition of “food” under the Food Safety Law when used for human consumption, as long as the animal is not solely used as medicine.\(^3\) Given that China is one of

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the largest markets for wild animal trading today, wild animals are in a regulatory grey area.

Even prior to the emergence of COVID-19, which may be related to the Chinese Pangolin, wild animals raised questions regarding the safety of their consumption. For example, in 2003 the SARS-CoV-2 pandemic emerged, which has since resulted in over 2000 deaths around the world. The pangolin is a small scaly anteater that is native to Africa and Southeast Asia and is known for its scales. Several studies have shown that the virus responsible for the COVID-19 pandemic is similar to the virus that causes the SARS-CoV-2 pandemic, specifically the pangolin. This has led to increased concerns about the safety of consuming wild animals.

With COVID-19, President Xi Jinping explicitly warned of the dangers posed by these animals to public health in the midst of unknown threats, and the Standing Committee of the National People’s Congress swiftly placed a ban on consuming almost all wild animals. In light of this action, in early 2020 wild animal consumption was seen as a significant risk. That same year, local governments took action to ban the breeding and sale of previously approved wild animals. By October 2020, the first draft

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6. See generally Paolo Zucca et al., What Do Adolescents Know About One-Health and Zoonotic Risks? A School-Based Survey in Italy, Austria, Germany, Slovenia, Mauritius, and Japan, 9 FRONTEERS PUB. HEALTH 1 (2021) (discussing zoonosis attributed to human activities). Id. at 2 ("More than 60% of the 1,700 infectious diseases that affect humans come from animals like the Sars-Cov-2, Ebola, Hiv, SARS, MERS, Swine, and Avian flu, Zika, etc. pandemics, after starting from sporadic phenomena limited to rural areas, have become a global emergency.").


amendment of the Wildlife Protection Law became publicly available for public consultation, which raised optimism for many environmental activists, food scholars, and lawyers hoping to halt the trade and consumption of wild animals. As this paper underwent edits for publication, a second draft amendment entered into effect on May 1, 2023. However, it is apparent in this latest amendment that there is still a general lack of understanding in regulating the use and consumption of wild animals.\(^1\)

This paper does not aim to discuss all problems related to wild animals. Instead, it seeks to focus on how wild animals pose a public health risk even post-COVID-19 by entering the human food chain\(^2\) as a result of gaps in many bodies of law. In order to analyze how the food legal order in China has failed to effectively bring wildlife into its governance, Part I of this article aims to first position wildlife animals in the Chinese food legal order that developed over time to balance food availability and safety issues. Part II reviews the regulatory history of both the food safety regime and the wild animal protection regime. In doing so, some of the normative progress that has taken place in the food safety regime will be discussed, separate from how the country has treated wildlife animals. This discussion allows a better understanding of what it missed in the grander food legal order. Part III analyzes the loopholes in the system in which efforts to improve the food safety regime have been curbed by deeply rooted wildlife consumption practices. The intent is to look, from an outsider’s perspective, into the implications of China standing at a crossroad where food safety improvement efforts meet realistic concerns related to wildlife consumption. Given the significance of public health, this study is not domestic in nature—it is supranational, reaching far beyond the state boundaries of China.

I. Miscoordination of Wildlife Regulations in the Food Legal Order

Understanding where wildlife regulations stand within the legal order involves analyzing some general and individual norms that have developed

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over time. With the support of science, biology, and culture, norms have evolved to advance safe production, distribution, and consumption of food. When safety issues arise based on scientific evidence, the State has shown a general propensity towards banning wild animal consumption. Nevertheless, a miscoordination of the regulations exists. To understand such miscoordination, it is important to study how wildlife is treated within the food safety regime. Without this perspective, a full panorama of understanding of the food safety regime and public health is nearly impossible. This is particularly true in countries such as China, where wildlife animals are sometimes actively sought for medicine and food by the public.

Some studies controversially attribute these actions to the emergence of COVID.

At the outset, the State has legal ownership over the wild animals within the territorial boundaries of the State in China. Article 3 of the Wildlife Protection Law stipulates that wild animal resources belong to the State. This provision in the law allows the government to place restrictions on private ownership over these animals. The government guarantees the legitimate rights and interests of organizations and individuals involved in scientific wildlife research, among others as a mediating move. While there are a total of 988 species of wildlife animals on the National List of Protected Wild Animals, scientific research on wildlife is in fact encouraged by the relevant governmental authorities at or above the county level under Article 4 of the Implementing Regulations on Wildlife Protection Law.
In another realm, the Food Safety Law and its amendments, implementation regulations, decisions and notices issued by the National People’s Congress, working documents from state agencies, and relevant judicial opinions, make up the food safety regime that sometimes involves wild animals. The executive, judicial, and the legislative branches seek to mitigate health risks from food and bring those liable for foodborne illnesses to justice, albeit at varying degrees. Recently, the three branches have shown movement in dealing with wild animals, as will be discussed below. From farm to table, multi-dimensional control has been placed on food, regardless of its origin. Food is normally processed and distributed through various channels and systems. Wild animals are, in essence, both a food source and a source of scientific research under both the government and the private sector.

A careful reading of the Food Safety Law and its developments over the decades teaches us that the Chinese people’s consumption of wild animals stems from “cultural, economic and political roots.” With starvation and insufficient food as serious problems in the past, the propensity to look for different food sources and unconventional parts of meat became a form of identity and a habit to some. This has been true even when the state has officially held the view that wildlife is a “resource” subject to protection. In fact, one could argue that even following the emergence of COVID-19, regulations specifically designed to curb wildlife consumption have been sparse and ineffective. This paper aims to point out the loopholes in the food legal order in this regard.

This paper mainly refers to the Food Safety Law to discuss State endeavors in improving food safety that directly impacts public safety. This is done alongside the reviewing of the People’s Republic of China Law on Wildlife Protection, which first came into effect in 1989. The Law on Wildlife Protection was subsequently amended and revised multiple times since

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23. See Food Safety Law 2021, supra note 3, at art. 46.
26. Id.
27. E.g., Wildlife Protection Law 2023, supra note 2, at art. 3, art. 17, art. 26.
28. See FUZHOU TRANSPORTATION BUREAU, supra note 2, at pmbl.
then. After it entered into force in 1989, it remained intact without any revisions until August in 2004. This was four months after the National Health Commission of the People’s Republic of China reported the first child avian influenza A(H3N8) infection to the World Health Organization, following his consumption of chickens in the backyard.\textsuperscript{29} The Wildlife Protection Law was then amended in 2009, revised in 2016 and again in late 2022. Further analysis on the developments and the loopholes will be discussed in the following sections.

It may be possible to see paradigms shift in food safety against the relative static nature of wildlife consumption. Although this study focuses on China’s food safety regulations and wildlife provisions, one cannot emphasize enough that this study at the very core is decentralized and supranational: we ultimately go beyond both state borders\textsuperscript{30} and fixed time frames. Wildlife is not unique to one country,\textsuperscript{31} but rather an issue for humanity altogether due to their borderless movement—particularly in the post-COVID era.

II. The Need to Read Both Regulatory Spheres Together

China has continued its quest to promote food security, safety, and quality over history.\textsuperscript{32} The country made its first institutional attempt in drafting the national administrative law exclusively for food in 1965 by introducing the Regulations on the Administration of Food Hygiene for Trial Implementation.\textsuperscript{33} This came in line with certain important socio-political changes that were taking place in the country, such as the introduction of the First Five-Year Plan geared towards rapid industrialization.\textsuperscript{34} The overlap in timing hints at the optimism in allocating resources to food hygiene with industrial development taking place at that time. Yet, the country was

\begin{itemize}
  \item \textsuperscript{29} For a description of the case, see World Health Organization [WHO], \textit{Avian Influenza A (H3N8) – China} (May 9, 2022), https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON378 [https://perma.cc/EEJ3-UFJG].
  \item \textsuperscript{30} See infra Part IV Section 3.
  \item \textsuperscript{31} Bushmeat is sold at local markets around the world, such as in India, Latin America, and Africa. Dina Fine Maron, ‘Wet Markets’ Likely Launched the Coronavirus. Here’s What You Need to Know, \textit{NAT’L GEOGRAPHIC} (Apr. 15, 2020), https://www.nationalgeographic.com/animals/2020/04/coronavirus-linked-to-chinese-wet-markets/ [https://perma.cc/7U4R-EXWL].
  \item \textsuperscript{33} Bian Yongmin, \textit{The Challenges for Food Safety in China}, 53 \textit{CHINA PERSPECTIVES} 1, 3 (2004).
  \item \textsuperscript{34} John Wilson Lewis et al., \textit{The Transition to Socialism}, 1953-57, in \textit{CHINA, BRITANNICA} (2023) https://www.britannica.com/place/China/The-transition-to-socialism-1953-57 [https://perma.cc/ELS4-HLPP].
\end{itemize}
suffering from food availability issues at the time, and was only able to introduce the Administrative Provisions on Standardization and the Administrative Provisions on Food Hygiene in 1979, which was a decade later, and the Food Hygiene Law (for trial implementation) in 1982. From there, it took over another decade for the official Food Hygiene Law to be adopted in the country in 1995. The Food Hygiene Law placed primary importance on maintaining hygiene in food, additives, containers and packaging. Considering the ongoing food safety issues largely instigated by the Melamine Crisis in 2008, drastic measures were taken to introduce the Food Safety Law in 2009 which had a broader scope and purpose than the food hygiene law. This Food Safety Law was then revised in 2015, and 2021 after the emergence of COVID-19.

Reading the development of the law while considering the major debates that prevailed over time makes the interdisciplinary study of food safety and wild animals interesting. In 1965, the Regulations on the Administration of Food Hygiene for Trial Implementation mainly covered and discussed state-owned food producers. For example, Article 9 provided that food additives were “only to be produced by factories designated by the competent authorities of the State Council and of the provinces, autonomous regions, and municipalities directly under the Central Government that are responsible for chemical industry, light industries, petroleum industry, forestry, aquatic products, pharmaceuticals” among others. Private entities and individuals were basically unmonitored in the production and processing of food if they had access to any. This correlated well to the socio-economic status of the country, in which its

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37. Id.
38. Id.
41. See Food Safety Law 2021, supra note 3.
42. Yongmin, supra note 33, at 1.
43. Food Hygiene Law, supra note 39, at art. 9.
annual GDP was a mere 70.44 million USD.\textsuperscript{44} While this was a significant increase compared to the previous year (approximately 59.7 million USD), the hunger level was still considerably high.\textsuperscript{45} As aforementioned, the country’s largest concern was that there was not enough food supply for the people to consume at this point.\textsuperscript{46} The country had just survived the Great Famine and over-exporting of grains,\textsuperscript{47} making it more important to feed the populace. As in many other countries suffering from hunger, wildlife animals were a resource that provided much needed nutrition at these difficult times.\textsuperscript{48} Due to the combination of limited resources and interest, it was two decades later before the Wildlife Protection Law of the People’s Republic of China was adopted in 1988\textsuperscript{49} at the 4th meeting of the Standing Committee of the Seventh National People’s Congress.\textsuperscript{50} In other words, for almost two decades, while specialized laws on other subsets of food such as agricultural produce were being developed,\textsuperscript{51} there was a vacuum in the regulation of wildlife. Also, when regulations on wildlife did appear in 1988, they mainly sought to protect wild animals as a ‘resource’ and that purpose remained unchanged throughout amendments and revisions in 2004, 2008, 2016, 2018, and 2022.\textsuperscript{52}

This Wildlife Protection Law, as its name suggests, is geared toward protecting the environment in theory. But it does not adequately acknowledge that wildlife has been used as food or ingredients, such as for

\begin{itemize}
  \item \textsuperscript{44} \textit{Comparison: Annual GDP} 1965, \textsf{COUNTRYECONOMY}, \url{https://countryeconomy.com/gdp?year=1965} [\textsf{https://perma.cc/Y5AJ-C7XJ}].
  \item Yongmin, \textit{supra note 33}, at 1.
  \item See, e.g., Cortni Borgerson et al., \textit{Food Insecurity and the Unsustainable Hunting of Wildlife in a UNESCO World Heritage Site}, \textsf{3 FRONTIERS IN SUSTAINABLE FOOD SYS.} 1, 7, 9 (2019) (discussing the consumption of wild animals by food insecure households in Madagascar).
  \item E.g., Wildlife Protection Law 2023, \textit{supra note 2}.
  \item Id.
  \item See Wildlife Protection Law 2023, \textit{supra note 2}.
\end{itemize}
Chinese medicine or direct consumption, for over 5,000 years,\(^ {53}\) posing health risks to the general public.\(^ {54}\) This fact alone suggests that when compared to the laws on food safety, wildlife did not receive much attention from the public nor the government “even after the bitter lessons of the 2003 SARS epidemic.”\(^ {55}\) Wildlife animals have been left in the shadows of the bodies of law that should govern them. Nevertheless, as the recent suggested amendments to the law suggest, wildlife regulations have become subject to amendments more frequently, and the central government revisited its permission on the “use” of wild animals. In fact, after the emergence of COVID-19, the Standing Committee of China’s National People’s Congress banned hunting, trading, and transporting any terrestrial wildlife for the purpose of eating.\(^ {56}\)

In reference to wildlife trading, there is a broad allocation of administrative responsibilities placed on all state departments nationwide: “[d]epartments at all levels including those of market supervision and administration, customs, railways, roads, water transport, civil aviation, post and others shall supervise and inspect the trade, utilization, transport, mailing and carrying of wild animals and the products thereof.”\(^ {57}\) The Wildlife Protection Decision in 2020 newly added that the law “is formulated for the purpose of protecting wild animals, saving species of wild animals which are rare or near extinction, maintaining biodiversity and ecological balance, guarding against public risks, and promoting the establishment of ecological civilization.”\(^ {58}\) Although the second revisions to the amendment released in 2022 showed the deletion of “guarding against public health

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58. *Id.* at art. 1 (emphasis added).
risks” in stating the overall purpose of the Wildlife Protection Law, the state’s sense of urgency is still separately reflected in the Committee placing a “complete ban of illegal wildlife trade and the elimination of the unhealthy habit of indiscriminate wild animal meat consumption.” The amendments to the Wildlife Protection Law overall aimed to strengthen protections against risks; and it newly proposes that the state would “pursue a policy of . . . guarding against risks, [while promoting] the harmonious symbiosis of man and nature.” It is one of the first genuine attempts to officially merge the concept of wildlife into the food legal order. In fact, when reading the Food Safety Law together with the Wildlife Protection Law, the State’s intention to discourage, and further create hurdles to, consuming wildlife became apparent. The 2020 Wildlife Protection Law proposed amendment states, “illegal consumption of wild animals as food shall be prohibited.” Regardless, given that significant changes were made to the text for the second draft version that was later passed, whether these genuinely mean an improvement in the food safety regime is debatable.

1. Regulatory History of Food Safety and Wildlife Protection

To properly understand and correlate the current legal framework with how food safety and wildlife interact and co-exist, a look into the historical development of the relevant laws in China as well as the relationship and ramifications to wildlife management is necessary. Furthermore, historical context of important events and previous wildlife related pandemics provides vital perspectives into how the development of these laws was informed. The Food Safety Law, Wildlife Protection Law, and contributions of the various regulations for the protection of terrestrial and aquatic animals, are all bodies of law that should be read together.

Following the foundation of the People’s Republic of China in 1949, the government was interested in establishing a food safety regulatory scheme, although this did not mean that wild animal consumption was consistently taken into account when making legislative reforms on food

59. Yifan & White, supra note 9.
60. Chen & Yifan, supra note 55.
61. Wildlife Protection Law 2020, supra note 1, at art. 4.
62. See Chen & Yifan, supra note 55.
63. Wildlife Protection Law 2020, supra note 1, at art. 6
64. See also Yifan & White, supra note 9.
65. See Hu Yinglian, Regulation: Institution Arrangements and Organisational Evolution, in BUILDING FOOD SAFETY GOVERNANCE IN CHINA 47 (Jerome Lepeintre & Juanjuan Sun eds., 2018) [hereinafter BUILDING FOOD SAFETY GOVERNANCE].
hygiene and safety. In a way, early developments appear fragmented from a modern scholar’s perspective.

In 1949, the Ministry of Health was established, and the Changchun Railway Bureau began its operation as the State’s first health and anti-epidemic station. While this was a single station, by 1953 there was a widespread expansion of such health and anti-epidemic stations around the country. The Government Administration Council mandated local health authorities to monitor and manage hygiene around the country. At the same time, hygienic standards were set for individual items such as “grains, oil, meat, eggs, alcohol and dairy products.” The Interim Administrative Measures for Cool Drinks and Foods was also issued the same year given the importance of monitoring and supervision of individual food products. The state’s interest in establishing state standards was quite high, but it did not act fast enough, and only four years later in 1957, the country was hard hit by the Asian Flu Pandemic H2N2, an avian recombinant. There is a lack of official records left on the pandemic that possibly resulted in four million casualties, and speculations point to geese from Guizhou as the origin of the Asian Flu Pandemic H2N2. This however became one of the first modern records that showed how human-wildlife interactions could pose a public health risk.

Intriguingly, while the state did not issue standards or measures related to wild animal consumption, it did proceed with those related to food products per se. In 1957 the Ministry of Health had “circulated a piece of legislation nationwide that was originally formulated by the Tianjin Municipal Bureau of Health, stipulating a maximum amount of 1 mg/kg of arsenic content in soy sauce.” This was perhaps due to the prevalence and the popularity of soy sauce being used as a cooking ingredient. Three years later, the State Council additionally circulated the Administrative Measures for Synthetic China Food Pigments, which was put together by the State Scientific and Technological Commission, MOH, and the Ministry of Light.

66. None of the legislative endeavors, such as the Interim Administrative Measures for Cool Drinks and Foods, Trial Regulations on the Implementation of Food Hygiene Management mention wildlife animals as a food ingredient. See Shípǐn Xiàng Guān Chǎnpǐn Zhí Liàng Ānquán Jiàndū Guǎnlǐ Bànfǎ (食品相關產品質量安全監督管理暫行辦法) [Interim Measures for the Supervision and Administration of Food-Related Product Quality and Safety] (promulgated by State Administration for Market Regulation, Mar. 1, 2023), http://www.lawinfochina.com/display.aspx?id=39793&lib=law# [https://perma.cc/KAE4-QR6X].

67. BUILDING FOOD SAFETY GOVERNANCE, supra note 65, at 47.

68. Id.


70. BUILDING FOOD SAFETY GOVERNANCE, supra note 65, at 47.
Coordination of efforts from the central government for standardization was developing despite fast-approaching economic downturns. From 1959 to 1961, in what is known as the Great Famine, harvests dropped around the country and caused great livelihood problems. Hunger was widespread and death tolls were some of the worst in history. To many people, hygiene standards became de facto meaningless, and standardization efforts were significantly curbed.

Soon after the end of the Great Famine, however, the central government returned to taking national measures in developing legal instruments for public health. The Administrative Measures of Standardization of Industrial, Agricultural Products and Engineering & Construction was introduced in 1962, and it only took approximately two years until the promulgation of the 1965 Trial Regulations on the Implementation of Food Hygiene Management. This marked the state’s first attempt to solely focus on food production and consumption. It was a sign of the onset of an early cohesive, centralized supervision with the aim of having nationwide impact.

Even early in this legislative history, an intricate balance of responsibilities between the State and private individuals was also increasingly becoming a part of food production and processing. Such balancing contributed to the steady improvement of food safety in the country in the years ahead. Article 2 of the 1965 Trial Regulations on the Implementation of Food Hygiene Management stipulated that throughout the process, from production to sale, relevant competent authorities were required to incorporate food hygiene-related plans and then designate

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71. See id. at 47–48.
74. In a state where there is scarcity of food for many, food per se can translate to political power, and Sen explains access to food was “governed by one set of rules or another, combined with the contingent circumstances.” Amartya K. Sen, The Food Problem: Theory and Policy, 4 THIRD WORLD Q. 447, 451–52 (1982). He termed this an “entitlement,” which independently became a subject of a heated debate among interested scholars. See id. For more information on Sen’s enlightenment approach to famine analysis, see generally Stephen Devereux, Sen’s Entitlement Approach: Critiques and Counter-Critiques, 29 OXFORD DEV. STUD. 245 (2001); D. John Shaw, Food Entitlement, in WORLD FOOD SECURITY 230 (2007).
institutions or personnel to manage the system.\textsuperscript{75} The health department was responsible for the supervision and technical guidance of food hygiene.\textsuperscript{76} Food production and business units and their competent departments, and health departments at all levels were further required to cooperate closely to advance food hygiene.\textsuperscript{77} Food production and supply was a matter of political importance during this period, and it would have been of the government’s interest in supervising the establishment and operation of food enterprises.\textsuperscript{78} In other words, individuals had no room to be involved in this supervision. The 1965 Trial Regulations on the Implementation of Food Hygiene Management also mostly applied to State-owned food producers\textsuperscript{79} or “enterprises owned by the whole people,”\textsuperscript{80} and other forms of food-producing enterprises were unregulated.\textsuperscript{81} Influenced by the Soviet Model, food quality management and control were created out of a hierarchical “subordination relationship” in state enterprises.\textsuperscript{82} Nevertheless, as it turned out, this model contributed to positive food production growth of 6.8\% per year on average from the years 1953 to 1978,\textsuperscript{83} and the responsibility placed on more personnel and individuals grew accordingly.

In line with other aforementioned changes under Article 13 of 1965 Trial Regulations on the Implementation of Food Hygiene Management, the state placed more emphasis on individual responsibility in protecting food hygiene.\textsuperscript{84} Food production and business units were required to do health checks of new hires in advance of the starting work.\textsuperscript{85} It was prescribed in law that personnel were not allowed to be infected with certain infectious diseases such as intestinal infectious diseases, nor were they allowed to be carriers of infectious hepatitis, active tuberculosis, purulent or exudative

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\item \textsuperscript{75} Shipin Weisheng Guangli Shixing Tiaoli (食品卫生管理试行条例) [Regulations on the Administration of Food Hygiene] (promulgated by the St. Council on Aug. 17, 1965, repealed on Aug. 28, 1979), art. 2, https://zh.wikisource.org/wiki/%E9%A3%9F%E5%93%81%E5%8D%AB%E7%94%9F%E7%AE%A1%E7%90%86%E8%AF%95%E8%A1%8C%E6%9D%A1%E4%BE%BB
\item \textsuperscript{76} Id.
\item \textsuperscript{77} Id.
\item \textsuperscript{78} See id.
\item \textsuperscript{79} Yongming, supra note 33, at 1.
\item \textsuperscript{80} Building Food Safety Governance, supra note 65, at 49.
\item \textsuperscript{81} Id.
\item \textsuperscript{82} Peng Liu, Tracing and Periodizing China’s Food Safety Regulation: A Study on China’s Food Safety Regime Change, 4 REGUL. & GOVERNANCE 244, 24749 (2010).
\item \textsuperscript{83} See Building Food Safety Governance, supra note 65, at 48.
\item \textsuperscript{84} See Regulations on Food Hygiene, supra note 75, at art. 13.
\item \textsuperscript{85} Id.
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skin diseases, or leprosy, among others. Any staff suffering from these infectious diseases had to transfer his or her work and was subject to at least one annual health check. However, these changes were not applicable to food production outside of the broad framework of State monitoring, and there is no record of whether any safety regulations were developed for processing and consuming wild animals.

Many changes took place in daily food production and consumption patterns during the 1966-1976 Cultural Revolution. The State’s endeavors to build a centralized management system based on law and regulation of food safety was short-lived because the legal system in the country collapsed soon after laws were implemented. Most predominantly, there was a “Down to the Countryside Movement” that encouraged youths nationwide to relocate to remote places. This movement meant that for many, there was a sudden lack of food options. It became a common practice to supplement food consumption habits with foraging for plants and hunting animals, such as dogs. There was no mention of wildlife consumption in the regulations that were related to food hygiene, but it was clearly becoming a food source. Wild cats, foxes, snakes, and other living species on the mountains were often sought by individuals who had no knowledge in food safety. They also were heavily involved in personally catching, cooking, and processing of wild animals. Such unsafe practices often led to severe results and casualties, in which in one account of many, people died as a result of eating dog brains. Not much information was available on how severe the conditions in the countryside were until relevant news spread to Hong Kong. This later became known as the Hong Kong Flu Pandemic, a H3N2 pandemic that was speculated to originate from

86. Id.
87. Id.
88. See Bermouna, supra note 73, at 42; Yongming, supra note 33, at 2.
93. Heping, supra note 90.
the mainland was reported in Hong Kong in 1968, and some currently speculate the casualties reached 4 million.\textsuperscript{94} Diseases and viruses from wild animal sources continued to be a risk to public health throughout this difficult time of “lost years.”\textsuperscript{95}

A decade later, as China entered a market economy era, it developed its outreach and international cooperation on wildlife protection and refined its regulations on food hygiene. The 1970s was an interesting period viewed from such a perspective. Globally, the number of wild animal transactions continued to grow,\textsuperscript{96} and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat prompted the global community to undertake scientific and technical studies on standards for the necessary identification, preparation, and shipping of specimens.\textsuperscript{97} Adopted in 1973, the global community under the CITES framework aimed to propel international cooperation in safeguarding diverse animal and plant species. Domestically, China was ramping up its work on food hygiene and passed its 1979 Regulations on the Administration of Food Hygiene.\textsuperscript{98} Although it took another two years for China to join as a signatory of CITES in 1981,\textsuperscript{99} it has remained an active Member State since.

In 1979, China introduced the 1979 Regulations on the Administration of Food Hygiene.\textsuperscript{100} Based on the 1965 Trial Regulations on the Implementation of Food Hygiene Management, the new regulation reflected one of the earliest attempts to formally define “food hygiene” and apply it on a nationwide scale. Under Article 1, the 1979 Regulations on the Administration of Food Hygiene were introduced to strengthen food hygiene management, improve food quality, prevent foodborne diseases caused by harmful substances in food, improve people’s health, and promote production.\textsuperscript{101} The regulations did not mention the “safety” of

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\item \textsuperscript{94} See generally W. Charles Cockburn et al., \textit{Origin and Progress of the 1968-69 Hong Kong Influenza Epidemic}, 41 \textit{BULLETIN OF THE WORLD HEALTH ORGANIZATION} [WHO] 345 (1969) (discussing speculation made at that time).
\item \textsuperscript{96} See \textit{What is CITES?}, CITES, https://cites.org/eng/disc/what.php [https://perma.cc/272U-HTQZ].
\item \textsuperscript{98} Regulations on Food Hygiene, \textit{supra} note 75.
\item \textsuperscript{100} Regulations on Food Hygiene, \textit{supra} note 75.
\item \textsuperscript{101} \textit{Id.} at art. 1.
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food as a core concept, but given that “hygiene” is such an integral part of food safety, the State’s intention to protect the people was quite clear. The 1979 Provisions for Trial Implementation included specific examples of foodborne illnesses, and thus, left open doors to embody distinct and nuanced concepts such as improving food “quality”102 and “safety.”103 In other words, even when the country was struggling to feed all of its people, China had a silent but forward-looking approach in defining the intended purpose of the 1979 Regulations on the Administration of Food Hygiene.

This was a positive indication since food quality is a grand concept that goes beyond the review of risks posed by food products and possible foodborne illnesses; it encompasses various aspects such as “nutritional value, absence of alteration and/or adulteration, genuineness, safety of use, [and] traceability”104 in addition to the absence of risks. Notably, there still was no reference to wild animals as food ingredients, and people were therefore subject to impending health risks from wild animals. Wild animals as ingredients would not have to scientific risk-assessment based safety standards.105 However, given the poverty rate of the country at that time, there were not many options available to the public.

During this time, China had its own food safety concerns. According to one study, instances of food fraud or counterfeiting in China heavily outnumbered “pre-market” risks between 1949 and 1978, such as those caused by underdeveloped food production techniques, lack of adequate equipment or problematic internal management.106 This implies two phenomena: one, either people were not interested in actively adulterating food for profit, or two, the infrastructure that allowed safe food production was lacking. At this point in history, food production was largely carried out using “traditional methods without heavy use of chemical fertilizers, pesticides, and additives.”107 At the same time, producers were facing fewer

105. While there is not much record of illnesses originating from wild animals back then, it would be reasonable to assume that reaching positive outcomes from merely devising legal mechanisms would have been more challenging compared to modern days due to lack of scientific data available.
106. BUILDING FOOD SAFETY GOVERNANCE, supra note 65, at 47–48.
pressures to make financial gains out of their production resources, as such materials, equipment and technologies “were centrally planned and controlled by the state.” In essence, there was a clear lack of the infrastructure that applied scientific standards in the processing and producing of food, alongside those related to the use of wild animals and their parts. Simply put, there were fewer barriers in using wildlife as food ingredients since there were no alternatives available in the market.

By the early 1980s, interest in standardization grew and Article 5 of the Food Hygiene Law stipulated that the health department should gradually study and develop health standards (including inspection methods) for various major foods, food ingredients, food additives, and food packaging materials as needed. The Ministry of Health was to share these duties with the Ministry of Agriculture and the Standardization Administration. Again, there was no mention of scientific standards to be applied to wildlife. The law was silent on the applicability or the importance of such standards.

Simultaneously, upon joining CITES as a signatory state in 1981, China increased its legal efforts on wild animal protection. Laws and regulations were newly designed to protect wild animals but with the focus on viewing wild animals as a resource that needed protection. In 1983, the state promulgated the Circular Decree of the State Council Concerning Strict Protection of Precious and Rare Wild Animals. It stated that “protection of precious and rare wild animals constitutes an important aspect in promoting socialist spiritual civilization and socialist material civilization.”

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108. Id.
110. Id. at 106.
111. In fact, the emergence of and boost in popularity for standards is more of a contemporary movement in food studies that only took place during the last two decades or so. See Ioannis S. Arvanitoyannis & Maria Sakkomitrou, Introduction to Food Safety Management, in HANDBOOK OF FOOD SAFETY ENGINEERING 709–32 (Da-Wen Sun ed., 2012).
114. Id. § 1.
resolutely,” and “penalized.” Any violations would also be published in the newspaper for the sake of educating others.115

This action ultimately led to the promulgation of the Wildlife Protection Law in 1988,116 the same year that the Supplementary Provisions of the Standing Committee of the National People’s Congress Concerning the Punishment of the Crimes of Catching or Killing Precious and Endangered Species of Wildlife Under Special State Protection entered into force.117 The 1988 Wildlife Protection Law again emphasized that rare or near-extinct terrestrial species of important economic or scientific value, need to be protected.118 The law stipulated that wild animals fall under either first class protection or second class protection, depending on how they were classified by the Department of Wildlife Administration under the State Council.119 Such classifications would remain for decades to come. Hunting, catching or killing of wildlife was prohibited under Article 16, whilst subject to exceptions such as for scientific research, domestication, breeding, and exhibition.120

The 1988 Supplementary Provisions of the Standing Committee of the National People’s Congress Concerning the Punishment of the Crimes of Catching or Killing Precious and Endangered Species of Wildlife Under Special State Protection stipulated that anyone who violates the law by illegally catching or killing precious and endangered species of wildlife would be sentenced to fixed-term imprisonment of not more than seven

115. Circular Decree Protecting Precious and Rare Wild Animals, supra note 113, at § 2.
119. Id. at art. 9.
120. Id. at art. 16.
years or criminal detention, and may concurrently or exclusively be fined.\(^{121}\) Likewise, any seller of such wildlife would be punished for crimes of speculation or smuggling.\(^{122}\) In line with this endeavor, the Law of the People’s Republic of China on the Prevention and Treatment of Infectious Diseases was introduced in 1989 and sought to popularize health education on animals that transmit infectious diseases to either humans or other animals.\(^{123}\) In regard to wild animals in particular, the Infectious Diseases Law prohibited sales and transportation of wild animals that were related to known and common infectious diseases until they had been quarantined by the animal husbandry and veterinary department of the pertaining local government.\(^{124}\) Yet, the Infectious Diseases Law had a narrow scope of coverage. Preventing, treating and controlling rabies was still the focus, and it mandated animal husbandry and veterinary departments, health departments, and public security departments of governments at various levels to be responsible for the law’s implementation.\(^{125}\)

In the following years, China continued to see further development of laws and regulations in both areas of food and wild animal protection. Three years later, the Regulations for the Implementation of the People’s Republic of China on the Protection of Terrestrial Wildlife were implemented in 1992, and the Regulations for the Implementation of Wild Aquatic Animal Protection were introduced in 1993.\(^{126}\)

In 1995, the National People’s Congress promulgated the 1995 Food Hygiene Law. Article 2 was written to make clear to the people what the State was endeavoring to do: institutionalize a “system of food hygiene supervision.”\(^{127}\) The purpose of the law, was to “[ensure] food hygiene, [prevent] food contamination and harmful substances” in order to

\(^{121}\) Supplementary Provisions on the Punishment of the Crimes of Taking Endangered Wildlife, supra note 117.

\(^{122}\) Id.


\(^{124}\) Id. at art. 75.

\(^{125}\) Id.


\(^{127}\) Food Hygiene Law, supra note 39, at art. 2.
safeguard people’s health and their physical fitness. It added 12 articles to the 1982 Food Hygiene Law and sought to clarify individual responsibility by listing out acceptable hygiene practices to ensure that packages and materials—such as containers, disinfectant products, and wash—that come into contact with food are not hazardous to people. It also mentioned water standards.

Despite its relatively extensive coverage of various safety aspects such as supplementary food for infants, the 1995 Food Hygiene Law still showed room for improvement. First, nowhere in its 57 articles was the concept “food hygiene” defined. Second, as one scholar put it, the Law merely “covers only very basic practices.” Additions to the 1982 law were incomplete and insufficient to cover the entire food production chain, from farm-to-table. It therefore led to the state’s failure to respond effectively to major food safety accidents such as the emergence of many pandemics, including the H5N1 avian flu suspected of having originated in Guangdong in 1996.

Due to the growing importance of international trade, China also joined the World Trade Organization in 2001. Opening up the country also meant that there were now more varying channels of food and medicinal products sourced from wildlife entering the global market. While the country proceeded to revise its existing laws such as the Wildlife Protection Law and the Law of the People’s Republic of China on the Prevention and Treatment of Infectious Diseases, China was not ready to tackle pandemics such as SARS in 2003 or the H5N1 avian flu in 2004 under its existing regulatory framework. In fact, even when it was reported that “preliminary studies of early SARS victims here in Guangdong have found that an unusually high percentage were in the catering profession—a tantalizing clue, perhaps, to how a germ that genetically most resembles chicken and rodent viruses has gained the ability to infect thousands of humans,” no changes were made.

128. Id. at art. 1.
129. Yongming, supra note 33, at 3.
130. Id.
131. Id.
132. Id.
134. See generally Liyao Xiang et al., Global Trade Pattern of Traditional Chinese Medicines and China’s Trade Position, FRONTIERS PUB. HEALTH, Apr. 2022, at 1, 13.
in reviewing the conventional perspective of wild animals being separate from food ingredients in the blackletter law.\footnote{137}

Instead, changes to the food safety regime were made in 2008 when a major scandal emerged that led to public outcries for an improvement in food safety as a standalone regime.\footnote{138} In China alone, 300,000 young children became ill, and six died upon consuming milk formula containing melamine, an industrial chemical used in tableware, flooring, and electrical products.\footnote{139} Parents of the affected children protested, civic groups became involved, and media started exposing the dark side of dairy production.\footnote{140} Naturally, the Food Hygiene Law was also reviewed and scrutinized due to public demand, and movement to improve the situation resulted in a new body of law. All the loopholes in the 1995 Food Hygiene Law led to the introduction of the Food Safety law in 2009, which included aspects of safer food farming, manufacturing, and distributing practices.\footnote{141} Article 1 of the 2009 Food Safety Law made the purpose clear: “for the purposes of ensuring food safety and safeguarding public health and safety.”\footnote{142} As one of the more noticeable changes, more nuanced rules were developed surrounding the formation and enforcement of public national food safety standards.

Nevertheless, changes made to the Wild Animals Protection Law in the same year did not do much to prevent consumption of wild animals. In 2012, state media covered a series of stories involving government officials designated to work on wild animal protection and monitoring, using state funding to consume wild animals at restaurants owned by government officials.\footnote{143} These scandals involved public expenses or state budgets being spent on wild animal consumption.\footnote{144} Ramifications, while “vigorous” in

\begin{footnotes}
\item[137.] This is supported by the fact that no major revisions in the existing laws were made to outlaw consumption of wild animals.
\item[139.] \textit{Id.}; \textit{SNYDER}, supra note 40, at 9.
\item[140.] \textit{China Dairy Products Found Tainted with Melamine}, BBC (July 9, 2010), \url{https://www.bbc.co.uk/news/10565838} \[https://perma.cc/KD87-QP7K].
\item[141.] \textit{See generally Food Safety Law 2021}, supra note 3.
\item[142.] \textit{Id.} at art. 1.
\item[144.] \textit{CHINESE COMMUNIST PARTY NEWS NETWORK}, supra note 143.
\end{footnotes}
some regards, were mere window dressing and did not actually solve the root problem.\textsuperscript{145} Many of these restaurants were exposed for selling exotic animals such as cobras, lizards, and pangolins, which sold for 780 RMB per 600g. These species were able to stay on the market as they were often only available to frequent customers, particularly those who consumed them for \textit{mianzi} (social face).\textsuperscript{146}

Keeping this in mind, scholars with an interest in food safety would have found the revised Law of the People’s Republic of China on the Prevention and Treatment of Infectious Diseases in 2013\textsuperscript{147} to be quite convoluted. This revised version merely emphasized that wild animals related to infectious diseases \textit{common} to human beings and animals were to be sold or transported only after they have passed quarantine.\textsuperscript{148} In fact, even when it came to information sharing, the law merely stated that animal anti-epidemic agencies and disease prevention and control institutions needed to keep each other informed without delay of the epidemic situation of infectious diseases that are common to animals and human beings.\textsuperscript{149}

Food safety-wise, the country was making large strides and hitherto unprecedented advancements. In 2015, the Standing Committee of the National People’s Congress amended the 2009 Food Safety Law, imposing more stringent control and supervision across the food production chain.\textsuperscript{150} With the China Food and Drug Administration under the State Council supervising food production, distribution, and catering, it became apparent that there was an institutional move towards centralizing resources and supervisory power. The amended law also better reflected people’s consumption habits, such as the usage of online food platforms using third party service providers, and addressed the need to accurately record the flow of food ingredients or improve traceability.\textsuperscript{151} It also further classified food products into individual sectors, such as health food, baby food, or food for special medical purposes.\textsuperscript{152} To improve on standards, the 2015 Food Safety Law newly stipulated that national food safety standards were

\textsuperscript{145} We are in action to protect wild animals: CCTV launched an initiative to jointly protect wild animals, CCTV-13 NEWS CHANNEL (Nov. 29, 2012, 6:35 PM), https://tv.cctv.com/2012/11/29/VIDE1355709699127824.shtml?spm=C53156045404.PORCMBcavhG.0.0 [https://perma.cc/43YB-G3JQ].

\textsuperscript{146} Id.

\textsuperscript{147} Infectious Diseases Law, supra note 123.

\textsuperscript{148} Id. at art. 25.

\textsuperscript{149} Id. at art. 36.

\textsuperscript{150} See generally Food Safety Law 2021, supra note 3.

\textsuperscript{151} See id. at art. 62.

\textsuperscript{152} See id. at art. 74.
to be formulated and issued by the health administration under the State Council, with the coordination of the Food and Drug Administration under the State Council. Relatedly, these standards were required to be formed based on a risk assessment, international standards, and international food safety risk assessments. For example, when it comes to slaughtering animals and poultry, testing requirements are set by the agriculture administration under the State Council, together with the health administration under the State Council.

On the other hand, the 2016 Wild Animals Protection Law and the 2016 Regulations for the Implementation of the People’s Republic of China on the Protection of Terrestrial Wildlife remained relatively static in their development in terms of human-animal interaction and public health. Much of the discussions on the revisions to the law surrounded “preventing damage caused by wild animals” to ensure fewer conflicts between humans and wild animals. The state’s view of wild animals as a resource remained unchanged, and China was an active member of CITES. Much of its focus was aligned with the interests of CITES, such as illegal trafficking. As one example, signatory nations to CITES were encouraged to fund the International Consortium on Combating Wildlife Crime for the implementation of its Strategic Programme for 2016-2020 that sought to fight illicit wildlife crimes. Since then, the Wildlife Protection Law in China seeks to prohibit “illegal hunting, catching, transport[ing] and [trading] of wild animals” domestically in the country.

In its implementation report to CITES, the Chinese government reported that it was strengthening enforcement for the protection of wild animals using different bodies of law: namely, criminal law, the law of customs, and the Wildlife Protection Law. For example, State direction in

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153. See id. at art. 21.
154. See id. at art. 28.
155. See id. at art. 27.
156. See Li Hongyang, Revised Wildlife Law Aims to Prevent Harms to People, CHINA DAILY (Sep. 3, 2022, 8:02 AM), https://www.chinadaily.com.cn/a/202209/03/WS6312999ca310fd2b29e75b85.html [https://perma.cc/7VR5-DXGE].
159. See, e.g., Wildlife Protection Law 2023, supra note 2, at art. 6.
the first amendment draft of the Wildlife Protection Law was a notable change. It stated that wildlife trafficking is a serious crime and the penalty for smuggling specific specimens under the CITES Appendices would range from “fixed-term imprisonment of not more than five years and fine, imprisonment of five to ten years and fine, more than 10 years imprisonment and asset forfeiture, to life imprisonment and asset forfeiture.”\(^{161}\) Criminalization of such acts runs parallel to recent endeavors to strengthen food safety enforcement. In 2020, at least 15,000 individuals were reported to be prosecuted for wildlife crimes, marking a 66% increase compared to the year before.\(^{162}\)

In the wake of COVID-19’s emergence, scientists, scholars, media, and the public started to speculate that wild animals may be one possible origin of the pandemic. Multiple officials were reprimanded for sale of wild animals within a market in Guangzhou.\(^{163}\) There were even reports that emerged in December 2020 that the Qinghuang Island Wildlife Rescue Center allegedly bred, butchered, and manufactured wildlife food products for sale.\(^{164}\) Allegations stated that only wildlife of economic importance, such as level one and level two animals, were rescued, and some of these wild animals were sold to zoos and farms.\(^{165}\) People had been producing and consuming wine made from tiger bones, and several animal products had been sold between 1000 RMB to 5000RMB.\(^{166}\) To complicate matters, this particular wildlife rescue organization was one that had been permitted to produce and sell terrestrial wildlife biological specimens.\(^{167}\) It was legal within the scope and quantity as permitted by the State Forestry Administration.\(^{168}\) The center had additionally registered to rescue, breed,
study wild animals, and conduct information exchanges related to wildlife.\textsuperscript{169}

In a stark comparison, the Food Safety Law made further developments in safeguarding general public health, most recently in 2021. It narrowed down the 2009 phrase “public health” to “physical health and life safety of the public.”\textsuperscript{170} It moved beyond simply considering hygiene and sought to improve the quality of people’s lives altogether. Under Article 4 of what is today’s Food Safety Law, liability is placed on both producers and distributors in the case of unsafe food consumption.\textsuperscript{171} Pertinent laws, regulations, and standards must be met by anyone handling food ingredients to ensure the safety of the food. Private food safety standards developed by private institutions, developed domestically and internationally, are widely used. These standards, such as ISO 22000 or Hazard Analysis and Critical Control Point (HACCP), strictly require individuals handling and processing food to follow its requirements, and different stakeholders, such as media, consumer groups, and retail groups, must keep a close track of any private developments.\textsuperscript{172} Under the Food Safety Law, food producers and distributors are subject to social supervision, and they are to assume social responsibilities.\textsuperscript{173} By social supervision, Article 9 of the 2021 Food Safety Law notes that it is to be carried out by consumers groups.\textsuperscript{174} Since then, food production or distribution enterprises are still required to have a sound food safety management system and to further train employees on product safety knowledge under Article 44.\textsuperscript{175} These trained employees are expected to manage and operate a safe food production or distribution system. Likewise, food industry associations also have duties to self-discipline and establish and continue to improve industry standards.\textsuperscript{176} The associations are further required to direct and supervise producers and distributors and to ensure they abide by the law and regulations in the industry.\textsuperscript{177} Upon carrying out these enlisted jobs and making a significant contribution to

\begin{flushleft}
\textsuperscript{169} Id.
\textsuperscript{170} See Food Safety Law 2021, supra note 3, at art. 1 (illustrating the different wording between the originally enacted law and 2021 amendment that narrows the phrasing).
\textsuperscript{171} See id..
\textsuperscript{172} Zhang Man et al., The Third-Party Regulation on Food Safety in China: A Review, J. INTEGRATIVE AGRIC. 2176, 2177–78, 2180 (2015).
\textsuperscript{173} Food Safety Law 2021, supra note 3, at art. 4..
\textsuperscript{174} Id. at art. 9.
\textsuperscript{175} Id. at art. 44.
\textsuperscript{176} See id. at art. 9.
\textsuperscript{177} Id.
\end{flushleft}
food safety, entities or individuals are honored and awarded under relevant state provisions.178

Most recently, the Standing Committee of the National People’s Congress did attempt to take measures on wild animal consumption.179 While banning any “illegal trade and consumption of wildlife as food,” the government also entered into multiple bilateral agreements for co-management of shared species,180 and Article 26 of the Implementing Regulations of the Protection of Terrestrial Wildlife currently prohibits purchase of species of wildlife under special protection by the State or the products thereof in the marketplace.181

Under the current wildlife protection regime, there are two different protection levels in place for nationally protected wildlife.182 Wildlife under the first protection level are considered rarer and subject to stringent protection, while the second protection level are afforded less protection.183 This grading system is revisited every five years.184 In order to hunt wildlife under the first protection level, more complicated license applications must be submitted to the Wildlife Conservation Department, which is directly supervised by the State Council.185

According to Article 7 of the Implementing Regulations of the Protection of Terrestrial Wildlife, the competent Department of Forestry Administration under the State Council and the competent departments of forestry administration under the people’s governments of the relevant provinces, autonomous regions and municipalities directly under the

178. Id. at art. 13.
181. Regulations for the Protection of Terrestrial Wildlife, supra note 22.
183. See Wildlife Protection Law 2023, supra note 182, at art. 21.
184. Id. at art. 10.
185. See id. at art. 21.
Central Government are mandated to carry out surveys every 10 years of wildlife resources and record the survey results that are used for protection planning.186 Such results are then to be approved by the relevant department of Forestry Administration under the State Council or the relevant Department of Forestry Administration under the people’s government of the relevant province, autonomous region or municipality directly under the Central Government.187

Yet, whether these bans are as effective as intended remains debatable, as shown by the latest research conducted by the non-governmental organization World Wildlife on the State Council’s 2017 ivory ban.188

III. Existing Loopholes Even After COVID-19

Article 4 of the Wildlife Protection Law provides the overarching themes of the law: to “strengthen protection and restoration of important ecological systems, implement the principles of prioritized protection, regulated use, and strict oversight of wildlife; encourage and support the performance of scientific research on and use of wildlife; adhere to the notion of an ecological civilization, and promote green development.”189 With this language, as aforementioned, wild animals appear to be strictly prohibited from being sold, traded, and transported. Yet, under specific circumstances, exceptions are made, and it remains questionable whether wild animals are indeed prohibited from consumption,190 and effectively made unavailable for consumption.

While changes in the blackletter law allow improvements in the food safety law, a cautious realist would continue to be alert for any existing gaps in the law. Gaps in the bodies of law show where efforts to improve food safety are curbed by realistic concerns. This article argues that changes made from Administrative Provisions to the most recent introduction of the Food Safety Law in China represent deliberate and thoughtful

186. Regulations for the Protection of Terrestrial Wildlife, supra note 22, at art. 7.
187. See id.
189. See Wildlife Protection Law 2023, supra note 2, at art. 4.
190. See generally Wildlife Trade and Eating Decision, supra note 179; but see Lian P. Koh et al., The Value of China’s Ban on Wildlife Trade and Consumption, 4 NATURE SUSTAINABILITY 2, 2 (2021).
advancements in food hygiene, security, and safety. Yet, it is of paramount importance to once again consider how these interact with regulations on wildlife. As this paper has tried to illustrate, any governmental attempts to substantially improve public health, nutrition intake, or food safety requires coordinated efforts from various sectors and departments.  

Conventionally, when studying a food chain, interests are drawn across the chain from farmers to consumers, and food production chains are described as being built on a process that requires meeting minimum safety standards based on basic international principles. In other words, it requires a review of the entire food chain, ranging from production to the end point of consumption. This is where the mistake is often made of failing to include those who operate in the wildlife market and those who hunt and sell exotic animals for food behind closed doors. For example, the Huanan Seafood Wholesale Market in Wuhan, which was where the first outbreak of COVID-19 was reported, was reported to have been selling wild animals such as badgers, bamboo rats, and porcupines, among others. One report, in particular, discussed how one stall sold approximately 100 varieties of live animals, including civet. Neither the Food Safety Law nor the Wildlife Protection Law had reached the market before the emergence of COVID-19. This is particularly concerning since civets had been already regarded as an intermediate host that transmitted the severe acute respiratory syndrome virus from bats to human in Guangdong province in 2002 and 2003. The problem we face now is that loopholes persist in the current system even

191. See Snyder, supra note 40, at 74–78.
193. See Photograph of Food Market Price List for Wild Animals, in Xiang Legao, Wuhan Pneumonia: The Source of the Virus is the Price List of Wild Game in the South China Seafood Market, Which Costs 350 RMB to Eat Peacocks, HK01 (Jan. 23, 2020), for a visual of the prices of wild animals sold in Wuhan, https://www.hk01.com/%E7%86%B1%E7%88%86%E8%A9%B1%E9%A1%8C/425605 (scroll to bottom of page; click on far right photograph in fourth row of images) [https://perma.cc/PEB8-GGN3].
after the emergence of COVID-19 and it triggers the question of whether a safe symbiosis of humans and wild animals is possible.\textsuperscript{196}

The following section intends to retell the state’s institutional efforts to curb wildlife consumption throughout the food production process. Much of the different regulations and rules, from the 1965 Regulations on the Administration of Food Hygiene\textsuperscript{197} to the latest 2021 Food Safety Law,\textsuperscript{198} have been drafted according to the chronological order of a conventional food production process. A typical food production chain involves multiple steps—production at the farm, processing at an industrial establishment, distribution from a relevant facility, and preparation at a catering establishment or a retail store.\textsuperscript{199} The distribution stage pertains to various activities ranging from storage to transportation.\textsuperscript{200}

1. Multiple Exceptions to the Wild Animal Consumption Ban

At the outset, hunting or killing wild animals specified for special protection by the State is generally banned under Article 11 of the Implementing Regulations of the Protection of Terrestrial Wildlife.\textsuperscript{201} Yet, the gatekeeping features in the Food Safety Law that aim to regulate production and distribution are not as effective since there are a number of exceptions that allow hunting and killing wild animals.\textsuperscript{202} In fact, Article 9 of the Wildlife Protection Law provides the grounds for one of these exceptions by stipulating that those who have made outstanding contributions to wildlife protection and scientific research are to be rewarded by the people’s governments at or above the county level.\textsuperscript{203} This


\textsuperscript{197}Regulations on Food Hygiene, supra note 75.

\textsuperscript{198}Food Safety Law, supra note 3.

\textsuperscript{199}For a detailed review of food systems, see Maurizio Aragrande & Olivio Argenti, Chapter 1: Food Supply and Distribution Systems to Cities, in STUDYING FOOD SUPPLY AND DISTRIBUTION SYSTEMS TO CITIES IN DEVELOPING COUNTRIES AND COUNTRIES IN TRANSITION (Beverly Lewis ed., 2001), https://www.fao.org/3/x6996e/x6996e08.htm [https://perma.cc/7835-6K32].

\textsuperscript{200}U.N. Food & Agric. Org., Chapter 3:The Food System and Factors Affecting Household Food Security and Nutrition, in AGRICULTURE FOOD AND NUTRITION FOR AFRICA, http://www.fao.org/3/W0078e/w0078e04.htm [https://perma.cc/M42J-D8CG]; Regulations on Food Hygiene, supra note 75 (focusing on Article 10 (8) of the Administrative Provisions, which stipulated that hygiene requirements be set in the production, processing, procurement, storage, transportation and sales operation procedures).

\textsuperscript{201}Regulations for the Protection of Terrestrial Wildlife, supra note 22, at art. 11.

\textsuperscript{202}See Wildlife Protection Law 2023, supra note 2, at art. 22.; see generally Food Safety Law 2021, supra note 23, at art. 1.

\textsuperscript{203}Wildlife Protection Law 2023, supra note 2, at art. 9.
applies to those who have conducted experiments with wild animals under national first-level protection, as long as a special hunting license had been issued. In the case of a wild animal under the second level protection, an application to the wildlife protection department of the people’s government of the province, autonomous region, or municipality is sufficient. For any other wild animal, a hunting license from the wildlife protection department of the local people’s government at or above the county level will suffice under Article 22 of the Wildlife Protection Law.

One exception is wild animals continuing to be used as an ingredient in Chinese medicines. Animals and their parts for medicinal use continue to be governed under the Wildlife Protection Law and the Traditional Chinese Medicine Law. The 2021 Food Safety Law in China includes an extensive list of items that fall under the prohibited food list: food and food additives that are putrid or deteriorated, spoiled by rancid oil or fat, moldy, infested with pests, contaminated and dirty, mixed with foreign objects, adulterated and impure, or abnormal in sensory properties; food using food additives beyond the approved scope or limit; and food in which pathogenic microorganisms, pollutants such as pesticide residues, veterinary medicine residues, biotoxins, and heavy metals exceed the limit specified in food safety standards. Article 38 of the Amended 2021 Food Safety Law, however, stipulates that if a substance is considered both a food and a traditional Chinese medicinal substance, then it is allowed to be added to any food that is produced and distributed. This may in effect allow wild animals used as ingredients in medicine to enter the food market without

204. Id.
205. Id. at art. 21.
206. Id. at art. 22.
207. This has also been raised as an ongoing concern by the media. See China Adds More than 500 Species Wildlife Protection List, Reuters (Feb. 5, 2021 9:45 PM), https://www.reuters.com/article/us-china-environment-wildlife/china-adds-more-than-500-species-to-wildlife-protection-list-idUSKBN2A604H [https://perma.cc/N69F-NT7L] (“China’s parliament announced plans to implement a permanent nationwide ban on wildlife trade and trafficking in February, though it left big loopholes for the captive breeding of animals traded for fur or used in traditional Chinese medicine.”).
208. See generally Wildlife Protection Law 2023, supra note 2.
209. See generally Zhonghua Renmin Gongheguo Zhong Yiyao Fa (中华人民共和国中
    医药法) [Law on Traditional Chinese Medicine] (promulgated by the Standing Comm. Nat’l
211. Id. art. 36.
212. Id. art. 28(2).
213. Food Safety Law 2021, supra note 3, art. 38.
regulation and monitoring. In addition, typically, those who are producing and distributing food must have a license, unless they are selling what would be considered edible agricultural products under Article 35 of the Food Safety Law.\(^{214}\) This provision may strongly correlate to the reason local cultures consume wild animals for traditional medicinal effect. For example, pangolin scales are still used today as ingredients in eight patented medicine formulae in the country, including Zaizao Wan typically used to boost blood circulation, and Awei Huapi Gao primarily taken for abdominal pain relief.\(^{215}\) Despite controversy, the parts from these wild animals are still in high demand because it is widely accepted that any substitutes would not be as effective.\(^{216}\) The need to keep using wild animals as ingredients for Chinese medicine had often in history been justified by lawmakers, for example Jin Hua has commented that: “Some international forces use [banning of wildlife] as a pretext to attack the raw material requirements for traditional Chinese medicines, and often require China to forbid their trade.”\(^{217}\) Because of this, information on the prices of exotic animals are publicly available and, as previously mentioned, have led the country to not be as aggressive in updating its list of endangered species (the last update was at its introduction in 1988).\(^{218}\)

As the law is written, if wild animals are used as ingredients for medicine, they are only allowed after “strict examination and approval” by supervising departments.”\(^{219}\) While wild animals used as ingredients for traditional Chinese medicine would not strictly be seen as “food,” they still jeopardize several decisions adopted in February 2020 that sought to ban both trade and consumption of terrestrial wild animals.\(^{220}\) Another caveat is that the list of protected species had not undergone any significant

\(^{214}\) Id. at art. 35.


\(^{216}\) See Ben Blanchard, China Defends Use of Wild Animals in Traditional Medicine, REUTERS (Jul. 2, 2016, 7:36 AM), https://www.reuters.com/article/us-china-endangered-idUSKCNOZI0GB [https://perma.cc/3CF4-LLVF] (quoting Zhai Yong, head of parliament’s environment and resources protection committee legislation department stating: “If in the future original products from wild animals are all substituted, our Chinese medicine perhaps won’t be of any use anymore. This issue needs to be discussed by us Chinese people.”).

\(^{217}\) Id.

\(^{218}\) Beech, supra note 194.

\(^{219}\) Devonshire-Ellis, supra note 5.

\(^{220}\) See Wildlife Trade and Eating Decision, supra note 179.
changes for over three decades until 2021 due to disagreement between authorities over preparation of the list. The list would then be subject to approval by the State Council. Some scholars have touted that because this protected species list is outdated, wildlife management tactics are ineffective. China’s National Forestry and Grassland Association most recently amended its list of protected wild animals in February 2021. This new list now includes 980 species and eight groups of wild animals. Of these wild animals, 234 species and one group belong to the national first-level protected wild animals category, and the remainder belong to the second-level protection category. To the relief of many, when such changes were made to the list of protected wild animals, some species were reclassified and upgraded for further protections based on reasons such as extinction imminency. These examples include the Snub-Nosed Monkey.

Other exceptions arise when the organization that has either hunted, caught, or killed wildlife has applied for a special license for one of the following purposes: scientific exploration and survey of resources; domestication and breeding thereof under special protection by the State; scientific research above the provincial level or the production of medicine by the State; or other special reasons. In other words, as long as quarantine certificates and approvals are sought and granted under the current licensing arrangement, wildlife animals can be bought, sold, and used. This is not to say that the law is in any way clear about what constitutes “special reasons” to hunt, catch, and kill wild animals prior to occasionally consuming them. Generally, they can be sold, and subsequently


222. Baiyu, supra note 221; Chen & Yifan, supra note 55.

223. See Lingyun Xiao et al., supra note 54, at 168.

224. Xi, supra note 17.

225. Id.

226. Id.

227. See d.

228. Id.

229. Regulations for the Protection of Terrestrial Wildlife, supra note 22, at art. 11(7).

used, without a special license if they are not otherwise prohibited by law.\textsuperscript{231}

2. Lack of Traceability Mechanism

One of the more recent developments of the food safety regime has been the State’s drive to establish a full-scale traceability system. Currently, under Article 42 of the Food Safety Law, food producers and distributors are required to establish the traceability system and be able to track the food production chain and its inverse, if necessary.\textsuperscript{232} The State additionally encourages food producers and distributors to collect and preserve production and distribution information at each production stage using the latest technological means.\textsuperscript{233} Establishing such system is important as it allows close monitoring of products and ingredients,\textsuperscript{234} and enables recalling food products at any stage of production or processing.\textsuperscript{235} With the advancement of technology and widespread use of smartphones, different forms of information channels, such as the use of QR codes or barcodes, have started to be employed in China.\textsuperscript{236} Nevertheless, such developments have not been extended to people’s ability to track wildlife consumption, and it is realistically almost impossible to trace movement of wild animals both before and after capture.

As stipulated in Article 53 of the Food Safety Law, food distributors are required to check and confirm the license and inspection certificates of food suppliers as they come in.\textsuperscript{237} A record is required to be kept for these inspections, including the name, specification, quantity, production date, batch number, and contact information of the supplier among other information.\textsuperscript{238} Food distribution businesses in the food wholesale business are also required to maintain an inspection record for incoming food that correctly indicates such information.\textsuperscript{239} While still many of the wild animals

\textsuperscript{231} See id.
\textsuperscript{232} Food Safety Law 2021, supra note 41, at art. 42–43.
\textsuperscript{233} Id. at art. 9, 11, 42.
\textsuperscript{235} See Zhilong Yu, et al., Smart Traceability for Food Safety, 62 CRITICAL REVIEWS IN FOOD SCI. & NUTRITION 905, 906 (2020).
\textsuperscript{237} Food Safety Law 2021, supra note 3, at art. 53.
\textsuperscript{238} Id. at art. 53.
\textsuperscript{239} Id.
are not nationally protected from being used in traditional medicine, it is highly unlikely that any of these requirements would apply to those handling wild animals. There is no comprehensive working recall or traceability system in place since wild animals are still often traded under the table. This is particularly concerning. Commitment to safe practices, ranging from adhering to basic food safety principles to employing unique conservation methods, is particularly important when dealing with meat derived from wild animals. For these animals, each hunting, poaching, storing, transporting, and consuming requirements may also be different. For example, different disinfecting solutions and containers may be required for usage depending on the type of wild animal.

If animals are slaughtered on site, adequate transportation processes and methods would be required to prevent both contamination and spoilage. Depending on the size of these animals, they may additionally need to be cut into smaller portions. In reality, however, sellers of these wild animals are faced with a conundrum. When these animals would need to be monitored before being sold to an end consumer, any careful investigation into how safe or hygienic they actually are would mean financial and practical costs. This results in no standardized quarantining or slaughtering protocol of these animals being followed prior to these animals being sold on the market. This means that wildlife pathogens and diseases will continue to exist as a constant threat, not merely to consumers, but possibly to the general public as well.

In theory, various tactics may be used to ensure safety and freshness of the meat, such as undertaking a controlled slaughter under specific temperature conditions for a prompt death. These animals have a higher possibility of being contaminated with earth or grass, and different handling equipment used for hanging, dragging, and killing would be needed. After handling each animal, new gloves need to be worn. In addition, separate inspection processes should be established depending on

240. See Yifu Wang et al., Global Biodiversity Conservation Requires Traditional Chinese Medicine Trade to be Sustainable and Well Regulated, 28 GLOB. CHANGE POL’Y 6847, 6848-49 (2022).
242. Id. at 18.
243. Id.
244. Xiao et al., supra, note 54, at R168–69.
245. See ABU DHABI FOOD CONTROL AUTH., supra note 241, at 19.
246. See id. at 19, 22.
the animal kind. Each animal should be tested and examined for health risks posed, such as infectious diseases or abnormal bacterial impurities. For any subsequent preservation and storing, adequate freezing or refrigeration facilities should be installed.

Because of how much these activities are unregulated and unmonitored, it is extremely challenging to view this industry as a safe one that does not pose health risks. At sale and distribution, relevant institutions, enterprises or organizations should only sell and distribute food which is guaranteed to be hygienic and safe. Relatedly, an issue that warrants further study by the food legal order in China are the small workshops that employ less than 10 people. These exist in both marketplaces and street sides, and they often use ingredients that are simply untraceable and unmonitored. Article 36 of the Food Safety Law writes that “small food production and processing workshops, food vendors, etc. engaged in food production and trading activities shall comply with the food safety requirements provided for in this Law that are appropriate to the scale and conditions of their production and operation, and ensure that the food they produce is hygienic, non-toxic and harmless.”

Many of the wild animals in China are left unchecked in stalls at wet markets because of this, leaving the public doubtful that the food and drug administrations adequately supervises those working in the industry, given the nature of these wild animal sales in wet markets. A central issue with small vendors is that they often try to cut down operation costs, making it difficult to follow certain standard systems in place such as HACCP, even if similar systems existed for wild animal processing, as encouraged by the State under Article 48 of the Food Safety Law. This is a particularly alarming situation given that viruses are nurtured in damp, cramped, unhygienic conditions like the poorly maintained cages at wet markets.

247. See generally id.
248. Id. at 15, 18.
249. See generally Yunxiang Yan, Food Safety and Social Risk in Contemporary China, 71 THE J. OF ASIAN STUD. 705 (2012).
250. Food Safety Law 2021, supra note 3, at art. 36.
251. See generally Beech, supra note 194.
252. See generally, Lihua Ma et al., Food Safety Knowledge, Attitudes, and Behavior of Street Food Vendors and Consumers in Handan, a Third Tier City in China, BMC PUB. HEALTH (2019), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6697930/ [https://perma.cc/CBU2-X5Q9].
253. Beech, supra note 194.
Studies show that these viruses are transmitted to humans through bodily fluids from animals.254

The real challenge is that there is simply not enough information on the wildlife markets, or wet markets that also sell wild animals. The emergence of online marketplaces for wild animal trading adds another layer of complexity to the existing problem.255 In a legal sense, there is a non-mandatory, public obligation to report any form of market selling wild animals, particularly if those animals may cause a hazard or risk.256 It is not very difficult to notice the lack of a state monitoring system that is specifically designed to detect such risks. In many other parts of the world, such risk monitoring and assessment systems have been set up across state boundaries and have proven to be extremely important in rapidly alerting both consumers and the government on all levels when a risk has been identified.257 A rather successful example is the European Union’s RAPID alert system258 that is discussed later in Section 4 of this paper.

When China had completed drafting the Administrative Provisions with much less focus paid to the handling of wild animals, the country was still suffering both economically and socio-politically from the famine in the 1960s.259 Farms located in the northern regions were undergoing severe productivity problems.260 Wheat production dropped 7% from the previous year, while coarse grains had fallen by 3%; soybeans also suffered a decrease in its production level.261 Today, much has changed. China is the

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254. Id.
256. See Food Safety Law 2021, supra note 3, at art. 12.
258. See generally id.
261. FOOD & AGRIC. ORG. U.N., THE STATE OF FOOD AND AGRICULTURE 1966, 21 (1966).; According to the FAO report, an average consumer in Southeast ate China from 500 to 680 grams of rice per day. Id. Today, while an average consumer is known to consume rice at a slightly lower level, income again is yet a better resolation of the food security level, especially since there is no clear indication of whether the number in the FAO report is indeed accurate.
world’s largest food and agriculture product importer. Nevertheless, the Chinese Academy of Engineering estimates that the wildlife-farming industry, which remains highly unregulated and unmonitored, reached 520 billion yuan (about $74 billion USD) in 2017.

The following portion of the paper intends to propose modifications to the norms, or modes of action typical, to create a safer food legal order in China. This is done in consideration of standing at a crossroads where efforts to strengthen the nation’s food safety are subject to ongoing socio-economic concerns.

IV. Proposed Changes in Dealing with Wild Animals

1. Recognizing the Vulnerable Groups to Enforce Strict License Requirements

Considering the general improvements made in the country’s overall domestic food security, it is imperative to focus on improving norms and modes of actions related to wildlife consumption by first recognizing who is still most at risk of consuming wild animals. Only by doing so can we better understand and address the realistic desire and demand to consume wild animals. First, populations in rural areas that still suffer from relatively difficult, inaccessible means to nutritious foods are one group of concern. Today, when it comes to risks caused by food, nutritional deficiency is generally found to be high in poorer regions. Studies show that there is generally a moderate danger of nutritional imbalance from excessive consumption from salt and saturated fat, while risk caused by naturally occurring toxins such as alkaloids, legume toxins, and cyanogenic glycosides is high. Microbiological contamination such as bacteria, viruses,
parasites, mold, and algal toxins is also very high.\textsuperscript{267} Such unprocessed food if mishandled would not only be unfit for consumption,\textsuperscript{268} but also unsafe.

Particularly in these areas, the public should be educated early on about potential foodborne illnesses and risks from mishandled food products, which increase significantly with consumption of wild animals.\textsuperscript{269} Government should also take on an active role in training food producers, distributors, consumers, and even government officials\textsuperscript{270} on the hazards of eating unsafe food. Article 10 of the Food Safety Law states that governments at all levels shall strengthen the promotion and education of food safety, popularize and standardize knowledge of food safety, and encourage social organizations, mass autonomous organizations, and food producers and distributors to popularize laws and regulations concerning food safety.\textsuperscript{271}

Regarding the dissemination of information across rural China, further prioritizing target groups in disseminating information may be effective. According to the FAO, when there is a problem of insufficient crop production, small-scale farmers who do not have modern technological resources and farm laborers are the most affected.\textsuperscript{272} When food or agricultural trade is impacted, small scale food and agricultural exporters along with lower-income families that heavily rely on cheaper imported food are the most negatively affected.\textsuperscript{273} Similarly, when policies fail, families located farther away from urban cities with poor infrastructure are most affected.\textsuperscript{274} This reality is one reason why people turn to cheaper options, including consumption of wild animals. The Chinese government was aware of these problems before the emergence of the COVID-19 pandemic, and promoted selling wild animals to develop rural towns and alleviate poverty, until the outbreak of COVID-19.\textsuperscript{275}

Other groups that are vulnerable to food availability problems and lack of adequate nutrition include laborers who do not own land, families

\begin{footnotes}
\footnote{267. \textit{Id.}}
\footnote{268. \textit{Id.}}
\footnote{270. \textit{We are in Action to Protect Wild Animals: CCTV Launched an Initiative to Jointly Protect Wild Animals}, CCTV (Nov. 29, 2012), https://tv.cctv.com/2012/11/29/VIDE1355709699127824.shtml?spm=C53156045404.PORCMBcavyhG.0.0 [https://perma.cc/4P4C-UEGV].}
\footnote{271. Food Safety Law 2021, \textit{supra} note 3, at art. 10.}
\footnote{272. See \textit{Food & Agric. Org. of the U.N.}, \textit{supra} note 200.}
\footnote{273. \textit{Id.}}
\footnote{274. \textit{Id.}}
\footnote{275. Regulations for the Protection of Terrestrial Wildlife, \textit{supra} note 22, at art. 26.}
\end{footnotes}
headed by women, families with many children, families residing in areas where natural disasters occur, and poor families. Among these families, risks are highest for children under the age of five, and women of childbearing age. Based on these findings, regulators ought to investigate building adequate norms and modes of action. There are commonly limited resources and time to enforce any policy. Thus, it would be ideal to prioritize some tasks over others in taking a regulatory approach using blackletter law. Education programs related to wildlife conservation, and the dangers of zoonotic pathogens posed by consuming and capturing wild animals should be pursued. Early detection of zoonotic pathogens and young people’s awareness are crucial.

One last recommendation to strengthen regulation is related to permits in areas where people are prone to engage in wildlife hunting and capturing. Under Article 25 of the current Wildlife Protection Law, only people breeding wild animals under special national protections, or those that require the highest level of protection need to obtain a permit. The previously proposed draft amendment to the Wildlife Protection Law would have required individuals to obtain permits to captive breed wild animals subject to special national protection, as well as for those animals subject to local protection and those with “ecological, scientific and social value.” This requirement would effectively open the door to stronger regulations related to the monitoring and handling of all wild animals. This amendment, however, was discarded in the final amendment, effectively allowing commercial breeding and unmonitored poaching. In its Interpretation on Several Issues Concerning the Application of Law in Handling Criminal Cases

277. Id.
278. See generally WORLD ORG. ANIMALS HEALTH, OIE WILDLIFE HEALTH FRAMEWORK: PROTECTING WILDLIFE HEALTH TO ACHIEVE ONE HEALTH (2012).
280. See Paolo Zucca et al., WHAT DO ADOLESCENTS KNOW ABOUT ONE-HEALTH AND ZOONOTIC RISKS? A SCHOOL-BASED SURVEY IN ITALY, AUSTRIA, GERMANY, SLOVENIA, MAURITIUS, AND JAPAN, 9 FRONTIERS PUB. HEALTH, 30 Mar. 2021, at 2, 3 (indicating the importance of early detection as part of building norms).
281. See Wildlife Protection Law 2023, supra note 2, at art. 25.
283. See Wildlife Protection Law 2022 draft, supra note 1, at art. 48(2).
Destroying Wildlife Resources, the Supreme People’s Court also endorsed this view, stating:

when determining whether the relevant behavior constitutes a crime and determining the penalty, consideration should be given to different factors such as whether the animal involved in the case is artificially bred, the degree of endangerment of the species, the survival status in the wild, the situation of artificial breeding . . . the degree of damage to wild animal resources, and the degree of awareness of wild animals and their products.\textsuperscript{284}

Under the new proposal, breeders who fail to register with the local authorities for those wild animals that provide “ecological, scientific and social value” are merely fined 500 to 2,000 yuan.\textsuperscript{285} Instead, no wildlife animals should be hunted, and much stricter requirements should be adopted, for those animals that are hunted.

2. Reconceptualizing Wild Animals to Allow Stricter Enforcement of the Law

After identifying who is most at risk of consuming wild animals and introducing an administrative hurdle such as a strict breeding license requirement, it would then be reasonable to re-conceptualize “wild animals.” No one concept needs to remain static and perpetually valid, particularly when it comes to animals that are conventionally taken as a “claim of entitlement.”\textsuperscript{286} Re-conceptualizing wild animals involves defining new key concepts such as “animals,” “domesticated animals,” “laboratory-bred animals,” and “wild animals.” This should be done with a critical view, since any reference to the previously accepted definitions or norms would create staggered definitions for the key concepts that affect how wild animals are treated and consumed. Currently, the Wildlife Protection Law does not adequately and precisely define what a wild animal is. It merely states the scope of wild animals and their rarity.\textsuperscript{287} Even a cursory


\textsuperscript{285} Yifan & White, supra note 9.


\textsuperscript{287} Yifan & White, supra note 9.
comparison to the World Organisation for Animal Health (OIE)'s definition of wild animal demonstrates that there is much more work to be done in narrowing the definition. The OIE's definition of a “wild animal” is “an animal that has a phenotype unaffected by human selection and lives independent of direct human supervision or control.” This may also mean that the bodies of law that govern food consumption, traditional medicine, and protection for wild animals need to share a common definition of “wild animal.” These legal regimes would also benefit from sharing access to scientific research centers, government facilities, and restricted private institutions. Again, risks that increase zoonosis emergence is extensive, ranging from deforestation and climate change to poorly monitored wildlife trade. Thus, identifying related key concepts and harmonizing them would be essential.

In addition to harmonizing core legal definitions, another way to mitigate the current situation is to close the loopholes in existing laws that regulate studies on animals for the purpose of increasing monitoring of wild animals. For example, regarding a lack of uniform definition of “wildlife” and “wild animal,” the law still has gaps allowing for unmonitored use of wild animals. Professor Cao, a leading scholar in the areas of animal law and animal ethics and welfare, illustrated this point by shedding light on the current research practice that uses wild animals in China.

Ethical rules and welfare standards are not strictly applied or enforced, and other prevailing issues such as lack of transparency disallow outsiders from genuinely engaging in the advancement of animal welfare. Today, the Regulations for the Administration of Laboratory Animals and the Guidelines for the Humane Treatment of Laboratory Animals are the two bodies of law that primarily govern animal testing and research in laboratories. Although there are provincial laws, guidelines and standards, a common criticism has been that these are too vague to be

288. WORLD ORG. FOR ANIMAL HEALTH, supra note 178, at 3. 3 (2021).
291. See generally Bryan E. Ogden et al., Laboratory Animals, Regulations, Guidelines and Standards in China Mainland, Japan, and Korea, 57 INST. FOR LAB'Y ANIMAL RScH. J. 301 (2016) (providing an overview of the laws, regulations, and guidelines pertaining to laboratory animals).
292. Id. at 302 (discussing Laboratory Animal Quality Management, Laboratory Animal License Management Regulations, State Laboratory Animal Seeds Center Management,
These rules apply only to laboratory animals that are born and bred solely for the purpose of testing, and therefore, exclude other animals. In February 2020, the Ministry of Science and Technology newly issued the Guidelines of Strengthening the Biosafety Management of High-Level Virus Microbiology Laboratory of New Crown Virus in an effort to further regulate lab activities dealing with animals. Nevertheless, there are still gray areas where wild animals are overlooked or missing definitions.

Regarding the use of certain wild animals as a food ingredient, once the State formulates certain standards for production processes, the possibility of introducing wild animals as a food source would also be significantly reduced when such efforts convene the Hazard Analysis Critical Control Point (HACCP) directives designed “specifically around the microbiological hazards.” HACCP is endorsed as one of the world’s leading endeavors in improving food safety with practical visible effects. It operates on seven important principles:

conduct[ing] a hazard analysis by identifying potential hazards and control measures, determin[ing] critical control points, establish[ing] validated critical limits for each of these critical control points, establish[ing] monitoring systems for each critical control point, establish[ing] corrective actions, validate[ing] the HACCP plan and establish[ing] verification procedures, and lastly, establish[ing] documentation and record keeping.

Guidelines on Humane Treatment of Laboratory Animals, the Approach to Research Misconduct during the Implementation of National Science and Technology Plans.


In addition, a food safety management system at the national level, beyond HACCP for selected food products, will improve food safety in the state, and thereby indirectly benefit many people.

In the end, state agencies, both on the national and provincial levels, should create realistic rulemaking proceedings to promulgate food, science, medicinal agendas, and procedures under strictly controlled environments by reconceptualizing wildlife animals. Authorities should develop a strict traceability mechanism for all animals, whether born, bred, or captured from the wild, or used for scientific research. Regulators should recognize that when any animal is used as a subject, their location, relocation, study method, and purpose should be carefully and precisely recorded for future reference. In addition, use of wild animals in Chinese medicine, should be strictly banned. Currently, the permission to use those that do not fall under the protected species list is problematic, particularly since the list often does not get updated regularly.

3. Sharing Transparent Information

Given that the objective of multi-governmental cooperation is to ensure uniform and concerted management of risks posed by wild animals, communication within the international realm is key. One policy recommendation is to combine resources with international partners under the CITES framework. Today, traditional Chinese medicine is found in more than 180 countries globally, making it a 60 billion USD industry. CITES’ practice of selectively dealing with wild animals provides for a continuous forum for cooperation, and a deeper shared understanding of Chinese traditional medicine markets among CITES state members. Stakeholders such as suppliers, distributors, and consumers for traditional Chinese medicine exist on almost every continent, including Japan, Hong Kong, Russia, Vietnam, and Australia, and in the European Union. It is possible to better understand the industry and its consumers through the

302. For a list of endangered species that CITES protects, see The CITES Species, CITES, https://cites.org/eng/disc/species.php [https://perma.cc/SV6X-9FQ4].
303. Annie Xianghong Lin et al., Internationalization of Traditional Chinese Medicine: Current International Market, Internationalization Challenges and Prospective Suggestions, 13 CHINESE MED. 1, 2–3 (2018).
lens of CITES. This understanding may lead to the development of an internationally standardized approach in discouraging wild animal consumption. Building an internationally integrated understanding for consumer health, medicinal support, and safe food consumption habits would propel stricter enforcement not only for suppliers, but for end consumers as well.

In its 2018-2020 CITES report, China CITES Management Authority emphasized that any changes in the CITES appendices would not require special revisions to the domestic law or legislative procedures. Thus, changes made within the framework of CITES would have an automatic effect domestically. Still, according to the implementation report, the country runs an electronic data management system and a paper-based permit issuance system simultaneously, and it still lacks effective cross-border information sharing.

One existing framework to reference for these group of countries from the food safety regime would be the European Union's Rapid Alert System. Established in 1979, RASFF is the core engine that encourages and allows for quick information sharing between EU Member States’ food safety authorities, the EU Commission, European Food Safety Agency, EFTA Surveillance Authority, Norway, Liechtenstein, Iceland, and Switzerland. The system allows for efficient risk communication that involves all interested parties, including non-governmental organizations, food companies, and governments. Information on existing dangers and risks is exchanged to safeguard consumer health. Notifications are sent real-time to interested parties when the Rapid Alert System detects certain risks. For example, the Rapid Alert System for Food and Feed (RASFF) established by Regulation 178/2002 in January 2002, runs on a notifications system that distributes information on existing risks posed by food, feed, or any food contact materials. It also shares tracing updates, including border rejections and the measures undertaken or requested by Member States in response to detected risks. It is important to note that throughout this process,

305. Id.
307. See European Commission Press Release, supra note 257 (detailing the process of the RASFF system).
border control officials, market control officials, supplying or distributing companies, or consumers can lodge a risk notification under the RASFF system. The European Food Safety Authority presents opinions on substantive matters and assists in ensuring that the European Union continues to enforce the highest food safety standards. Instant communication among the involved parties allows for a rapid withdrawal of food products deemed risky or harmful to humans.

Likewise, CITES Member States that either import or export traditional Chinese medicine could actively develop and operate an intra-authority information network. It is important to exclusively focus on traditional Chinese medicine, given its tendency to include parts or ingredients from wild animals. When a risk is identified, a live exchange of information regarding measures taken, and tracing information would allow for a coordinated response among Member States. Reflecting on the RASFF experience, when a product is found to pose potential risks at any point, corresponding national authorities can draft notifications using similar platforms that contain pertinent information. Notifications could include notes on which company or individual purchased the product, its tracing records, measures taken to counter its potential risks, how it was distributed, and by whom. This draft can then be translated and forwarded to CITES Secretariat before it is reviewed and distributed to all other CITES contact points.

CONCLUSION

This paper focused on how wild animals continue to pose public health risks by entering the human food chain. In discussing how the food legal order in China has failed in effectively bringing wildlife into its governance,
this paper first reviewed the existing miscoordination of wildlife regulations in the food legal order, particularly as China made normative efforts to improve food safety over several decades. It then looked into how the miscoordination can be attributed to food security issues in China’s history. Specifically, it discussed the miscoordination by reviewing the regulatory history of the Food Safety Law and the Wildlife Protection Law. Even after the emergence of the COVID-19 pandemic, there continues to be a looming problem with how the Wildlife Protection Law and the Food Safety Law fail to prohibit uncontrolled and unmonitored wild animal consumption. There are loopholes in the blackletter law for wild animals used as ingredients in medicines, and for wild animals used for scientific research. The law also poses difficult challenges for people seeking alternative sources of food. Lastly, the paper described some practical suggestions to fill these regulatory gaps. Using education to promote knowledge that discourages participation in hunting and consuming wild animals is a critical step. Additionally, reconceptualizing wild animals by re-defining and harmonizing the definitions of concepts such as “animals,” “domesticated animals,” and “laboratory-bred animals” is crucial. Introducing standards such as HACCP throughout the food production process would also assist in reconceptualizing food safety based on non-consumption of wild animals. Lastly, the author argues that actively developing and using an intra-authority information network within the CITES framework would be helpful in safeguarding public health.

This is an important study since, as mentioned earlier, miscoordination in the different bodies of law curb nationwide efforts to improve food safety. Decades of changes have been made in the food safety regime, and yet people still end up with wild animals on their table due to legal loopholes. In discussing either public health or food safety, wildlife animals cannot be left out of the legal order in China, nor outside of China. Doing so would undoubtedly result in a regulatory failure as demonstrated by the COVID-19 pandemic. Wild animals are an important, albeit forgotten, part of the discussion on global public health in practice and in scholarship. Today, the legal study of public health needs a more balanced comprehension of food availability, food safety, food hygiene and food quality, and how these are affected by wild animal ingredients.