Animal Welfare and Covid-19 in Indonesia: A Neglected Legal Issue

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ABSTRACT

The Covid-19 pandemic currently infecting the world population comes from the Coronavirus (SARS-CoV-2) transmitted initially from animals to humans, then between humans. This disease is referred to as zoonosis. Covid-19 discourse is generally about zoonotic transmission from animals to humans. Not much attention has been given to the potential transmission from humans to animals. In several countries, cases indicating the exposures of animals with the Coronavirus have been found. Thus, a discussion on the vulnerability of exposure to animals with the Coronavirus is significant to scientifically discussed. Unfortunately, concerns about this problem are still voiced by the mass media. Limited studies have been found, especially in Legal Science. In Indonesia, the Covid-19 incidence has hit more than 200 thousand people, one of the highest in Southeast Asia. Nevertheless, animal protection policy is not part of the national program of Covid-19 Control. Indonesia has several laws and regulations concerning animal welfare and zoonosis control. This article presents our study’s findings investigating how the animal welfare law is applicable to protect the animals from Covid-19. Using the method of normative legal analysis, we found several weaknesses in the legal norms. We also observed how the ethics of anthropocentrism and ecocentrism compete in animal welfare laws.

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1. Introduction

The COVID-19 pandemic that currently hit the world stems from the outbreak that occurred in the city of Wuhan, Hubei Province, China, in December 2019. The disease has originated from the Coronavirus, SARS-CoV-2, which was initially transmitted from animals to humans, then progressed more rapidly when there was a transmission between humans.
Diseases originating from the Coronavirus and other viruses, bacteria, and parasites transmitted through animals are zoonoses. The World Health Organization (WHO) defines zoonosis as a disease or infection that is naturally transmitted from animals to humans.\(^1\) Mackenzie and Smith said that SARS-COV-2 is the third zoonotic virus that significantly impacts human health in the world, after SARS-Co-V and MERS-CoV. They attack respiratory function.\(^2\) Data when this article finalized on September 14, 2020, report that there are 28.9 million cases of Covid-19 sufferers in the world, with 922 thousand deaths. The United States was in the top rank with 6.54 million cases and 194 thousand deaths due to Covid-19 and 3.5 million people who have recovered. Indonesia was ranked 23rd or the second largest in Southeast Asia. There were 218 thousand people infected, with the number of recovered were 155 thousand people, and the death numbered 8,723 people.\(^3\)

Studies on Covid-19 generally focus on the emergence of zoonoses due to the disruption of ecosystem functions and animal habitats. Since ecosystems' ability to limit disease transfer from animals to humans has been disturbed, policies to conserve nature and animals are necessary. Forest destruction and natural landscape changes are proven to have a significant impact on habitat disturbance and wildlife populations.\(^4\)

Apart from the problem of environmental damage, hunting and trafficking of wild animals has also emerged to explain the causes of Coronavirus transmission. Uncontrolled hunting and illegal trades in animals have opened up many opportunities for humans to interact with these animals.\(^5\)

One scientific issue that has not received much attention from the studies on Covid-19 is the potential for transmission of the virus from humans to animals. For example, in the Bronx, United States, a tiger in a zoo was infected with the Coronavirus.\(^6\) In Hong Kong, some dogs die from exposure to this vision. Meanwhile, in Leipzig, Germany, a baby orangutan died amid the Covid-19 Pandemic.\(^7\) Although an investigation is ongoing, this is an important concern because Orangutans (Pongo) are among the animals susceptible to disease from humans.

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1. Mackenzie, J. S., & Smith (2020). “COVID-19: A novel zoonotic disease caused by a coronavirus from China: What we know and what we don’t.” *Microbiology Australia*, 41(1), 45-50. https://doi.org/10.1071/MA20013

2. Everard, M., Johnston, P., Santillo, D. & Staddon (2020). "The Role of Ecosystems in Mitigation and Management of Covid-19 and Other Zoonoses." *Environmental Science and Policy*. 111:7-17. https://doi.org/10.1016/j.envsci.2020.05.017; Fletcher, R., Büscher, B., Massarella, K., & Koot, S. (2020), “Close the Tap!: COVID-19 and the Need for Convivial Conservation.” *Journal of Australian Political Economy* 85:200-211.

3. Novianty, D & Utami, L.S. (2020), Bayi orangutan diduga mati karema virus corona. Available online from: [https://www.suara.com/teknis/2020/05/20/110000/bayi-orangutan-diduga-mati-karena-virus-corona](https://www.suara.com/teknis/2020/05/20/110000/bayi-orangutan-diduga-mati-karena-virus-corona) [accessed, 14 September 2020].
The US Centre for Disease Control and Prevention said that it was investigating the potential for human-to-animal transmission of the Coronavirus. Nonetheless, there is an indication that in certain situations, this transmission could occur. The situation in question is if there is a close contact of a person with Covid-19 with these animals.\(^8\) Parry, in her recent article states that several animals with close contact with humans have been infected by the virus, though little evidence suggests that the animals can retransmit it to humans.\(^9\) Still, the problem would not about the animal-humans’ virus transmission but on the possible threat of animals’ health due to the virus. An issue that has been neglected in academic discourse.

For Indonesia, our discussion regarding the vulnerability of exposure to these animals to the Coronavirus is significant, considering that the central and local governments in June to Augustus 2020 revisited their partial lockdown policy known as Large-Scale Social Restrictions or Pembatasan Sosial Berskala Besar-PSBB. The mobility of people increased even more to some tourist spots. The zoos and natural tourism parks were also opened. Thus, the potential for human-animal interactions returned to 'normal'. The question is, how safe is this against the transmission of the Coronavirus to the animals? Unfortunately, concerns about this matter are still voiced by the mass media. There has not been any study, especially in law, which more fully explains this. Experts’ attention is still focused on public health, economy, politics, education, freedom of worship, and the like.

The Covid-19 pandemic is mostly approached with an anthropocentric view where humans are the centre of attention. As mentioned above, the impact of the Covid-19 disease does affect not only humans but also animals. The discourse on Covid-19 in Indonesia generally ends on zoonotic factors in the spread of the Coronavirus. Barely discussed zoonoses’ relation to animal welfare, an issue that is not just a scientific aspect but also extends to moral philosophy. In this sense, animal health becomes one of the focuses of legal studies on animal welfare.

Golab and Scarfe say that the animal welfare policy provides animals with freedom from hunger, thirst, discomfort, injury, disease, fear, threat, and other disturbances that cause them to be unable to express their natural behaviour.\(^10\) Laws and regulations related to animal protection and welfare have already been enacted in Indonesia and aim to apply those principles too. For example, there are Law Number 18 of 2009 concerning Animal Husbandry and Animal Health as amended by Law 41/2014, Law Number 5 of 1990 concerning Conservation of Living Natural Resources and Their Ecosystems, and Law Number 32 of 2009 concerning Environmental Protection and Management Life. Besides, the Criminal Code also regulates, in a limited manner, animals’ rights to the offense of torture. Then, in the Draft Criminal Code, animal protection is also regulated due to the data that wildlife-related crimes occupy the top three crimes with large transactions in

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\(^8\) Centre for Disease Control and Prevention (2020), Covid-19 and Animals. Available online from: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/animals.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fanimals.html [accessed 30 July 2020].

\(^9\) Parry, N. M. A (2020), “COVID-19 and pets: When pandemic meets panic.” Forensic Science International, 2: 1-4, http://doi.org/10.1016/j.fsir.2020.100090

\(^10\) Golab, G. C. & Scarfe, D. (n.d.), “Animal Welfare-From Philosophy to Regulation: Assessing Animal Welfare and its Impacts on the Veterinary Profession and Animal Industries.” Proceeding of International Association for Aquatic Animal Medicine. Available online from: <https://www.vin.com/apputil/content/default01.aspx?id=3865186&pid=11257&sprint=1> [accessed 15 June 2020].
Indonesia, despite drugs and human trafficking. Interestingly, there has not been any legal analysis related to these regulations in explaining Covid-19 in Indonesia.

Our research investigated several legal issues of animal welfare and zoonotic control within the existing legal framework with the abovementioned background and arguments. We analysed the strengths and weaknesses of the legal norms against the transmission of Coronavirus in animals. We are also interested in analysing the influence of anthropocentrism and eco-centrism ethics in these regulations.

2. Method

This research used a normative legal method that scrutinizes the coherence and consistency between the norms of various laws and regulations on animal welfare and zoonoses control in Indonesia. It is statutory approach research. This study also described environmental ethics that influence those legal norms. Legal materials used in the research contained primary legal sources such as national laws and regulations relating to the protection of animals and control of zoonoses. Included here are Law Number 32 of 2009 concerning Environmental Protection and Management and Law Number 18 of 2009 concerning Animal Husbandry and Animal Health and its amended law (Law 41/2014). Also, we collected and analysed operational directives like Government Regulations, Presidential Regulations, and a Ministerial Regulation. Secondary legal sources were found in books, encyclopaedia, and journal articles related to environmental law philosophy and ethics. More specifically, journal articles concerning laws and policies on wildlife protection, animal welfare and control of zoonoses were also studied. Then, tertiary legal sources were also used to support a deeper understanding of the problem. They contained online mass media and journal articles related to zoonoses, the Coronavirus, Covid-19, and animal protection. The analysis explained the relationship between legal norms and found the influence of the doctrines of anthropocentrism and eco-centrism in the concept of animal welfare.

3. Indonesian Legal Framework on Animal Welfare and Zoonoses Control

In the introductory part, we have mentioned that Indonesia has a set of regulation concerning animal welfare and zoonotic control. Some of them are Law Number 18 of 2009 and Law 41/2014 on Animal Husbandry and Animal Health, Government Regulation Number 95 of 2012 on Veterinary Health and Animal Welfare, and Presidential Regulation Number 30 of 2011 concerning Zoonoses Control. Then, there is also a Decree of Minister of Agriculture in 2019 regarding zoonoses' priority list. This section discusses relevant norms of the animal welfare laws.

3.1. Legal Norms on Animal Welfare

Animal welfare is a philosophical concept that addresses the fair treatment of animals. According to Law 18 of 2009, animal welfare is "All matters relating to the physical and mental state of animals according to the natural behaviour of animals that need to be implemented and enforced to protect animals from the improper treatment of animals.

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11 Hukumonline (2018), Upaya Perlindungan terhadap Satwa Liar dalam RUU KUHP Belum Maksimal, available online from: <https://www.hukumonline.com/bertiga/baca/f5b10a19554e54/upaya-perlindungan-terhadap-satwa-liar-dalam-ruu-kuhp-belum-maksimal/> [accessed 14 June 2020].
by humans.”

Article 66 para 1 of this Law classifies animal welfare activities that include animal capture and handling, placement and holding, care, transportation, slaughter and killing, and fair treatment and protection of animals.

More detail, Law Number 18 the Year 2009 states that catching and handling animals from their habitats must be under the legal conservation provisions. Then, holding animals must allow them to express their natural behaviour. The care, safeguarding, and protection of animals are carried out to make them free from hunger and thirst, pain, abuse, fear, and distress. The transportation of animals is conducted to ensure that they are free from fear and free from abuse. Then the use and utilization of animals are carried out so that they are free from abuse. Slaughtering and killing are appropriately made to free animals from pain, fear, and distress. In addition to these, the treatment of animals must be avoided from acts of abuse.

Government Regulation Number 95 of 2012 concerning Veterinary Health and Animal Welfare then states the five freedom principles of animal welfare:

1. Free from hunger and thirst
2. Free from pain, injury, and disease
3. Free from inconvenience, abuse, and cruelty
4. Free from fear and depression
5. Free to express natural behaviour

Such freedom is applied to catching and handling, placing and holding, transporting, using and exploiting, treating and protecting, slaughtering and killing, and the practice of comparative medicine using the animals. From these national regulations, we can see that animals have the right to be protected from the disease as could be happen with the potential for transmission of the Coronavirus. Animal care, security, and protection must be carried out to free them from disease, including those from the Coronavirus.

Ensuring that animal welfare principles include in the Covid-19 handling policy is essential, considering that the Indonesian Government in June 2020 adopted a policy of reopening 13 natural tourism areas. These areas include marine tourism areas, water conservation areas, adventure tourism areas, national parks, nature tourism parks, forest parks, wildlife reserves, and parks. Besides, non-conservation tourism areas were also opened, such as botanical gardens, zoos, safari parks, tourist villages, and natural tourism areas managed by the community.

The question is, how can the principle of protecting animals from disease as part of animal welfare law in Indonesia be applied? Unfortunately, this matter does not appear in the policy of Covid-19 handling. In the explanation given by the Task Force for the Acceleration of Handling Covid-19 regarding the reopening of natural tourism areas, the priority was to prevent virus transmission between humans. The Task Force for example recommended using partitions at the ticket boxes, disinfection, checking visitors’ body temperature, providing handwashing facilities, and maintaining physical distancing. The only appeal that could be linked to protecting animal welfare is the use of masks.

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12 Article 1 number 42, Law 18 of 2009.
13 Article 66 para 2, Law 18 of 2009.
14 Article 83 para 2 and para 3, GR 95 of 2012.
15 Halim (2020), Kawasan Wisata Alam Akan Dibuka, Gugus Tugas Minta Pengelola Gunakan Partisi, available online from: <https://nasional.kompas.com/read/2020/06/23/18384871/kawasan-wisata-alam-akan-dibuka-gugus-tugas-minta-pengelola-gunakan-partisi?page=all>, [accessed 13 September 2020].
However, it is questionable whether this was intended to protect animals or more to prevent the spread of the virus between visitors and officers.

Protecting animals from disease is an apparent policy of animal welfare. Several studies agree that Covid-19 is a zoonosis\textsuperscript{16}, but few think it is a premature conclusion and suggest to use a term “emerging infectious disease (EID) of probable animal origin.”\textsuperscript{17} Using WHO’s definition, zoonosis is a disease or infection that is transmitted from animals to humans. Nevertheless, Indonesian law adopts a broader definition of zoonosis. As stated in Article 1 number 37 of Law 18 of 2009, zoonosis is defined as a disease transmitted from animals to humans or vice versa. By mentioning the phrase 'or vice versa', the Law considers that zoonoses can also be transmitted from humans to animals. At this point, the transmission of the Coronavirus from humans to animals becomes a legal issue. The problem then is how Indonesian laws regulate zoonoses particularly on the part of humans-animals transmission?

\subsection*{3.2. Zoonoses Control Regulation}

Law Number 18 of 2009 and Government Regulation Number 95 of 2012 place zoonoses control as veterinary health. The zoonosis control is carried out through zoonosis prioritizing, risk management, emergency preparedness, zoonosis eradication, and community participation.

Decree of the Minister of Agriculture Number 237/2019 identifies 15 types of zoonoses that require priority to be controlled and overcome. They are Avian influenza, Rabies, Anthrax, Brucellosis, Leptospirosis, and Japanese B. encephalitis. Besides, there are also Bovine tuberculosis, Salmonellosis, Schistosomiasis, Q fever, Campylobacteriosis, Trichinellosis, Paratuberculosis, Toxoplasmosis cysticercosis/taeniasis. This list does not include Covid-19 though it is globally recognized as a zoonosis. A statement from an official indicates a sceptical view that Covid-19 is a zoonotic disease.\textsuperscript{18} This statement could be an explanation behind the exclusion of Covid-19 from the list of zoonoses.

Regulation on zoonosis control is further stated in Presidential Regulation Number 30 of 2011 concerning Zoonoses Control. This Regulation believes that Indonesia is still facing animal diseases that can naturally be transmitted to humans, or vice versa. Under certain conditions, there is always the potential for this disease to become an epidemic or pandemic. Then, the Regulation also warns that the threat of zoonoses in Indonesia and the world tends to increase. It has implications for the social, economic, security, and welfare aspects of the people. Thus, to accelerate zoonosis control, comprehensive and integrated steps from the central government, local governments, business society, professional organizations, non-governmental organizations, universities, and international institutions and communities are required.

\textsuperscript{16} Muraina, I. A. (2020), “COVID-19 and zoonosis: Control strategy through One Health approach”, Asian Pacific Journal of Tropical Medicine 13(9): 381-383 doi:10.4103/1995-7645.290582; Cordoba-Aguilar, A., Ibarra-Cerdena, C.N., Castro-Arellano, I., Suzan, G., (2020), “Tackling zoonoses in a crowded world: Lessons to be learned from the COVID-19 pandemic”, Acta Tropica 214:195780. https://doi.org/10.1016/j.actatropica.2020.105780; MacKenzie, J. S., & Smith, D. W. (2020). Covid-19: A novel zoonotic disease caused by a coronavirus from China: What we know and what we don’t’. Microbiology Australia, 41(1), 45-50. https://doi.org/https://doi.org/10.1071/MA20013.

\textsuperscript{17} See for example, Haider, N., et.al., (2020), “Covid-19-Zoonosis or Emerging Infectious Disease.” Frontiers in Public Health. 8:596944: 1-8. doi: 10.3389/fpubh.2020.596944.

\textsuperscript{18} Ditjen Peternakan dan Kesehatan Hewan (2020), Kementan: Hewan Kesayangan Tidak Menularkan Covid 19, available online from: <https://ditjenphk.pertanian.go.id/kementan-hewan-kesayangan-tidak-menularkan-covid-19> [accessed 14 September 2020].
Operational steps said the Presidential Regulation must be integrated into a national control system where zoonoses' control becomes the central government and local governments' responsibility. Thus, several commissions are formed, such as the National Commission, Provincial Commission, and Regency/City Commission for zoonosis control.

The zoonosis control regulations are human-centred laws. They concern human health protection more than animal welfare. Article 3 of Presidential Regulation 30 of 2011 clearly describes several strategies of zoonoses control. Two of them are to prevent transmission of disease to humans and to enhance community protection efforts from the threat of zoonotic transmission. In a similar case, Covid-19 regulations in Indonesia focus on human protection too. The handling of Covid-19 is mostly related to community health, economic, and state financial aspects. When Covid-19 also concerns human-to-animal transmission, why the laws do not include animal welfare concern? Is it merely a political preference of the government? Or, do the existing animal laws not have robust norms concerning animal interest? We will discuss it in the following section.

4. Strength and Weaknesses of the Legal Norms

After explaining animal welfare and zoonotic control regulation, this section discusses the strengths and weaknesses of these legal norms to prevent transmission of the Coronavirus from humans to animals. Laws related to animal health in Indonesia believe that zoonotic transmission can also occur from humans to animals. As explained previously, the definition of zoonosis used in Law Number 18 of 2009 and its derivative regulations contains a broader definition of zoonosis than that used by WHO.

With such a definition, animal health law in Indonesia has already anticipated the potential for human-to-animal transmission of the virus. Unfortunately, this definition is not more elaborated in the body of subsequent norms. The law does not include the prevention of disease transmission from humans to animals. Zoonotic risk management, which is regulated in Government Regulation Number 95 of 2012, for example, does not restrict things that can save animals from potential disease transmission.

Animals, in this sense, are subjects for the spread of disease, rather than as objects for contracting the disease, especially from humans. The tendency of legal norms, as described above, reflects the strong ethical view of anthropocentrism, notwithstanding that the formal definition of zoonosis tries to include animal protection rights. On this side, it seems that there is a discontinuity between the zoonotic control norms and the animal welfare norms. It has been mentioned earlier that one of the principles in animal welfare is to ensure that animals are free from disease. Yet, this principle cannot be found in zoonotic control regulations. With such legal norms, efforts to protect animals from the potential transmission of the Coronavirus become weaker. The only strength is in the zoonotic definition that allows for human-to-animal disease transmission.

Another concern, the Government of Indonesia has doubts about declaring Covid-19 a zoonosis. Thus, it has not been included in the zoonosis priority list. Consequently, all regulatory instruments related to zoonosis control and prevention cannot be implemented. Given that the transmission of the Coronavirus from humans to animals has occurred in other countries, Indonesia needs to prepare a better legal framework to anticipate this problem.
5. An Ethical Perspective of Animal Welfare Law

This article holds a view that animal welfare must be incorporated into Covid-19 policy. Nevertheless, as known, the Covid laws and policy focus on humans-first protection rather than the protection of other species. An anthropocentric policy is evident in this regard. Another question then rises. Is animal welfare law in Indonesia entirely for the sake of animal protection? What do environmental ethics affect animal welfare legal provisions?

Ethics is a reflective and critical process through which the government determines policy choices and actions. As the law results from policymaking, the legal norms formulated in statutory regulations contain philosophical values chosen by lawmakers.¹⁹

There are various theories regarding environmental ethics. Most discussed and relevant to this research are the ethics of anthropocentrism and ecocentrism. Anthropocentrism places humans and human needs as first, higher, and more valuable than other species.²⁰

Anthropocentrism ethics are commonly attached to the Western philosophy of nature.²¹

The main challenge with anthropocentrism is biocentrism or sometimes zoo-centrism. The biocentrism views that all living things, biotic and abiotic in living systems, have the same value and form a whole. Meanwhile, zoo-centrism puts animals first.²² Ecocentrism goes beyond biocentrism and zoo-centrism, but it also does not entirely condone anthropocentrism. Ecocentrism provides an umbrella for justice for all components of the environment. According to ecocentrism, life is the inter-dependence of the biological, geological, and geomorphological means. In this sense, biodiversity is intrinsic.²³

Which environmental ethics most influences the concept of animal welfare invites debates. To some, animal welfare as a form of anthropocentrism because the word ‘welfare’ here often in conjunction with human interests. For example, when the slaughtering and killing of animals happen, the ultimate end of welfare is human needs. Others believe in using ecocentrism to the concept of animal welfare.

Animals, like humans, need welfare; and welfare is not something that is given. Welfare is sought, and it can present in its best or worst form. Thus, animal welfare can be measured.²⁴ One way to do so is to assess the fulfilment of animal needs instead of human needs. As quoted earlier, Golab and Scarfe mention those needs include being free from hunger, thirst, discomfort, injury, disease, fear, threat, and other disturbances that cause them to be unable to express their natural behaviour. We have discussed that Golab and Scarfe's opinion aligns with animal welfare principles in Indonesian law.²⁵

Looking at back at the animal welfare laws, the concepts and principles used are quite strong in ecocentrism's ethics. The regulation for animal welfare protection is not only for these animals as adhered to by bio or zoo-centrism but places in the interaction of

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¹⁹ Keraf, S.A. (2010), Etika Lingkungan Hidup, Jakarta: Penerbit Buku Kompas.
²⁰ Keraf, Ibid; Kopnina, H.; Washungton, H.; Taylor, B.; Piccolo, J.J. (2018), “Anthropocentrism: More than Just a Misunderstood Problem.” Journal of Agricultural Environmental Ethics 31:109–127.
²¹ Simkins, R.A., (2014), “The Bible and anthropocentrism: Putting humans in their place.” Dialect Anthropology 38: 397–413.
²² A good article explaining the animal rights philosophy and its development in Indonesia's animal lover movement can be seen in Resolute, P. (2016), “Humanizing the Non-Human Animal: the Framing Analysis of Dogs' Rights Movement in Indonesia.” MASYARAKAT: Jurnal Sosiologi 21(2):149-172.
²³ Washington H; Taylor B & Kopnina H. (2017), “Why ecocentrism is the key pathway to sustainability.” The Ecological Citizen 1: 35–41.
²⁴ Broom, D.M. (1991), “Animal welfare: concepts and measurement.” Journal of Animal Science, 69, 4167-4175.
²⁵ Golab, G. & Scarfe, D., Ibid.
animals and other living things, especially humans. Likewise, existing legal norms regulate zoonoses using an ecocentrism concept rather than the anthropocentric one. The definition of zoonosis as diseases transmitted from animals to humans or vice versa has proven an ecocentric view. However, as discussed in the previous sections, the norms regarding zoonoses control lose their connection with the legal norms on animal welfare. As a result, the policy arrangement of zoonosis has become very anthropocentric. This incoherence legal norm explains why animal welfare in Indonesia seems anthropocentric.

6. Conclusion

Indonesian laws and policies regarding Covid-19 are more focused on public health, disaster, and economic issues but barely incorporate on zoonosis and animal welfare. To anticipate the transmission of Covid-19 from humans to animals, integrating laws related to animal welfare and zoonotic control into Covid-19 handling needs to be considered. Animal health laws have anticipated the potential for transmission of the virus from humans to animals. Unfortunately, much regulatory content does not provide detailed instructions to prevent human-to-animal disease transmission. Zoonotic risk management does not protect animals from such a transmission. The laws also contain incoherent legal norms that weaken animal protection from the Covid-19 transmission.

This research also found that animal welfare and Covid-19 laws reflect an anthropocentrism point of view rather than ecocentrism. The anthropocentric laws have caused environmental destruction and the extinction of non-human species and, at a certain point, become the cause of zoonoses. Environmental ethics that ensure balanced inter-species relations is a necessity. The Covid-19 pandemic must be a turning point in applying ecocentrism in animal welfare and Covid-19 handling. The protection of animal rights from disease transmitted from human to animal need to be clearly regulated.

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References

BBC. (2020, April 6). Virus corona: Seekor harimau di kebun binatang Amerika Serikat positif terinfeksi virus. Retrieved from: <https://www.bbc.com/indonesia/dunia-52178462. [accessed 14 June 2020].

Broom, D. M. (1991). "Animal Welfare: Concepts and measurement". Journal of Animal Science, 69, 4167–4175.

Centre for Disease Control and Prevention. (2020). Covid-19 and Animals.
Cordoba-Aguilar, A., Ibarra-Cerdena, C.N., Castro-Arellano, I., Suzan, G., (2020), “Tackling zoonoses in a crowded world: Lessons to be learned from the COVID-19 pandemic”, Acta Tropica 214: 195780. https://doi.org/10.1016/j.actatropica.2020.105780.

Ditjen Peternakan dan Kesehatan Hewan. (2020, March 16). Kementan: Hewan Kesayangan Tidak Menularkan Covid. Retrieved from https://ditjenpkh.pertanian.go.id/kementan-hewan-kesayangan-tidak-menularkan-covid-19 [accessed 14 September 2020].

Everard, M., Johnston, P., Santillo, D. & Staddon, C. (2020). The Role of Ecosystems in Mitigation and Management of Covid-19 and Other Zoonoses. Environmental Science and Policy, 111, 7–17.

Fletcher, R., Massarella, K., & Koot, S. (2020). ’Close The Tap!’: COVID-19 and the Need for Convivial Conservation. Journal of Australian Political Economy, 85, 200–211.

Golab, Gail C. & Scarfe, David, A. (n.d.). "Animal Welfare-From Philosophy to Regulation: Assessing Animal Welfare and its Impacts on the Veterinary Profession and Animal Industries". In Proceeding of International Association for Aquatic Animal Medicine. Retrieved from https://www.vin.com/apputil/content/defaultadv1.aspx?id=3865186&pid=11257&print=1. [accessed 15 June 2020].

Halim, D. (2020, June 23). "Kawasan Wisata Alam Akan Dibuka, Gugus Tugas Minta Pengelola Gunakan Partisi." Kompas.Com. Retrieved from: <https://nasional.kompas.com/read/2020/06/23/18384871/kawasan-wisata-alam-akan-dibuka-gugus-tugas-minta-pengelola-gunakan-partisi?page=all>, [accessed 13 September 2020].

Hukumonline. (2018, June 1). "Upaya Perlindungan terhadap Satwa Liar dalam RUU KUHP Belum Maksimal". Retrieved from https://www.hukumonline.com/berita/baca/tt5b10a19554e54/upaya-perlindungan-terhadap-satwa-liar-dalam-ruu-kuhp-belum-maksimal/[accessed 14 June 2020].

Humane Society International (2020). Wildlife Markets and COVID-19. Washington D.C.

Jeffries, B. (2020). "The Loss of Nature and the Rise of Pandemics: Protecting Human and Planetary Health". Gland, Switzerland: WWF.

Keraf, A. S. (2010). Etika Lingkungan Hidup. Jakarta: Penerbit Buku Kompas.

Kopnina, H.; Washington, H.; Taylor, B.; Piccolo, J. J. (2018). "Anthropocentrism: More than Just a Misunderstood Problem". Journal of Agricultural Environmental Ethics, 31, 109–127.

MacKenzie, J. S., & Smith, D. W. (2020). Covid-19: "A novel zoonotic disease caused by a coronavirus from China: What we know and wahat we don’t". Microbiology Australia, 41(1), 45–50. https://doi.org/https://doi.org/10.1071/MA20013

Muraina, I. A. (2020), “COVID-19 and zoonosis: Control strategy through One Health approach”, Asian Pacific Journal of Tropical Medicine 13(9): 381-383 doi:10.4103/1995-7645.290582.

Novianty, D & Utami, L. S. (2020, May 20). "Bayi Orangutan diduga mati karena virus corona". Retrieved from https://www.suara.com/tekno/2020/05/20/110000/bayi-orangutan-diduga-mati-karena-virus-corona [accessed, 14 September 2020].
Parry, N. M. A. (2020). "COVID-19 and pets: When pandemic meets panic". Forensic Science International, 2(April). https://doi.org/10.1016/j.fsir.2020.100090

Resolute, P. (2016). "Humanizing the Non-Human Animal: the Framing Analysis of Dogs’ Rights Movement in Indonesia". Masyarakat: Jurnal Sosiologi, 21(2), 149–172.

Simkins, R. A. (2014). "The Bible and anthropocentrism: Putting humans in their place". Dialect Anthropology, 38, 397–413.

Washington H, Taylor B, Kopnina H, C. P. & P. J. (2017). "Why ecocentrism is the key pathway to sustainability". The Ecological Citizen, 1, 35–41.

WHO. (n.d.). Zoonoses. Retrieved from: <https://www.who.int/topics/zoonoses/en/#text=Zoonosis%20is%20any%20disease%20in%20nature> [accessed 13 June 2020].

**Conflict of Interest Statement:**

The author(s) declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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