

PROCEEDING OF THE 3RD ANIMAL WELFARE -
INDONESIA INTERNATIONAL CONFERENCE 2024

ANIMAL WELFARE.
WORLDWIDE.



THE 3RD

ANIMAL WELFARE CONFERENCE INDONESIA

INTERNATIONAL CONFERENCE 2024

United for
Animal Welfare:
From Best Practices
to Policy Reforms

6 - 7 December 2024
Menara 167 Jakarta, Indonesia

PROCEEDING OF THE 3RD ANIMAL WELFARE - INDONESIA, INTERNATIONAL CONFERENCE 2024

THE 3RD ANIMAL WELFARE CONFERENCE - INDONESIA, INTERNATIONAL CONFERENCE 2024

“United for Animal Welfare: From Best Practices to Policy Reforms”

| 6 - 7 December 2024
| Menara 167 Jakarta, Indonesia

Organizes by **Yayasan JAAN Kesejahteraan Hewan**

Supported by **FOUR PAWS International**

ORGANISING COMMITTEE OF THE 3RD ANIMAL WELFARE-INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

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2. FOUR PAWS International

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2. Marcella Ayu

The 3rd Animal Welfare Conference Indonesia is organised by Yayasan JAAN Kesejahteraan Hewan (JAAN Domestic Foundation), and supported by FOUR PAWS International. Please note, the views expressed in these proceedings are those of the respective paper authors and do not necessarily reflect those of the sponsor or organisers. FOUR PAWS International and JAAN Domestic, cannot vouch for the accuracy of information contained in the papers.

ORGANISING COMMITTEE OF THE 3RD ANIMAL WELFARE-INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

Scientific Manager

1. drh. Khansa Muthia Arifin

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7. drh. Vicky Kristiawan
8. Yohana Ninda M. Fernandez, A.Md.Par

Master of Ceremony

1. Hana Khoirun Nisa S.Si
2. Astrid K. Sudarwanto S.Ars.
3. Gladys Veronica, S.H.
4. Muhammad Ihsan Arifin Soepeno

Moderator

1. drh. Rio Aditya Setiawan, M.Sc
2. Benedicta Erika, S.H
3. Aditya Prasetyo, M.Krim
4. Drh. Deon Kristiawan, M.Sc
5. Drh. Zulfikar Basrul, M.Sc
6. Drh. Maria Pristi Anris Yunikawati
7. Anisa Ratna Kurnia, S.Sos
8. Anne Dawydowa, DVM

Event Organiser Co-Support

1. Futari Indonesia

Publisher of The Proceeding

Animal Welfare Conference - Indonesia
The 3rd International Conference 2024
www.animalwelfare.id



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ANIMALWELFARE.ID



WELCOME MESSAGE

FROM FOUNDER & CEO OF JAAN DOMESTIC INDONESIA
FOUNDATION



KARIN FRANKIN

FOUNDER & CEO OF JAAN DOMESTIC
INDONESIA FOUNDATION

It's with great pleasure to welcome you to the 3rd Animal Welfare Conference – Indonesia, International Conference 2024!

This conference has been made possible by our amazing team from JAAN Domestic Indonesia Foundation, in particular our ANIMAL WELFARE INDONESIA team and our partners from FOUR PAWS INTERNATIONAL.

We hope that this conference, with its impressive line up of speakers, will have a great impact on strengthening and empowering various sectors, including animal lovers, shelters, veterinarians, scientific communities, veterinary schools and many more. This conference unites animal welfare professionals, who advocate for the humane treatment of animals; sharing best practices, challenges and successes. In line with this goal, our digital education platform, ANIMALWELFARE.ID, has become an indispensable tool that is incorporated within all programs that we run.

We need in depth human education more than ever, especially when we are looking at the world today, the different types of violence, from bullying, domestic violence, crime, lack of empathy, lack of respect, climate change, to the extreme exploitation of animals, which is not only cruel, but also leads directly to disasters and threatens the health and safety of all living beings. At this point educators, parents and governments should by now realize, human education combined with character building, should be a top priority.

This website is, therefore, a platform for parents, teachers, communities and various sectors who wish to make a positive contribution to today's society. We aim to build kinder societies and encourage people to learn about the importance of empathy.

We want people to understand that the principle of life means respecting and caring for all living beings and that all life is valuable, not only human life. We want people to understand that becoming a responsible member of society is important to make this world a better place.

We are confident that this conference and our digital platform will make an enormous contribution to positive change as well as bridging governments, communities, animal lovers, shelters, veterinarians, educators and all stakeholders to achieve greater results in the future!

Karin Frankin

- CEO & Founder JAAN Domestic Indonesia Foundation
- Co-Founder Jakarta Animal Aid Network
- National Coordinator for Dog Meat Free Indonesia Coalition
- Co-Founder Koalisi Perlindungan Hewan Indonesia

WELCOME MESSAGE

FROM EXECUTIVE DIRECTOR OF JAAN DOMESTIC
INDONESIA FOUNDATION



**DRH. MARIANA FERDINANDEZ,
M.SI (DVM, M.SC)**

EXECUTIVE DIRECTOR OF JAAN
DOMESTIC INDONESIA FOUNDATION

Welcome to Jakarta!

Welcome to the 3rd Animal Welfare Conference - Indonesia, International Conference 2024.

On behalf of AnimalWelfare.id and the organizing committee, we are thrilled to welcome you to this significant international event on Animal Welfare in Indonesia. This year's theme, **"United for Animal Welfare: From Best Practice to Policy Reform"** highlights our collective dedication to advancing animal welfare initiatives.

We are proud to announce that this year, with Dog Meat Free Indonesia Coalition (DMFI), we have taken a monumental step by submitting an animal welfare law for domestic animals to the Legislative Department of Indonesian House of Representatives, which includes a crucial chapter on banning the dog and cat meat trade. This initiative marks a significant stride toward policy reform and reflects DMFI unwavering commitment to creating lasting change.

This year, we are honored to collaborate with esteemed organizations such as the Association of Shelter Veterinarians, the University of California Davis (UC Davis) Koret Shelter Medicine Program, the Animal Legal Defense Fund, Asia for Animals, Animals Alliance Asia and Act for Farmed Animals.

Additionally, this year, we have initiated a new collaboration with the Indonesian Veterinary Student Association (IMAKAHI) to establish an animal welfare student chapter, fostering the next generation of animal welfare advocates.

We are delighted to host this conference to address the pressing need for updated animal welfare knowledge and legal protections, facilitating connections among professionals and networks. During this event, we proudly promote AnimalWelfare.id, a digital education platform designed to provide accessible information on animal welfare in Indonesia.

Our mission extends beyond knowledge-sharing. We aim to empower and support grassroots communities, including animal lovers, shelters, veterinarians, scientific communities, and veterinary schools in Indonesia. By supporting these groups, we strive to improve animal welfare across the nation and inspire collective action.

Our purpose is to unite animal welfare professionals who advocate for the humane treatment of animals, sharing best practices, challenges, and successes in an environment of learning and collaboration. We also aim to empower communities to educate their surroundings about animal welfare nationwide. We hope this conference will provide valuable insights through interactions with internationally and nationally recognized experts and colleagues across Indonesia, fostering greater collaboration across disciplines.

We extend our gratitude to all contributors, including sponsors, collaborators, keynote and invited speakers, scientific paper presenters, moderators, facilitators, and attendees. Special thanks to FOUR PAWS International for their tremendous support, as well as to all collaborators, official partners, speakers, moderators, and the dedicated committee and volunteers who make this event possible. Welcome to Jakarta, and enjoy the 3rd Animal Welfare Conference - Indonesia 2024

Drh. Mariana Fernandez, M.Si (DVM, M.Sc)

- Chairperson of Organising Committee
- Executive Director of JAAN Domestic Indonesia Foundation
- Co-Founder and Chair of Indonesian Shelter Veterinarian Association
- The Asian Shelter Veterinarian Forum

WELCOME MESSAGE

FROM EXPERT CONSULTANTS AND ASSESSOR IN THE FIELD
OF ANIMAL WELFARE



DRH. RD WIWIEK BAGJA

EXPERT CONSULTANTS & ASSESSOR IN
THE FIELD OF ANIMAL WELFARE

“Strengthening Animal Welfare Policies for the Multisectoral Benefits of Animals”

First of all, please allow me to extend my warmest welcome to all participants of the 3rd Animal Welfare Conference Indonesia on 6–7 December 2024 here in Jakarta.

It is really a pleasure for me to meet you all to share some experiences and to discuss various issues related to animal welfare. Currently, animal welfare has become a global issue, in which some trading on live animals as well as animal products requires a guarantee that animal welfare has been implemented to the concerned animals. This requirement brought to the increasing competitiveness in trade and furthermore, many global food industry have taken the steps as far as boycotting some farm products that are not implementing animal welfare in their farms.

Some approaches have also been made to refine the definition of animal welfare that in principle, is to improve the wellbeing of animals. Animal welfare is very concern about particular present state of animals and later on goes into ethical and legal protection to animals. As civilized society, we have the obligation to treat all animals that live around us, and those that are being utilized for the benefits of human welfare, with respect and humanity.

This year's 3rd AWI Conference is being hosted in collaboration with the Directorate of Veterinary Public Health, Directorate General of Livestock and Animal Health (DGLSAH), Ministry of Agriculture of Indonesia.

Under such collaboration, this event involves representatives from all provinces in Indonesia as well as all Directorates under the DGLSAH. I think such a commitment should be appreciated, as it is truly an expression of our national commitment to carry out serious efforts in implementing Animal Welfare as mandated in some Laws and regulation. The government support to this event is very much in line with this year's theme: "United for Animal Welfare: From Best Practices to Policy Reforms", as we keep striving to achieve better standard, better practice, and policy for animal welfare implementation.

Finally I would like to express my deepest gratitude and highest appreciation to JAAN Domestic Foundation as the organizer of this conference which has continuously work their best efforts to bring Animal Welfare to have proper recognition in Indonesia. We believe with all supports from various parties, stakeholders and by working together, animal welfare enforcement could be brought into reality.

I wish you all a pleasant time during this meeting, to network, enjoy the insightful presentations, and may we all have fruitful discussion sessions. Hope to be able to see you in future events on Animal Welfare.

Best regards,

Drh. R. D. Wiwiek Bagja

- Senior Activist on Animal Welfare
- Expert consultants and Assessor in the Field of Animal Welfare (Former President of IVMA
- Animal Welfare Consultant for Ministry of Agriculture and Ministry of Forestry)

WELCOME MESSAGE

FROM FOUNDER & CEO NATHA SATWA NUSANTARA



DAVINA VERONICA HARIADI, S.I.KOM

FOUNDER & CEO NATHA SATWA
NUSANTARA

It is an honor to be a part of the 3rd Animal Welfare Indonesia Conference.

We believe that the majority of Indonesian society needs enlightenment in their relations to nature, animals and animal welfare. We share the earth together with other living creatures. We believe that nature and animals will survive without humans, but humans will not survive without them. Nature and animals belong to the earth and so humans should respect and protect their existence.

Humans need to get close to nature because it is a means of realizing how minuscule humans are and how humans need and are very dependent on nature, therefore we should appreciate, care for and love nature, and not unjustly and constantly drain nature.

I feel that my activities as an environmentalist and animal protector for more than a decade (15 years) and approach to several government agencies and leading figures were not sufficient. Providing education and raising awareness must continue to be done and maintained so that nature and its entirety may be maintained and conserved. People from all walks of life must be involved in nature conservation activities and that the activities be implemented in every day's life for the sake of sustainable life on earth.

Our mission is among others to take part in creating a world where we can live harmoniously with all living beings.

All living things on this earth are related one to the other, it's a web of life. Whatever we do against nature and the environment, will have an impact one towards the other.

Together with many NGOs, for example BOSF, FLIGHT, WWF Indonesia; I am very lucky to be given the opportunity to travel to their work areas in the forest as well as in the ocean in Indonesia. To witness and identify first-hand the problems relating to nature, animals and environment in Indonesia. It is not only nature that has been and continues to be exploited by humans, but animals are fallen victims, both protected, near-extinct animals and those that are not.

It has become our duty and hope to make people realize the importance of nature conservation efforts and appreciate the existence of other living creatures for the sake of sustainable life on earth.

The problems surrounding domestic animals in the cities are also shocking. My experience and observation along with NSN foundations indicate a large number of cases involving violence, cruelty, abuse and neglect of domestic animals in this country.

We also realize that the acts of abuse and cruelty against domestic animals or other animals including protected animals and those that are on the brink of extinction, will not stop without any laws and regulations that firmly protect those animals in Indonesia including heavy penalties against the perpetrators. It must also be equipped with guidance for law apparatus (particularly in the field) and a judiciary that complements and supports the implementation of such laws and regulations. These are the matters that we wish for and will keep on fighting together with those who have the same mission.

Davina Veronica Hariadi, S.I.Kom

- CEO & Co-Founder Yayasan Natha Satwa Nusantara
- Head of Awareness Campaigner Borneo Orangutan Survival Foundation
- Co-Founder Koalisi Perlindungan Hewan Indonesia
- Honorary Advisor Yayasan Terbang Indonesia (FLIGHT: Protecting Indonesia's Birds)

WELCOME MESSAGE

FROM SENIOR PROGRAMMES DIRECTOR OF
FOUR PAWS INTERNATIONAL



DR. MARTINA STEPHANY

SENIOR PROGRAMMES DIRECTOR OF
FOUR PAWS INTERNATIONAL

On behalf of the planning committee of JAAN and FOUR PAWS: Welcome to the 3rd Animal Welfare Conference in Jakarta, Indonesia! This year, we meet for two full days, to discuss and share projects and ideas under the theme ***“United for Animal Welfare – From Best Practices to Policy Reforms”***.

Animal welfare standards for farmed, wild, and companion animals have never been higher in human history. However, increasing demand for animal-based protein continues to intensify farming practices, underpinned by habitat destruction and the commercialization of animals and their products.

More than four years after the pandemic, we find ourselves in a world that has changed dramatically yet again. Geopolitical priorities are shifting, and animal welfare is increasingly at risk of being sidelined. As animal advocates, our task is becoming both more difficult and more urgent. Today, protecting animals is not only for their sake but also for human survival.

Animal welfare is now a critical issue, intertwined with human health, environmental sustainability, and social justice. Addressing these challenges requires a unified approach, involving animal rights advocates, health experts, environmentalists, governments, and industries.

This is a moment to celebrate our progress, confront ongoing challenges, and, most importantly, set the stage for transformative change. We are not alone in this mission. The progress we've made shows that collaboration works. From enhancing rescue operations to pushing for stronger laws, our joint efforts have brought real change. To create lasting impact, we must turn these victories into systemic change through policy reforms. Despite differing approaches, we all share the commitment to make animal welfare central to every decision.

The theme of this year's conference, "United for Animal Welfare – From Best Practices to Policy Reforms", highlights the need to translate our achievements into sustainable solutions. We have the knowledge, passion, and drive to shape policies that protect animals and promote a compassionate world for all living beings.

By fostering collaboration, pushing the boundaries of what's possible, and advancing policy reforms, we can build a future where animal welfare is not an afterthought but a key part of a healthier, more sustainable world. Together, we are not just advocating for animals; we are shaping a better future for everyone.

Martina Stephany

- Senior Programmes Director
- FOUR PAWS International

ANIMALWELFARE.ID



ABOUT ANIMAL WELFARE INDONESIA

Animalwelfare.id is an educational/character building website, which teaches Empathy, Respect and Responsibility through Animal Welfare. It gives animal lovers, teachers and communities the necessary tools to help educate through easy to use and step-by-step resources.

WHO ARE WE ?

Jakarta Animal Aid Network (JAAN) is a non-profit organisation dedicated to improving the welfare of animals throughout Indonesia. JAAN was founded in January 2008 and is 100% dependent on donations. JAAN runs a number of programs for domestic animals as well as for wildlife. JAAN owns and operates a number of programs, both for domestic animals and for Wildlife.

Since 2020, JAAN Domestic has been officially established as the JAAN Animal Welfare Foundation.

JAAN run active campaigns and programs, including Dog Meat Free Indonesia (DMFI), Care for Carriage Horses Jakarta, Animal Shelter & Rehabilitation for Dogs and Cats, Sanctuary for Ex Carriage Horses, Stray Animal Care, Sterilization Surgery program Stray Cats, and education program www.animalwelfare.id

To Learn more about the JAAN Programs, you can visit our website at www.jaandomestic.com

WHY WE DO WHAT WE DO ?

Welfare Education promotes knowledge, understanding, skills, attitudes and values related to animals, but it also encourages a general attitude. Empathy is believed to be a critical element often missing in today's society and the underlying reason for callous, neglectful and violent behaviour.

There is a well documented link between childhood cruelty to animals and later criminality, violence, and anti social behaviour. The link between animal abuse and human violence reveals that animal abuse can often have a domino effect. When adults disrespect, neglect, abuse or harm an animal; it starts a process of desensitisation or loss of feeling in our children. They become able to witness the neglect, hurting, harming or killing of animals without feeling a response. Habituation to neglect and cruelty means that abuse has become a routine part of a child's life and is accepted as normal.

Lack of empathy leads to dehumanisation because it slows down children's emotional development and they are not able to realise their full potential as emotionally mature adults.

We can break this cycle and replace it among others with empathy, respect, responsibility, and compassion, which is needed to build kinder and better societies.

HOW ?

Everybody can help by sharing knowledge to those close to you. Sharing knowledge doesn't cost a thing, but can have an enormous impact on society in general.

This website is for all educators, animal lovers, people who care about the environment or just simply people who care about people and be part of creating a kinder society. This easy to use website has provided step by step action plans for teachers, animal lovers and communities which includes lesson plans, action plans, resources, activities, letters, educational posters, videos, books and lots more!

BACKGROUND OF HOW IT ALL STARTED

Education has always been a high priority for JAAN domestic from the very early start. JAAN domestic realised that Education equals with change and using Nelson Mandela's quote: "education is the most powerful weapon which you can use to change the world".

We started with the concept of this website after having the opportunity to present to former DKI Jakarta's Governor Mr Ir. Basuki Tjahaja Purnama regarding Animal Welfare. Our presentation and ideas were very well received and the Department of Agriculture was instructed to collaborate with us on all these ideas. This happened in September 2015.

After this presentation, we started creating content and further developing our concept, and regular meetings to present our developments and after 5 months of hard work we were ready to meet the Governor again!

To celebrate our major milestone and to socialise our Mass Education Project, we had a launching event at Jakarta's City Hall (Governor's office) in North Jakarta on the 7th of February 2016! The launching was a great success! In 2017 parts of our education programs were featured on big LED's throughout Jakarta. 2017 – 2018 we continued with some further developments, but due to lack of financial support, we were not able to explore these developments any further.

SUPPORTED BY FOUR PAWS INTERNATIONAL

And in 2018 we held a meeting with FOUR PAWS and presented the program and what we've been doing up to that point. We also submitted a proposal containing what we still want to develop, including content and website creation which later can be a guide for animal lovers, teachers, parents, communities and others with an easy-to-use website design and program stages so that make it easier for us to provide education.

We are very grateful that FOUR PAWS was willing to sponsor the entire program thus giving us the opportunity to complete this excellent project.

The ultimate goal of JAAN is to create a better society through animal welfare education programs.

SO WHO IS BEHIND ANIMALWELFARE.ID ?

The following are the names and roles of each of the teams behind the process of making this website:

ANIMALWELFARE.ID PROGRAM MANAGEMENT:

Karin Franken – Program Advisor

Drh. Mariana Fernandez, M.Si – Program Director

Drh. Mikeu Paujiah, Dipl. Montessori – Education & Content Manager

Drh. Dhea Ardhina Krisdamayanti – Research

Levina Dewi Lomena, B.A – Art Director & Creative Manager

Maryam Sheer, S.Kom – IT. Manager

Azmi Masfiyati – Social Media Content Creator

Arif Wibisono – Admin

Magdalena Hutauruk, A.Md – Admin

Cerian Yuwono, S.T – I.T Advisor

Febe Kristiana – Web Analytical Advisor

Pratiwi Wahyu – Podcast Editor

Monique Kauffman – English Content Supervisor

Animawelfare.id Program Volunteer Team 2023:

Adithya Yudha Fimandhika – Research
Anjani Setya Utami – Translator
Hamdi – Research
Natasha Irene Setiawan – Research
Ade Mirzanthy – Translator and Content Writer
Azzahra Maulidina – Research
Citra – Research
Drh Rai Jaine Darmanta – Content Writer
Esther Adinda – Translator
Winaya satasya – Translator
Elizabeth Gabriella Anggina – Content Creator
Daffa Amalia Putri –Translator
Raden Destyana Yunissa Prizka – Contributor & Translator
Sri Meilyana Tjoewardi – Content Creator
Anastasia Merry Linda – Research
Benedikta Erica Lidwina – Content Writer & Research
Isabelle Schosser– Content Writer

Animalwelfare.id Pilot Project Team 2016 – 2019 :

Karin Franken
Drh. Mariana Fernandez M.Si
Aya Diandara Salvator, B.A
Levina Dewi Lomena, B.A
Bahana Damayana
Fandi

Proudly Presented by **JAAN DOMESTIC**
Supported by **FOUR PAWS INTERNATIONAL**

Contact us :
education@jaandomestic.com & animalwelfare.id@jaandomestic.com

ANIMALWELFARE.ID



TIME TABLE OF THE 3RD ANIMAL WELFARE - INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

DAY 1 - FRIDAY, DECEMBER 06, 2024

TIME (WIB)	DESCRIPTION	SPEAKER / TEAM / MC
07:00-09:00	Registration & Welcome Coffee	AWI Team
09:00-09:20	Opening Ceremony: Cultural Performance, Anthem, and Prayer	MC – Davina Veronica
	Welcome Speeches	
09:00-09:40	Objectives of Conferences	Drh. Merry Fernandez M.Si – Executive Director of JAAN Domestic
	Welcome speech from CEO of JAAN Domestic	Karin Franken – CEO of JAAN Domestic
	Welcome speech from The Indonesian Veterinary Medical Association	Dr. drh. Muhammad Munawaroh, MM. – President of The Indonesian Veterinary Medical Association
	Official Opening by Director General of Livestock and Animal Health, Ministry of Agriculture	Dr. drh. Agung Suganda, M.Si
	Keynote Session	
09:40-10:50	Strengthening Animal Welfare Policies for Multisectoral Animal Interests	drh. RD Wiwiek Bagja
	Why Mass Culling is Ineffective? Best Practice of Humane Population Management for Rabies Control (recorded)	Dr. Elly Hiby – The International Companion Animal Management coalition (ICAM)
	How Not To Lose Hope: 3 Success Factors for Animal Welfare	Dr. Martina Stephany – Senior Programmes Director at FOUR PAWS International
	Partnership for Progress: Fostering Synergy in Animal Welfare	Prof. Dr. Ir. Ali Agus, DAA., DEA., IPU, ASEAN Eng – Expert Staff of the Minister of Agriculture

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“United for Animal Welfare: From Best Practices to Policy Reforms”

TIME	DESCRIPTION	SPEAKER/ TEAM/ MC
10:50-11:20	Q&A	Moderator : Drh. Rio Aditya Setiawan, M.Sc
11:20-11:30	Group Photo	JAAN Team
	Lunch & Prayer	

CLASS A: FORUM LAW, POLICY, AND ADVOCACY FOR ANIMALS

TIME	DESCRIPTION	SPEAKER / TEAM / MC
13:15 – 13:20	Welcome Greeting (recorded)	Jessica Chapman – Staff Attorney from Animal Legal Defense Fund
13:20 – 13:35	Updates on Animal Welfare Legislation	Dr. Drh. Nuryani Zainuddin, M.Si – Director of Veterinary Public Health, Ministry of Agriculture
13:35 – 13:50	Challenges in Law and Policy to Fight Animal Cruelty on Social Media in Indonesia (recorded)	Dr. Yenti Garnasih, M.H. – STIN Lecturer
13:50 – 14:05	From Tradition to Transformation: Advocating for a Dog Meat Free Indonesia and Stronger Animal Protection Laws	Adrian Hane S.H and Karin Franken – Dog Meat Free Indonesia Coalition
14:05 – 14:20	The Impact of the Dog Meat Trade on Rabies Control Strategies	Matt Backhouse – Head of Stray Animal Care Southeast Asia, FOUR PAWS International
14:20 – 14:35	Global Challenge: Law and Policy Against Animal Cruelty (recorded)	Altamush Saeed, LL.M- Pakistan Animal Rights Lawyer, CEO & Founder Charity Doings Foundation Pakistan

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"United for Animal Welfare: From Best Practices to Policy Reforms"

TIME	DESCRIPTION	SPEAKER / TEAM / MC
14:35 – 14:50	Q&A Session	Moderator: Aditya Prasetyo, M.Krim
	Coffee break	
15:00 – 15:15	DMFI'S Animal Cruelty Cases: Seeking Justice and Protection for Companion Animals	RM. Heksa K.R.B.S Suryoningrat, S.H., M.H., CTL., C.L.A – DMFI Law Firm partner
15:15 – 15:25	BAWA's Animal Cruelty Cases, Challenge and Action Plans	Gusti Ngurah Bagus, S.Pt., MM. – Program Coordinator of Bali Animal Welfare Association
15:25 – 15:30	Video of the Connection between the DCMT & Rabies	FOUR PAWS
15:30 – 16:15	Focus Group Discussions: Challenges in Implementing Animal Welfare Laws and Action Plans for Solutions (based on above cases, how to implement animal welfare laws, etc.) with group presentation (15")	Moderator : FOUR PAWS Facilitator: Poppy Permatasari, B.Sc., drh. Sasa Vernandez, M.Si., Benedikta Erica, S.H & Raga Bintang, S.H
16:15 – 16:20	Closing Remarks: Summary of Key Challenges, Legislative Updates, and Proposed Solutions or Action Plans Moving Forward	
	Doorprize	

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6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

CLASS B: FORUM ANIMAL SHELTER MANAGEMENT

TIME	DESCRIPTION	SPEAKER / TEAM / MC
13:15 – 13:20	Welcome Greeting (recorded)	Dr. Kate Hurley – Program director of the Koret Shelter Medicine Program, University of California, Davis
13:20 – 13:30	Building Bridges: Strengthening Relationships with Growing Animal Shelters in Indonesia	drh. Merry Fernandez, M.Si – Director JAAN Domestic Indonesia, Asian Shelter Veterinary Forum & Himpunan Dokter Hewan Shelter Indonesia
13:30 – 13:50	Strategies for the Implementation of New Shelter Regulations from the Ministry	drh. Hastho Yuliyanto, MM. (coordinator of Animal Welfare – Directorate of Veterinary Public Health, Ministry of Agriculture
13:50 – 14:10	Cat Sterilization Program in the South Jakarta Area	Dr. drh. Hasudungan A Sidabalok, M.Si – Head of the South Jakarta City Food Security, Maritime and Agriculture Department
14:10 – 14:25	Creating a Protocol for your own shelter based on animal welfare & ASV Guidelines (recorded)	Brendan Bergquist, DVM –Assistant Clinical Professor of Shelter MedicineAuburn University College of Veterinary MedicineAssociation of Shelter Veterinarian
14:25 – 14:40	Building an Adoption Culture and Best Practice Shelter Management with Support from the FOUR PAWS Shelter Adoption Programme	Marissa E. Arief – Stray Animal Care program Coordinator for Indonesia, FOUR PAWS International
14:40 – 14:50	Q&A Session	Moderator: Anisa Ratna Kurnia – Natha Satwa Nusantara
	Coffee break	
16:30 – 16:40	Closing Remarks	
	Doorprize	

TIME TABLE OF THE 3RD ANIMAL WELFARE - INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

DAY 2 - SATURDAY, DECEMBER 07, 2024

TIME (WIB)	DESCRIPTION
08:30 – 09:00	Registration & Welcome Coffee
12:00 – 13:00	Lunch Break & Prayer
15:30 – 15:45	Doorprize & Closing
08:30 – 16:00	Exhibition / Poster Presentation Viewing

CLASS C: ANIMAL WELFARE AND PROTECTION FOR ALL SPECIES

TIME	DESCRIPTION	SPEAKER / TEAM / MC
09:00 – 09:20	Welfare and Protection for Carriage Horses: Challenges and Opportunities	Karin Franken – Aid for Carriage Horse, JAAN Domestic Indonesia
09:20 – 09:40	Illegal Song Bird Trade in Indonesia	Davina Veronica, S.I.Kom – Honorary Advisor FLIGHT Protecting Indonesia's Birds
09:40 – 10:00	Government Officials' Involvement in the Illegal Wild Animal Possession: What Can We Do When The Protectors are Among the Offenders?	Rheza Maulana, S.T., M.Si – Koalisi Perlindungan Hewan Indonesia

TIME TABLE OF THE 3RD ANIMAL WELFARE - INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

TIME	DESCRIPTION	SPEAKER / TEAM / MC
10:00 – 10:20	Jakarta Parlement's Perspective and Strategies for Advancing Animal Welfare Protection in All Species	Francine Widjojo, S.H M.H. (Jakarta Regional House of Representative) DPRD Provinsi DKI Jakarta
10:20 – 10:40	Community Empowerment for Primates Protection: Conservation Welfare	Cassytta Imtiyaz S.Hut., M.Si – Primate Welfare Researcher
10:40 – 12:00	Open Discussion and Q&A	Moderator : drh. Zulfikar Basrul Gandong, M.Sc.
	Lunch Break	
13:00 – 13:20	The Waves of Fish Welfare : A Legal, Services, and Technology Perspective	drh. Toha Tusihadi – Head of Serang Fish Health and Environmental Testing Center, Directorate General of Aquaculture, The Ministry of Marine Affairs and Fisheries
13:20 – 13:40	Cage-Free Futures: Welfare Management for Cage-Free Hens	Drh. Aisah Nurul Fitri – Animal Welfare Manager of Sinergia Animal
13:40 – 14:00	Scoping Report of Implementation of Farmed Animal Welfare Standards and It's Impact on Environmental and Public Health in Bali, Indonesia	Fiolitha Berandhini, S.H. – Founder of Animals Dont Speak Human
14:00 – 15:00	Q&A, Closing Remarks, and Group Photo	Moderator: drh. Khansa Muthia
	Doorprize & Awarding	

TIME TABLE OF THE 3RD ANIMAL WELFARE - INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

CLASS D: COMMUNITY ENGAGEMENT IN ANIMAL WELFARE

TIME	DESCRIPTION	SPEAKER / TEAM / MC
09:00 – 09:20	Understanding and Reshaping Our Culture in Animal Advocacy	Poppy Permatasari & Margaretha – Animal Alliance Asia
09:20 – 09:40	Changing Community Perception: Addressing Speciesism	Jon Rosén Bennett – Dog and Cat Meat Trade Programme Lead, FOUR PAWS International
09:40 – 10:00	Community Engagement: Spay and Neuter for Stray Animals	Desyanna Suryadi – Yayasan Peduli Lingkungan Indonesia (YPLI)
10:00 – 10:15	Community and Volunteer Movement: Stray Animal Mapping by Satu Peta Anabul	Rizka Zamzani Ibrahim, S.E., M.M. – Founder of Satu Peta Anabul
10:15 – 10:30	Street Feeding Movement: Collective Action for Stray Cats	Ananda Arief
10:30 – 11:00	Q&A	Moderator: Dr. Anne Dawydowa – Stray Animal Care Lead Veterinarian for Southeast Asia, FOUR PAWS International
11:00 – 12:00	Workshop on Compassion Fatigue	Facilitator: Matt Backhouse – Head of Stray Animal Care Southeast Asia, FOUR PAWS International
	Lunch Break	

TIME TABLE OF THE 3RD ANIMAL WELFARE - INDONESIA, INTERNATIONAL CONFERENCE 2024

6 - 7th December 2024 ; Menara 165 Jakarta, Indonesia

"United for Animal Welfare: From Best Practices to Policy Reforms"

CLASS E: SOCIAL MEDIA AND FUNDRAISING

TIME	DESCRIPTION	SPEAKER / TEAM / MC
13:00 – 13:30	Spot the Scam: Unmasking Fake Animal Rescues on Social Media by the Asia for Animals Coalition	Winaya S Tippy & Drh. Amanda Yonica – Asia for Animals (SMACC Coalition)
13:30 – 13:50	Tips for Maximizing Instagram in Animal Welfare Education	Anisa Ratna Kurnia – Operational Director of Natha Satwa Nusantara Foundation
13:50 – 14:10	Social Media Crowdfunding as a Fundraising Strategy for Nonprofits and Animal Shelters	Genoveva Karinza – Special Project Manager of Kitabisa
14:10 – 14:30	Best Practices in the Business of Saving Lives	Agra Utari, M.Pd – Education Coordinator of Seva Bhuna Foundation
14:30 – 14:50	Digital Healing: Creating a Kinder World for Animals Through Social Media	Dery G. Waluyo – Human & Animal Wellbeing Practitioner, Reiki Master, and Intuitive Animal Communicator
14:50 – 15:20	Q&A, Closing Remarks, and Group Photo	Moderator: Drh. Maria Pristi Anris Yunikawati
	Doorprize	

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Friends or Foes? Dogs Through the Eyes of Indonesia's News Media

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Abstract

For a long time, dogs have been a common topic of discussion in daily life, research, and news media. Their existence in the built environment has many meanings from utilitarian and humanistic perspectives. The humans-dogs' relationships have been well-established based on personal experiences and news media perceptions. News from Western media about dogs tend to have a positive outlook as heroes and are perceived as fun. On the other hand, Indonesia's culture and history have a complex relationship with dogs. To comprehend human-dogs relationship in Indonesia, this literature study aims to understand how two major Indonesian online news media (Kompas.com and Detik.com) present stories about dogs by counting and categorizing news article headlines. A total of 3,476 articles that met the study criteria were categorized into four categories: general news (48%), special news (30%), negative news (14%), and positive headlines (8%). Most negative news featured information about rabies, dog bites, and attacks, while the positive news mainly featured K9 services. Moreover, several reoccurring themes in special topics were dog meat debate, terror "kepala anjing," and community disrespect. In conclusion, these findings suggest that Kompas provides a generalized view, while Detik tends to raise cases of conflict between humans and dogs.

Keywords: human-dogs relationship, media perception, news media

Introduction

Dogs have lived among humans for over 14,000 years, and their co-evolution started 32,000 years ago (Boyko, 2011). From then until today, dogs are considered as companion animals or even family members since their companionship improves the quality of life of their owners. Based on the early relationship between humans and dogs, hunter-gatherers and agrarian societies used canines for utilitarian purposes: livestock protectors, property guardians, and hunting companions (Berglund, 2014). In some cases, dogs were also considered a food source, and even now, some cultures still regard dogs as a delicacy (Amiot et al., 2016; Resolute, 2017; Sabrina, 2023). As domesticated animals, dogs have several qualities that make them more easily trained to meet human needs. Therefore, dogs' roles in the modern era have diversified; especially in Western countries, where dogs are widely employed to aid in investigative efforts such as tracking bombs, drugs, or missing persons. In the field of nature conservation, they can detect invasive or endangered species and wildlife crimes. Moreover, dogs are also trained to contribute to medical fields by detecting diseases as well as alerting and assisting people with special needs.

Despite the merits of their utilitarian purposes, dogs are often associated with uncleanliness and thus perceived as pests, nuisances, and disease carriers (Berglund, 2014; Mustiana et al., 2015; Utami et al., 2019; Wera et al., 2015). Numerous studies agree that culture and social constructs influence the perception of dog roles in a society (Amiot et al., 2016; Blouin, 2013). The relationship between Indonesians and dogs is complicated due to the country's diverse social, cultural, scientific, and political history. First, Indonesia's population is predominantly Muslim, and most Muslims consider dogs to be unclean animals (Berglund, 2014). Second, dogs are one of the animals that can spread rabies, whose case is worst in Eastern Indonesia especially in Bali, West Nusa Tenggara, and East Nusa Tenggara. These regions are still struggling to control rabies and to become rabies-free (Mustiana et al., 2015; Utami et al., 2019; Wera et al., 2015). Due to this, it is reasonable that Indonesians perceive dogs as dangerous animals. Third, since humans migrated to the Pacific Ocean region, dogs have had high economic, historical, and cultural values in Eastern Indonesia. They are kept as crop guardians, hunting companions, and protein sources or as ceremonial sacrifices. As guardians, they can roam freely; for Muslims, hunting dogs cannot live indoors (Boyko, 2011; Mustiana et al., 2015; Wera et al., 2015). However, free-roaming dogs mean more environmental risks. Their stools contain parasites such as *Ancylostoma caninum*, *Toxocara canis*, *Dipylidium caninum*, and *Cystoisospora* spp (Lyons et al., 2022). Although the dogs are still loved and well cared for, this method of dog keeping is considered different from the "modern way" of raising dogs, which treats dogs as family, allows them to live inside the house, pampers them, and prioritizes their welfare. Most local dogs in Indonesia are called village dogs or "anjing kampung." In the past, keeping dogs, exceptionally pure breed dogs, as companions and leisure was only possible for the nobilities during the colonial era. Thus, the perception that dog keeping is a form of Westernization or is associated with European culture, wealth, and power is developed in the society (Berglund, 2014). Last, even though dogs are very versatile and compassionate, the word "anjing" has an unfavorable connotation in Indonesian society and is used as a swear word, a form of irritation, and is interpreted as an insult (Tambunsaribu, 2019, 2022).

Over time, there is a shifting perspective on dogs to that of a man's best friend and even cherished family member in Indonesia's society. The dog meat trade is now perceived as cruel, and dog rescue organizations have emerged to defend dogs' rights and welfare (Resolute, 2017). It was only recently discovered that allowing dogs to roam freely and consuming dog meat can contribute to the spread of rabies and dog bites (Mustiana et al., 2015; Utami et al., 2019; Wera et al., 2015). Besides science, one of the reasons for this change in perspective is due to the fast development of science, technology, and information, which changes or validates the dog owner's experience that dogs are not objects. Dogs are essential subjects that have strong emotional bonds with humans (Blouin, 2013; Herzog & Burghardt, 1988). Therefore, the media is influential in constructing and reflecting people's perceptions, opinions, and reactions. (Hooper et al., 2022).

Whether presented as saviors, heroes, victims, or vicious animals, dogs are the most common subject with a long history in Western news media (Herzog & Galvin, 1992; Podberscek, 1994). People consider news originating from reliable sources to reflect the current phenomena.

News media coverage can contribute to public policy by encouraging people to act a certain way (Degeling & Rock, 2012; Toohey & Rock, 2015). As a result, information from the news is used as a guide to behave in a way that is considered normatively desirable (Schulz et al., 2022). How dogs are portrayed in news media can affect the species and individuals depicted. Atkinson et al. (2014) found more dog-related articles in the New York Times than non-dog-related articles. This shows that US journalists like dogs and events featuring dogs because they are entertaining, and the soft entertainment style of reporting brings in readers (Atkinson et al., 2014). Studies on how news media present dogs have been frequently conducted in Western countries but rarely in Southeast Asian countries such as Indonesia. Unpreventably, non-dog owners, dog owners, and their dogs need to live in a harmonious coexistence. Therefore, by providing an overview of Indonesia's two significant online news media consensus, this research enriches the literature about how news media represent dogs. This study also sheds some light on Indonesia's journalism acts toward dogs.

Material and Methods

This literature study was inspired by Atkinson et al. (2014) and Hooper et al. (2022) research. Two major online news media in Indonesia, Kompas.com and Detik.com, were selected for this research. Kompas is a long-established news company with an established reputation for providing objective news (Praditha & Widodo, 2022). On the other hand, Detik is the most popular online news media company in Indonesia and presents information in real time by the minute (Elysia & Yaser, 2022). First, articles published between January 1st, 2021- August 13th, 2023, with the tag "anjing" were collected from both news outlets to examine how dogs were represented in Indonesian online news media. This yielded 2,640 articles from Kompas and 4,750 articles from Detik. Next, purposive sampling was used to acquire headlines of articles that were strictly about dogs and eliminate articles unrelated to dogs or did not mention dogs. This sampling method allowed several news articles that did not fit the subject criteria to be excluded, such as the case of a maid locked in a dog cage, an article about cats that used dog tags, an explanation of the tourist destination Pasir Anjing Beach in Taliabu, and articles about "anjing laut" or seal to name a few. Then, the collected data was analyzed descriptively and grouped based on the topics discussed. The researcher also compared the news presentation between the two sources and presented it in tables and charts.

Following the sampling criteria, 2,329 articles from Kompas and 1,147 articles from Detik were collected for further analysis. From all 3,476 article headlines collected, the researcher formed four categories based on cases or phenomena that occur in Indonesia's society:

- General: articles discuss care and maintenance of dogs, explanation of dog characteristics, introduction to dog breeds, entertainment events (e.g., ugly dog competition), or provide information about adopting, vaccinating, spaying, and neutering of dogs.
- Positive: articles saluted dogs and their service to society, including rescuing, preventing illegal goods tracking, or performing as service animals.
- Negative: articles presented dogs' harmful impacts on humans, such as bite cases, diseases, or accidents, which caused casualties of either humans or other living beings.
- Special: articles showed the complexities of the relationship between humans and dogs, which show pros and cons, such as examples of dogs as victims (e.g., kidnapped, consumed, abused, abandoned), community conflicts over dogs, or human actions that were considered insulting to a culture or community.

Results and Discussion

Kompas published dog headlines categorized as general 66%, special 19%, negative 10%, and positive 5% (Figure 1). The highest number of positive headlines in 2022 was 46 articles due to many events such as police dog unit (K9) helping track several cases of murder victims, searching for Ridwan Kamil's son (15th Governor of West Java) who was lost in the Aare River, finding Pasaman earthquake victims, detecting COVID-19 patients, tracking narcotics and bombs, and guarding houses of worship during holidays as well as the wedding of Joko Widodo's son (the seventh president of Indonesia). On the other hand, there was only one article about a therapy dog accompanying a stroke patient and a few articles about a victim's dog who helped locate its owner's mutilated body parts. Positive headlines between 2021 and 2023 mostly informed about K9 activities, dogs' loyalty to their sick and deceased owners, and a dog who saved its family from a cobra.

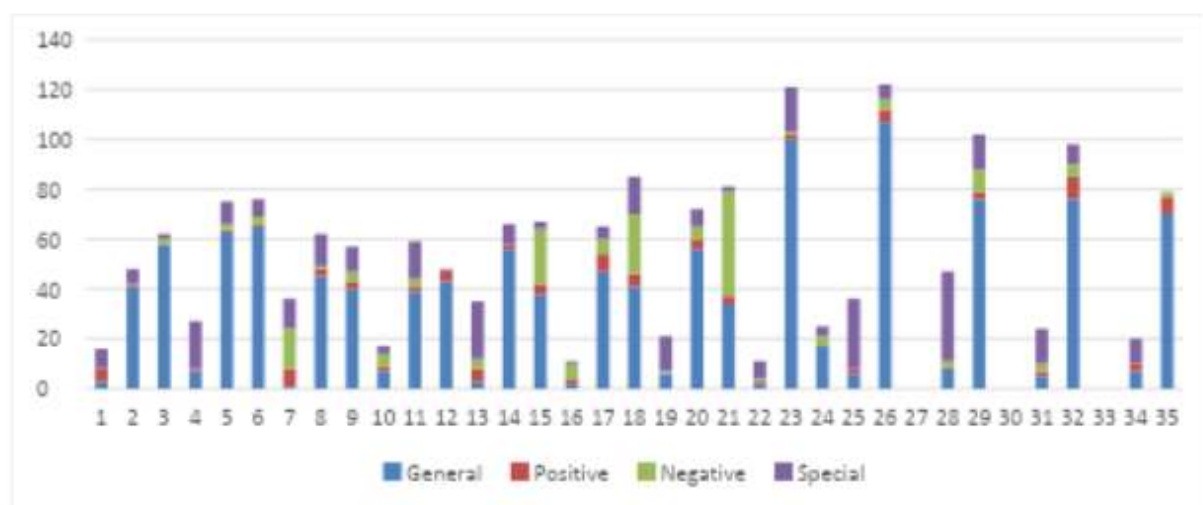


Fig. 1 Total categorized articles with "anjing" from Kompas.com headlines, 2021-August 13th 2023

In contrast, negative headlines in 2021 accounted for only 5% of the total articles and 4% in 2022, but there was a spike to 20% (101 articles) in 2023. Although data for 2023 were only collected until August 13th, the cases of rabies increased in that year, so articles about bites and rabies also increased. Apart from rabies, from July to August 2023, two special headlines were considered defamation: a dog owner marrying off their dogs under Javanese tradition and a man tying the Indonesian national flag around his dog's neck. Special news in 2021 (15%) was dominated by reports of dog abuse, such as dogs being dragged by motorcycles, dogs beaten by wooden beams, dogs shot with air rifles, and the dog meat trade in many countries, including Indonesia. Human-caused dog conflicts that year included a dog named Canon, who died in Aceh. Not only environmentally harmful, but dog's stool also caused the murder of a dog owner by his neighbor because the owner's dog defecated in the neighborhood. Special news was highlighted by the prohibition of dogs in Car Free Day (CFD) areas, the dog meat debate, the neglect and abuse of dogs, the capture and elimination of dogs in Mandalika, and dog theft throughout 2022.

Kompas regularly publishes articles in the general category compared to Detik, especially on explaining dog breeds, the importance of vaccination, healthy food for dogs, comparing dogs with cats, and global news such as the world's ugliest dog competition. Meanwhile, Detik only broadcasted headlines based on events and more often publishes headlines that belong to special (47%), general (21%), negative (21%), and positive (11%) categories (Figure 2). Generally, both online news media discuss the same events. The highest number of headlines occurred in 2022 (16%), followed by 2021 (10%) and 2023 (7%). Detik provides some articles not covered by Kompas, which was the K9 working during the G20 and NCT127 concerts. The researcher realized that some headlines about K9's services cases did not mention "anjing" even though the content of the article or case involved a K9, hence the lower percentage of positive headlines.

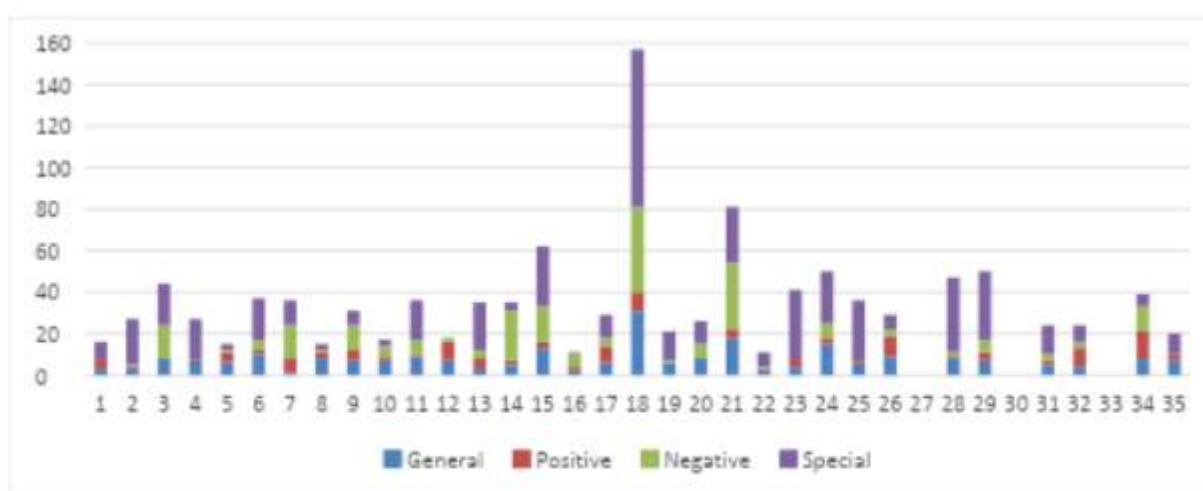


Fig. 2 Total categorized articles with "anjing" from Detik.com headlines, 2021-August 13th, 2023

Negative headlines were highest in 2023 (28%) due to increased rabies bite cases, especially in Bali, Nusa Tenggara, and surrounding areas, as well as stray dog attacks on people's livestock. Dogs were also considered terrifying animals because they were found eating the corpses of babies or murder victims. Detik tends to discuss social phenomena. Thus, the percentage of special news in the highest order was 2021 (58%), 2022 (44%), and 2023 (43%). "Terror kepala anjing" (sending someone a dog's head as a threat), the massacre of dogs in Pacitan, the death of a dog owner due to dog stools, Indonesian National Armed Forces personnel shooting dogs, dog meat trade, and Canon were popular topics discussed in 2021. The unique events in the Detik headlines in 2021 and 2023 were the recordings of "anjing ngepet," a mythical demon dog who steals people's money, and a dog chasing "pocong" or a Javanese ghost. Headlines of a Circular Letter banning dog meat in some cities in Indonesia, mistreatment, neglect, torture, theft, poisoning of dogs, birthday celebrations, weddings, and grand dog funerals drew criticism and filled headlines throughout 2021 to 2023. In 2022, the "terror kepala anjing" continued until February. There were many headlines about police officers ordering a university student to apologize to a dog, Turkish Airlines passengers' fight over being licked by a dog in the plane cabin, the prohibition of dogs during CFD, and dogs being raped by American men. Incidents of dogs being dragged by motorcycles in various cities in Indonesia were often mentioned in 2023. Black dogs were also mentioned to accompany the cult leader in Cisoka. The culture of "bagong anjing" or dogs fighting with wild boars, was covered by Detik in 2022.

General headlines discussed more specific dog breeds than "anjing kampung" even though they are commonly found throughout Indonesia. Along with viral headlines such as lavish dog birthday celebrations, weddings, and funerals, it is natural that the image of dogs in Indonesia is associated with European culture, wealth, and power (Berglund, 2014). Headlines about "terror kepala anjing", a man tying a national flag to a dog's neck being charged by police, and an owner being demanded to apologize for performing a dog Javanese wedding ceremony fit the image that dogs have a negative connotation in society (Tambunsaribu, 2019, 2022). Detik covers more local topics such as bagong anjing, anjing ngepet, and dog chasing pocong. Although bagong anjing and dog meat consumption are still considered a tradition in Indonesia, it is opposed by some local and international communities because it is considered animal abuse (Resolute, 2017; Sabrina, 2023). Meanwhile, dog chasing pocong was seen as a heroic and fun act. The number of positive headlines on this topic (10) is not as many as dog's negative portrayal of "anjing ngepet" (14). This can lead to more social conflicts between non-dog owners, dog lovers, activists, and dog owners who release their dogs.

In January 2023, Detik.com published a headline, "Anticipating Rabies, Village Chiefs Were Asked to Create Customary Law on Releasing Dogs" to reduce dog bites and the spread of zoonosis diseases in Bali. With the increasing publication of headlines about public health, animal abuse, cultural discussions, and dog meat headlines, the news media also helped push the effort to reduce the dog meat trade with the goal of a complete ban in Indonesia. As a result, news media, especially special news coverage, can contribute to developing formal or informal policies.

These policies are essential in Indonesia to reduce social conflict and environmental risk while improving public health. This proves that online news media can help non-dog owners, dog owners and their dogs live in a more harmonious coexistence (Degeling & Rock, 2012; Toohey & Rock, 2015). Contrary to Atkinson et al.'s (2014) results, dogs received mixed representation from Indonesian online news media. When comparing positive and negative headlines, there were more negative headlines. In addition to negative headlines, there were more dogs as victims and troublemakers than positive headlines.

Conclusion

News media have a vital role in representing how an individual or species is portrayed because it has a role in building public opinion, action, and behavior. With Indonesia's diverse background, online news media presented more negative news about the spread of rabies and bite cases due to Indonesia's challenges in managing rabies and free-roaming dogs in Eastern Indonesia than heroic or endearing stories. In addition, dogs have a complex relationship in Indonesian society as victims of abuse and a long history in Indonesian culture. Despite the mixed representations, shifting perceptions along with formal and informal policymaking were made with the help of viral news to create a healthier and more harmonious environment.

There were several limitations discovered in this study. First, it did not analyze the content and images used for news thumbnails. Second, the sub-categories for general and special categories were not calculated in more depth. Third, articles about the benefits of keeping dogs were included in the general category because they considered them informative research results, not headlines of cases. Further research needs to be done on dogs' roles in other media and other aspects of Indonesian society.

Conflict of Interest

The author states that there is no conflict of interest with any parties concerned in this research.

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Orangutan Welfare through Forest Vegetation Preservation: A Review

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Abstract

The survival and welfare of the Asian Great Apes, Orangutans are threatened by deforestation which will lead to their extinction. Based on the IUCN Red List these primates are categorized as “Critically Endangered” animals and included in Appendix I of CITES. It is known that the protection of some species is not only to save the species itself but also to protect the habitat as well. A comprehensive literature approach was conducted to discuss the importance of habitat protection for orangutan welfare and the impact of habitat destruction on orangutan food sources that affected their behavior. The search identified that orangutans depend on vegetation in the forest. Trees are used as food, shelter, reproduction, medicine, and all activities carried out by orangutans. This review confirms that Deforestation affects orangutans' feeding, resting, and roaming behavior which reduces their welfare. Therefore preventive measures are needed to minimize deforestation, respectively environmental education, community forest management programs, and forestry and environment-related laws.

Keywords: Orangutan, Deforestation, Habitat, Wildlife Welfare

Introduction

Orangutans are the only great apes native to Asia, found in Indonesia and Malaysia. Orangutan species are distributed on Sumatra and Borneo Island, namely Pongo tapanuliensis and Pongo abelii on Sumatra and Pongo pygmeus on Borneo Island (EIA, 2021). The orangutan are protected animals based on the Indonesian government through No. P.106/MENLHK/SETJEN/KUM.1/12/2018 on Protected Plant and Animal Species. Considering its low population and limited distribution area, these primates are categorized as “Critically Endangered” animals based on the IUCN Red List and in Appendix I of CITES (IUCN, 2017; CITES, 2018).

One of the main factors of Orangutans' survival and welfare is a healthy forest as a source of trees that produce food and as a nest (Arief & Mijiarto, 2024). Feed is a basic survival and welfare factor for all animals, due to its effect on supporting growth and development (Mellor et al., 2020). In primates, food availability and habitat condition influence their behavior (Kifle & Bekele, 2021; Souza-Alves et al., 2021). The availability of orangutan food will affect their daily roaming to obtain food (Saputra et al., 2017).

While orangutans can feed on lianas and parts of trees such as young leaves and shoots, flowers, inner bark, and small amounts of insects, soil minerals, mushrooms, also other herbs, they tend to eat fruits (Widiani et al., 2021). The most preferred tree species as orangutan food belong to families Euphorbiaceae, Annonaceae, Moraceae, Anacardiaceae, and Fagaceae (Arief & Mijiarto, 2024). In another perspective, the feeding behavior of orangutans is a part of their role to disperse seed, therefore supporting the sustainability and improving the carrying capacity of rainforest (Tarszisz et al., 2018).

However, deforestation is the primary cause of orangutans' population decline. Predictions based on models indicated that between 1999 and 2015, more than 100.000 individuals of Bornean orangutans vanished from the forest due to logging, deforestation, and industrialized plantations (Voigt et al., 2018). Logging significantly had negative impacts on forest structure and orangutan food resources, therefore affecting orangutans' behavior. Logging causes the loss of figs and lianas that are attached to timber trees. Orangutans living in logging areas tend to move more and rest more, due to the availability of figs and lianas as food sources (Hardus et al., 2012).

According to the previous study, it is known that the aim of orangutan protection is not only to save the species itself but also to protect the habitat as well (Davies et al., 2017; Santika et al., 2022). This review will discuss the importance of habitat protection for orangutan welfare and the impact of habitat destruction on orangutan food sources that affected their behavior. Based on the review, we provide recommendations for improving orangutan welfare through forest vegetation conservation and protection.

Materials and Methods

A comprehensive literature approach was conducted to identify studies related to orangutan welfare and its habitat. Electronic databases were searched via Google Scholar, Current Biology, Wiley Online Library, and Science Direct. We used the keywords "orangutans", "animal + welfare", "orangutan + habitat", "orangutans + conservation", "primates + orangutans + behavior", "orangutan + diet Preference", "orangutan + deforestation", "orangutan foods", and "orangutan + self-medication". Articles published in English and Bahasa Indonesia were included. The selected articles are reviewed.

Results and Discussion

In this mother earth, humans not only live by themselves but co-exist with other organisms. Humans can survive for many generations because they utilize nature such as plants and animals to provide their life. Nevertheless, humans often forget to keep the balance of nature to fulfill their profit, resulting in nature's destruction. The negative impact of rapid development can be felt on animals. Unfairly, due to their inability to voice their matters of life, animal issues are often underestimated. Therefore, to ensure the welfare of animals, there are the "Five Domains Model" to determine welfare status, in the following 1) Nutrition 2) Environment 3) Health 4) Behavior 5) Mental State. The first three domains focus on physiological stability. Any disruption in these three leads to the behavior (fourth domain) to restore stability. Therefore the behavior is a form of survival-critical effect. The behavior of animals can be shown after interaction with the environment, other animals, and humans. Further, the mental state (fifth domain) is generated by the brain to process the sensory inputs that are accelerated by external stimuli (Mellor et al., 2020).

In wildlife habitat, infrastructure projects and the converting of primary forests into forestry, agriculture, and livestock decrease the potential of wildlife animals for foraging, breeding, and hiding from predators (Berg et al., 2020). Furthermore, to make the land usable for humans, vegetation loss always occurred. During the removal of vegetation, the animals experience mental and physical trauma due to the application of mechanical force during the clearing process (Finn & Stephens, 2017). Therefore, both the loss of vegetation and the process of land conversion in forests worsen animals' welfare.

According to the World Resources Institute's Global Forest Review, Indonesia ranks fourth globally in terms of high tropical deforestation rates (WRI, 2024). Deforestation is the process of converting forests into land for non-forestry sectors such as industrial development. A prominent driver of deforestation in Indonesia is the rapid expansion of plantations, particularly those for oil palm cultivation (Nakita, 2022). The conversion of forests has occurred in Borneo and Sumatra due to the opening of agricultural land and mining (Austin et al., 2019). This is very unfortunate because these areas are the largest contributors of tropical forest land in Indonesia.

The conversion of forest has threatened Indonesia's biodiversity, particularly the endemic wildlife in these regions, one of which is the orangutan. The orangutan is a key species for maintaining the forest ecosystem's sustainability. There are three species of orangutans: the Bornean orangutan (*Pongo pygmaeus*), which is endemic to Borneo; the Sumatran orangutan (*Pongo abelii*); and the Tapanuli orangutan (*Pongo tapanuliensis*) which is endemic to Sumatra (Condro et al., 2021). All three species of orangutans are classified as "critically endangered" (IUCN, 2017). This classification does not necessarily guarantee the survival of protected orangutans.



Fig. 1 The species of Orangutans in Indonesia

(a) Bornean, *Pongo pygmaeus* (Hayashi *etal.*, 2018), (b) Sumatran, *Pongo abelii* (Iqbar *etal.*, 2024), and (c) Tapanuli, *Pongo tapanuliensis* (Putro *etal.*, 2019)

Deforestation may result in the extinction of orangutans. This is because orangutans play an essential role, therefore they are called an umbrella species (Iqbar et al., 2024). Based on their behavior when eating fruit, orangutans participate in the distribution of seeds. This feed behavior ensures vegetation regeneration in the forest ecosystem. As arboreal animals that depend on the presence of vegetation in the forest, orangutans are known as foragers in tropical forests. Orangutans used trees as food, shelter, reproduction, self-medication, and all activities they carried out. Orangutans exhibit nesting behavior by breaking branches and twigs, creating gaps in the tree canopy. These gaps allow sunlight to penetrate, reaching the forest floor and providing energy that supports seed germination (Sayektiningsih & Ma'ruf, 2017; Panda et al., 2020). Several types of vegetation are crucial to the survival and welfare of orangutans in their natural habitats, particularly on the islands of Borneo and Sumatra.

Table 1. Plant species for Orangutan Foods (Iqbar et al., 2020 ; Windiani et al., 2021 ; Kuswanda et al., 2021)

No.	Family	Species	Local Name	Eaten Part
1.	Anacardiaceae	<i>Mangifera foetida</i>	Mancang	Fruits
2.	Annonaceae	<i>Mezzetia parviflora</i>	Gompol kambing	Fruits
3.	Arecaceae	<i>Calamus</i> sp.	Rotan	Fruits, roots
4.	Clusiaceae	<i>Garcinia parvifolia</i>	Gandis	Fruits
5.	Dipterocarpaceae	<i>Shorea agamii</i>	Meranti putih	Cambium
6.	Euphorbiaceae	<i>Elateriospermum tapos</i>	Kayu karet	Fruits
7.	Malvaceae	<i>Durio</i> sp.	Durian canguk	Fruits
8.	Moraceae	<i>Artocarpus kemando</i>	Cempedak rawan	Fruits
9.	Meliaceae	<i>Dysoxylum binectariferum</i>	Gelinggang merak besar	Fruits
10.	Moraceae	<i>Ficus shwarzii</i>	Gala-gala rube	Cambium
11.	Moraceae	<i>Ficus coronata</i>	Rambung kusim	Fruits
12.	Moraceae	<i>Artocarpus dadah</i>	Asam bobi	Fruits
13.	Moraceae	<i>Streblus elongatus</i>	Damli	Cambium
14.	Moraceae	<i>Artocarpus elasticus</i>	Terap	Leaves
15.	Moraceae	<i>Artocarpus integrifolia</i>	Cempedak	Fruits
16.	Moraceae	<i>Ficus toxicaria</i>	Gumbot	Fruits
17.	Moraceae	<i>Ficus ribes</i>	Dongdong	Fruits
18.	Myrtaceae	<i>Syzygium</i> sp.	Jambu	Fruits
19.	<u>Olacaceae</u>	<i>Ochanostachys amentacea</i>	Katikal	Fruits
20.	Oxalidaceae	<i>Sarcotheca diversifolia</i>	Kekupui	Leaves

Table 2. Plant species for Orangutans self-medication (Morrogh-Bernard et al., 2017; Laumer et al., 2024)

No.	Family	Species	Local Name	Used Part	Application
1.	Asparagaceae	<i>Dracaena cantleyi</i>	Suji hutan	Apical parts of leaf extracts	External application of foamy mixture from saliva and leaf onto specific parts of the body (upper arms or upper legs)
2.	Menispermaceae	<i>Fibraurea tinctoria</i>	Akar kuning	Stem and leaves of liana	External application of a mixture of saliva and leaf juices to facial wound until the red flesh was fully covered with the green leaf material and feeding the plant

The consequences of deforestation furthermore change the forest structure conditions that are ideal for orangutan nests. Heterogeneous forest structure conditions provide the denser canopy conditions that orangutans prefer. Forests with dense canopy cover, taller trees, and identical height are preferred by orangutans (Davies et al., 2017). Among other primate groups, orangutan nests are considered the most complex (Prasetyo et al., 2009). Tree selection of orangutans plays a role in comfort, stability, and predator avoidance (Auliah et al., 2020). The more complex the nest, the better the sleep quality (Samson & Hunt, 2014). Nest site selection is influenced by sex, body size, and environment (Abernethy et al., 2018). Selection of trees for nests is also highly selective, due to orangutans' meticulousness in choosing construction materials, wood quality, flexibility and strength, leaf size, and phytochemical content (Samson & Hunt, 2014). Loss of tall vegetation will deprive orangutans of ideal nesting sites. Inevitably, loss of vegetation due to deforestation will also make orangutans more vulnerable to sunlight and rain, which can affect their health and welfare.

Table 3. Plant species for Orangutan Nest (Sayektiningsih & Ma'ruf, 2017 ; Nasution et al., 2018; Andini et al., 2021)

No.	Family	Species	Local Name
1.	Anacardiaceae	<i>Dracontomelon dao</i>	Dahu
2.	Annonaceae	<i>Cananga odorata</i>	Kenanga
3.	Annonaceae	<i>Cyathocalyx sumatranus</i>	Bau Langit
4.	Dilleniaceae	<i>Dillenia excelsa</i>	Sempur ungu
5.	Dipterocarpaceae	<i>Dipterocarpus sp.</i>	Keruing
6.	Dipterocarpaceae	<i>Lophopetalum javanicum</i>	Meranti petimah
7.	<u>Euphorbiaceae</u>	<i>Mallotus sphaerocarpus</i>	Rumpirawan
8.	<u>Euphorbiaceae</u>	<i>Macaranga triloba</i>	Tampu tapak-gajah
9.	Euphorbiaceae	<i>Macaranga gigantea</i>	Merkubung
10.	Fagaceae	<i>Lithocarpus meijeri</i>	Soepadmo
11.	Lamiaceae	<i>Vitex pinnata</i>	Leban
12.	Lauraceae	<i>Litsea sp.</i>	Medang telur
13.	Lythraceae	<i>Lagerstroemia speciosa</i>	Bungur
14.	<u>Meliaceae</u>	<i>Aglai korthalsii</i>	<u>Setur padi</u>
15.	Moraceae	<i>Streblus elongatus</i>	Damli
16.	Myrtaceae	<i>Syzigium spp.</i>	Kayu jambu
17.	Myrtaceae	<i>Eugenia clavimyrus</i>	Semantok
18.	Rutaceae	<i>Clausena engleri</i>	<u>Jerik batu</u>
19.	Sterculiaceae	<i>Sterculia sp.</i>	Bulu ayam
20.	Violaceae	<i>Renorea sclerocarpa</i>	Aging

Deforested forests cause damage to vegetation thus leading to changes in orangutan behavior and welfare. Deforestation tends to the loss of large trees, the main source of canopy cover. The loss of this source can affect orangutans' feeding, resting, and roaming behavior. A study by Rao and van Schaik (1997) showed that orangutans are more folivorous and roaming more in areas that have experienced deforestation.

Other studies have shown that orangutans require more resting time in deforested areas. Increased sun exposure due to low canopy cover forces orangutans to regulate body temperature and avoid overheating (Pollard et al., 2008). Meanwhile, orangutans have a maximum amount of time reserved for forced rest, beyond which they cannot survive, and this amount of time ranges from 30-40% (Korstjens et al., 2010).

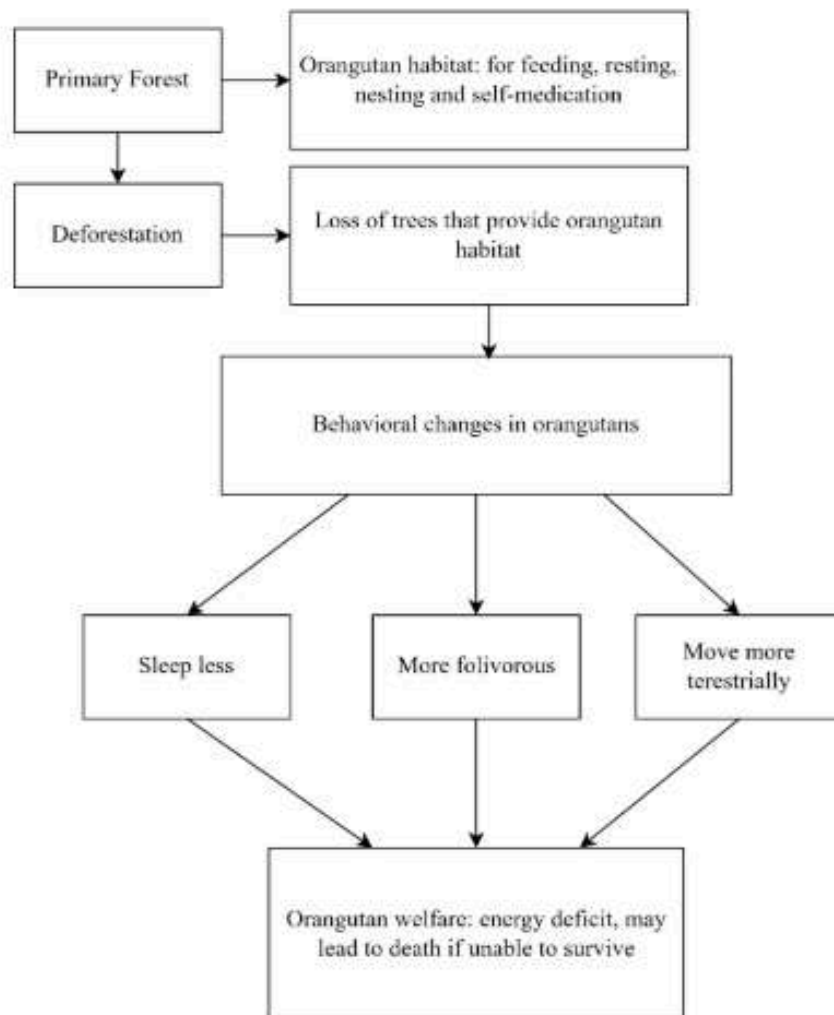


Fig. 2 Causal Effect Relationship of Deforestation on Orangutans

Orangutans are a group of primates whose diet consists mainly of fruit (frugivorous). Consequently, Orangutans require a certain amount of fruit in their diet and will struggle to survive if the amount of fruit consumed is less than 40% of their diet. The loss of most vegetation due to deforestation means that orangutans must adapt their diet to obtain food from existing vegetation (Carne et al., 2015). In deforested areas, there are fewer large trees as food sources (Felton et al., 2003), so orangutans become more folivorous compared to primary forests (Rao and van Schaik, 1997). Limited resources such as food availability, not only affected orangutan feeding behavior but also physiologically.

Female orangutans may delay reproduction due to low nutrition. Meanwhile, the critically endangered status of orangutans poses a significant challenge to efforts aimed at increasing their population in the wild (Sayektiningsih & Ma'ruf, 2017). For these reasons, restoring degraded habitats and protecting forest areas is essential to ensure sufficient and varied food resources for orangutan welfare. The loss of trees and habitat degradation will also likely induce significant alterations in orangutan movement patterns. Orangutans are arboreal animals that spend most of their time in canopy trees (Manduell et al., 2011, 2012). Under normal conditions orangutans tend to move arboreally through large trees, hence under deforestation conditions orangutans tend to move terrestrially. Which requires more time to find food and resting places and leads to a deficit of energy (Widyastuti et al., 2022). This has been seen in orangutans in northeast Borneo, which have adopted more terrestrial behaviors in recently logged areas (Loken et al., 2015). This can affect orangutans' resting time by requiring them to move and expend more energy (Hardus et al., 2012). Habitat destruction causes orangutan populations to migrate terrestrially to neighboring forests that are less disturbed, challenging orangutans to maintain a healthy energy balance, and if this migration is not possible, it can lead to population declines due to mortality (Ancrenaz et al., 2014; Husson et al., 2015; Ashbury et al., 2022).

Deforested forests showed increased stress due to the noise of heavy human equipment and the limited availability of trees for nesting and food. This indicates that differences in habitat structure due to deforestation affect orangutan behavior, ranging from diet, nesting sites, movement patterns, and effects on energy balance (energy intake and expenditure); a combination of lower energy inputs and higher energy outputs will result in a negative energy balance. (Knott, 1998; Thorpe et al., 2007; Hardus et al., 2012). This can lead to a decline in the orangutan population due to starvation, disease, or migration.

The population of species in wildlife, including orangutans, can be saved with conservation that sustains the natural environment while meeting human needs. The welfare efforts should focus on stopping humans from causing major threats to the natural environment, including forests (Paquet & Darimont, 2010). To minimize deforestation in the forest, preventive measures are needed. The basic thing that could reduce deforestation is through environmental education. Environmental education is a learning process to increase people's knowledge and awareness about the environment around them and how challenges exist (Bodo et al, 2021). Most human-made environmental damage is caused by ignorance of the consequences of such behavior. Understanding the ecosystem and its functions can help in the conservation and preservation of the environment (Bodo et al., 2018). Other steps that can be taken are (1) forest conservation and protection, (2) selective logging, and (3) community involvement in forest planning, management, and monitoring.

Forest protection is a long-term strategy to preserve forests for orangutan conservation (Wilson et al., 2014). Forest conservation can be achieved by improving and strengthening the understanding of forestry and environment-related laws drafted by the government (Arba et al., 2023). Well-managed selective logging techniques that do not destroy forests dominated by low-canopy group vegetation can allow orangutans to survive (Singleton et al., 2004). Maintaining logged forest areas is one way to conserve orangutans (Chapman et al., 2000; Husson et al., 2009).

Community forest management programs are an emerging strategy in developing countries, where various policies and projects are implemented to conserve forest resources (Resosudarmo et al., 2014; Rasolofson et al., 2015, 2016). One of the legal permissions for the management of forest areas in Indonesia is the social forestry program (Program Perhutanan Nasional) (Arba et al., 2023). One of the forest management programs in social forestry is the Hutan Desa (HD) or Village Forest. Hutan Desa aims to improve the social welfare and forest use rights of the community through communal forest use permits through the authority of the village head after obtaining permission from the government, and management rights are given to village institutions (Arba et al., 2023; Myres & Ardiansyah, 2014). A study showed that HD management was successful in minimizing forest deforestation in Sumatra and Kalimantan (Santika, 2017).

Conclusion

In conclusion, three species of orangutan are found in Indonesia, such as the Borneo orangutan (*Pongo pygmaeus*), the Sumatran orangutan (*Pongo abelii*), and the Tapanuli orangutan (*Pongo tapanuliensis*). All three species of orangutans are endemic to their respective locations and are classified as Critically Endangered (CR) according to the IUCN Red List of Threatened Species. The main contributing factor to the decline of the orangutan population is deforestation, as orangutans depend on the availability of food and nesting plants in the forest to sustain their daily activities. Orangutans typically consume fruits from a range of plant families that serve as food sources, including Anacardiaceae, Clusiaceae, Euphorbiaceae, Malvaceae, Myrtaceae, and the majority of Moraceae. Consequently, it is imperative to safeguard orangutan habitats through the implementation of regulations by the government, ensuring the welfare of orangutans and their continued growth.

Conflict of Interest

We certify that there is no conflict of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the manuscript.

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The Correlation of Moral Metaphors with Students' Decision-Making Ability about Human Ethics on Animals

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Abstract

Moral metaphors, as powerful cognitive tools, play an important role in shaping our understanding of morality. This study aims to reveal the relationship between the use of moral metaphors and high school students' decision-making skills in the context of human ethics towards animals. Through a quantitative approach, this study involved 82 high school students as participants. Data were collected through a moral metaphor survey and a decision-making skill test involving human-animal interactions. Data analysis was conducted to identify the pattern of relationship between the types of moral metaphors used and the decision choices made by students. The results showed a significant correlation between the types of moral metaphors students used and their decision-making skills related to animal ethics. Students who more frequently used moral metaphors that focused on social and emotional relationships tended to make more ethical decisions towards animals. In contrast, students who more frequently used moral metaphors focused on laws and rules tended to make decisions that were less considerate of animal welfare. These findings indicate that moral metaphors are not just a communication tool, but also reflect individuals' moral frameworks that can influence their behavior. The implication of this study is that effective moral education needs to pay attention to the use of moral metaphors. By understanding how moral metaphors influence decision-making, educators can design more effective lessons to develop students' understanding of animal ethics. In addition, this study also opens up opportunities for further research on the role of moral metaphors in various other moral contexts.

Keywords: moral metaphors, decision-making, animal ethics, high school students, moral education

Introduction

Along with current technology and scientific advances, the development of education has also shown positive progress. However, this progress is not in line with the moral development of students (Fahdini et al., 2021). Especially moral ethics towards animals. This is a concern for educators to help their students to be able to care for animals in the environment where they live. In this endeavor, proper observation, research and teaching are needed. Through socioscientific issues, we can see how students' perspectives on issues such as evolution, genetic engineering, and conservation of animals.

Cases of animal neglect often occur in the surrounding environment, such as neglect of newborn pets, animal abuse, and even animal abuse is often used as content on social media (Kornelis, 2023). This is proof that animal welfare issues in Indonesia still experience many obstacles, for example in the fields of research and education, the lack of supervision of research institutions, inappropriate competencies in handling research animals, and the lack of funds to support animal welfare (Wahyuwardani et al., 2020).

The bioethics principles that need to be considered to support animal welfare include 3R and 5F. The 3R and 5F principles of replacement, reduction, refinement are Replacing the use of animals with alternative techniques, or avoiding the use of animals altogether; Reducing the number of animals used to a minimum, to obtain information from fewer animals or more information from the same number of animals; Improving the way experiments are designed and conducted, to ensure animals suffer as little as possible; this includes better housing and improved procedures to minimize pain and suffering and/or improve animal welfare (Mancini & Nannoni, 2022). While the 5Fs are freedom from hunger, malnutrition and thirst; freedom from fear and distress; freedom from discomfort; freedom from pain, injury and disease; and freedom to express normal patterns of behavior (Kornelis, 2023; Labibah et al., 2021; Mayasari et al., 2021), 2021; Mayasari et al., 2023; Mutiarahmi et al., 2021; Nasution, 2022; Government of Indonesia, 2012; Wahyuwardani et al., 2020). Meanwhile, the need for practicum-based learning is also important to be implemented with the aim of observing the internal organs and internal structures of test animals, demonstrating physiological processes to students and developing students' practical skills through practical activities (Komarova & Kiv, 2020). Schools have the responsibility to improve the ability to think in determining a decision that is in accordance with ethics and the morals (Minarno, 2012). In order to achieve this goal, teachers or educators are tasked with teaching bioethics principles to their students to achieve animal welfare, especially laboratory animals.

Teachers are able to instill these principles by instilling appropriate moral metaphors to their students. Moral metaphor is defined as the use of non-literal or non-factual language to describe a moral concept, for example "animals are our property", this means placing humans above animals so that humans can use animals for their own benefit. People who supervise students who are practicing in research should ensure that students are fully instructed before using animals and should be responsible for the ethics and welfare of animals used by students (Naderi et al., 2012). Meanwhile, the need for practicum-based learning is also important to be implemented with the aim of observing the internal organs and internal structures of test animals, demonstrating physiological processes to students and developing students' practical skills through practical activities (Komarova & Kiv, 2020). Schools have the responsibility to improve the ability to think in determining a decision that is in accordance with ethics and the morals (Minarno, 2012). To achieve this goal, teachers or educators are tasked with teaching bioethics principles to their students to achieve animal welfare, especially in the field of testing animals.

According to Hudha, (2015) there are still many people who do not understand the knowledge of bioethics, so the ability to make decisions about ethics related to animals is still low. This is reinforced by Hartono (in Maulana & Rochintaniawati, 2021) who explains that science learning, especially biology in general, is still limited to verbal reasoning, logical thinking, listening to teacher explanations, taking notes and doing assignments given by the teacher. In addition, Ike & Anderson's (2018) research also illustrates the importance of learning bioethics for adolescents, about how the conditions of adolescents must be equipped to be able to blend in with society and have good decision-making skills in various fields such as education, politics, ethical behavior and many others. Furthermore, high school students are considered the most suitable for learning bioethics because they are at the same cognitive, emotional, and physical development. So further research is needed to find the right bioethics-content biology learning model to improve biology students' knowledge of bioethics and their ethical decision-making skills (Hudha, 2015).

Previous research on this topic has been conducted in Bavaria, Germany in 2022 with the title Student's conception about animal ethics: The benefit of moral metaphors for fostering decision-making competence involving twenty-two children with an age range of eleven to fifteen years. The study focused on moral ethics towards animals. Through moral metaphors, it helps students make ethical decisions towards animals in their environment such as behavior towards pets, animals in zoos, and farm animals. In addition, the study also categorized moral metaphors into five types, namely ruler metaphors, freedom metaphors, empathy metaphors, accounting metaphors and moral purity metaphors.

Materials and Methods

This research is a correlational research. In this study, the independent variable is the use of students' moral metaphors, while the dependent variable is students' decision-making skills. This study was conducted on 82 students in one of the private high schools in Bandung. There was no treatment in this study, students were asked to fill out a questionnaire which aims to measure students' moral metaphors. After students fill out the questionnaire, they will then fill out a test that is used to measure students' decision-making skills about human ethics in animals. The data was analyzed by examining the correlation between students' moral metaphors and decision-making skills. However, before conducting the correlation test, there are several prerequisite tests carried out including the Kolmogorov-Smirnov normality test and the linearity test. In this study, the data were not normally distributed and not linear, so a non-parametric correlation test was carried out.

Results and Discussion

Tramowsky (2022) in his research states that moral metaphor is the use of language that is not literal or that is not the actual meaning to describe moral concepts where it is able to become a link between the source domain and the target domain. Metaphors are expected to make it easier for students to accept learning, particularly abstract materials. Metaphors play a role in making decisions about ideas such as morals, care, and social decisions (Lee & Schwarz, 2013). Moral metaphors help simplify the choices available in complex information with a pre-existing moral framework. Metaphors influence people's reasoning by structuring knowledge that is consistent within a particular framework, and making it a structurally consistent conclusion (Thibodeau & Boroditsky, 2011).

Research on moral metaphors is usually done in a qualitative way of analyzing and classifying the moral metaphors used. However, this study tries to use a different approach by exploring the assessment of moral metaphors simply by adapting the questions asked in previous studies. Next, the moral metaphor data can be seen in table 1 below

Table 1. Recapitulation of Students' Moral Metaphor Percentage Score and Decision-Making Ability on Human Ethics in Animals

Description	Students' moral metaphors	Decision-Making Ability
Number of students (N)	82	82
Average of scores (%)	74,7	59,6
Maximum score (%)	100	100
Highest score (%)	93,7	87,5
Lowest score (%)	65	20

The average score of students' moral metaphors about human ethics in animals is 74.7, while the average score for students' decision-making ability is 59.6. Based on this moral metaphor score is included in the good category. However, the decision-making ability score is still in the poor category. Based on observations in the field, this is thought to occur because practicum learning has not integrated bioethical knowledge in students. In addition, students have not been introduced to socio-science issues related to human ethics in animals, so that decision making regarding test animals is new to students.

Furthermore, the data on students' moral metaphors are projected in Figure 1, which has been adjusted to the number of categories of moral metaphor survey scores.

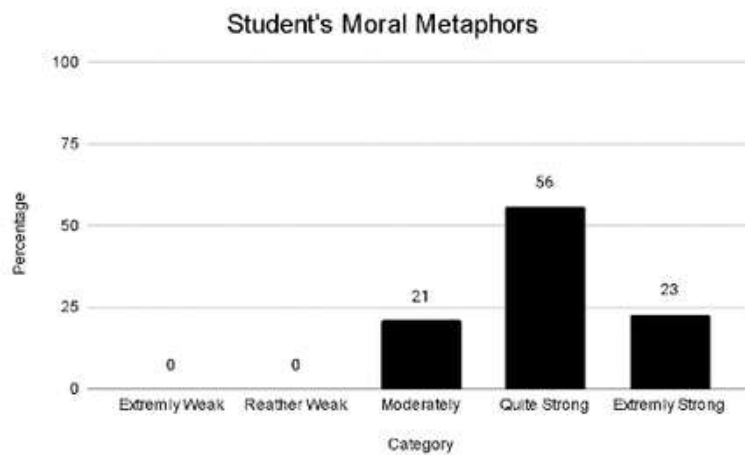


Fig. 1 Percentage of students in each moral metaphor category

Based on Figure 1, 56% of respondents have a good level of knowledge in understanding moral metaphors, especially about human ethics in animals, 21% have a moderate level of knowledge and even 23% have a very good level of knowledge about human ethics in animals. In addition, there are no respondents who have a weak or very weak level of knowledge.

Although the knowledge of human ethics towards animals is not explicitly included in the curriculum, the lessons implicitly explain how a good attitude should be applied to the environment, which includes how to be kind to animals. Basically, teenagers begin to understand good and bad things. Based on the observations of researchers in the field, high school students in grade XI MIPA already understand the concept of morals as behavior, habits, character, and character. In addition, students in grade XI MIPA also learn biology through practicum so that they have experience interacting with test animals. This is what causes the moral metaphors of students in grade XI MIPA in private high schools in Bandung to have a good understanding. In accordance with what is stated by Lakoff and Johnshon in (Landau, 2018; Tramowsky et al., 2022; Tramowsky & Groß, 2018) which states that moral metaphors as targets will be formed through concrete sources, one of which is experience.

The use of moral metaphors is able to describe the relationship between humans-animals grouped into five types, namely the ruler metaphor (Ruler metaphor), freedom metaphor (Freedom metaphor), empathy metaphor (Emphaty metaphor), accounting metaphor (Accountant metaphor) and moral purity metaphor (Be-good metaphor) (Tramowsky et al., 2022). The following is the total percentage of students' use of moral metaphors

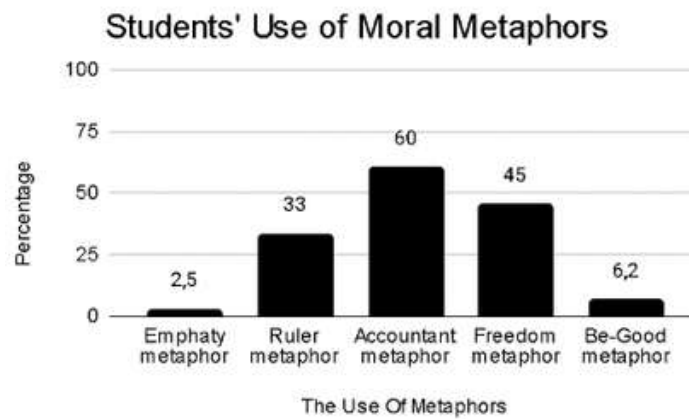


Fig. 2 Students' use of moral metaphors

The highest use of metaphor is accounting metaphor, which reaches 60%, then in order, freedom metaphor, ruler metaphor, moral purity metaphor and empathy metaphor 45%, 33%, 6.2% and 2.5%. Students who choose the use of accounting metaphors tend to pay more attention to justice and animal welfare. Students who choose the use of freedom metaphors think that animals have the right to be free, while students who choose ruler metaphors tend to think that animals have a low position. (Tramowsky & Groß, 2018). Empathy metaphors, have high attention and care for animals (Tramowsky et al., 2022). Based on observations and survey results, students who have the concept of empathy metaphors often interact with animals. This is in accordance with research on educational, moral metaphors conducted by (Tramowsky et al., 2022; Tramowsky & Groß, 2018). In addition, the relationship between test animals and humans also often changes from “research subjects” to “pets” due to the nature of empathy which results in a psychological burden for researchers (Herzog, 2002).

Decision making is crucial because it is done every day to help solve problems. The process of selecting various alternatives to find the best solution in small matters involves cognitive roles (Skagerlund et al., 2022). The following is survey data on the decision-making ability of high school students in class XI MIPA in private high schools in Bandung.



Fig. 3 Percentage of the number of students in each category of students' decision-making ability

The acquisition of this percentage is based on several indicators. The decision-making indicators used in this study are (a) Resistance to Framing (b) Resistance to Sunk Costs (c) Consistency in Risk Perception (d) Applying Decision Rules (e) Under/overconfidence (f) Recognizing Social Norms (Fischhoff, B. & Parker, 2005; Parker et al., 2018; Weller et al., 2021). In this study, students' decision-making ability about human ethics in animals is still weak, this is because on several indicators there are still students who have low scores such as on the indicators 1. Resistance to Framing, 2. Resistance to Sunk Costs and 3. Recognizing Social Norms. According to (De Bruin et al., 2007; Ghazal et al., 2018) the six indicators to measure decision-making ability are positively related to each other so that if one of the other indicators is weak it will affect other indicators.

In addition to the indicators described in this study, it shows that the decision-making ability of girls is more influenced by empathy for the test animals. This is reinforced by (Maulana & Rochintaniawati, 2021) which states that there are differences in decision-making skills between men and women. This difference can be influenced by different behaviors and mindsets between male and female students. In general, women have a tendency to be more anxious and hesitant in making decisions, while men generally have more goal-focused and rational thinking, they tend to analyze information thoroughly and consider various aspects before making decisions. Biologically, the difference in decision-making between men and women lies in the logic organized in the limbic network. The limbic has a part called Amygdala that regulates human emotions and feelings. So, it can be concluded that the limbic system in women is more active when making decisions than men (Arini Dina Ismiati et al., 2024).

There are things that can affect the student's decision-making process both externally and internally. According to (De Bruin et al., 2007), there are at least four factors that can affect a person's decision-making ability. These are:

a. Decision-making ability which includes resistance to framing, resistance to sunk costs, consistency in risk perception, applying decision rules, under/overconfidence and recognizing social norms. Parker and Fischhoff in (De Bruin et al., 2007) state that there is a positive correlation between six tasks for measuring decision making.

b. Demographic characteristics such as social status and age, adolescents who have economic difficulties show low ability in four decision-making tasks including consistency in risk perception, applying decision rules, under/overconfidence and recognizing social norms (De Bruin et al., 2007). Age can also affect how a person makes decisions, for example, in adolescence, they feel less confident when making decisions because the nature of adolescents in general is still unstable. With the ability to apply decision rules, adolescents and early adults have better abilities when compared to late adults. This is possible because the ability to apply decision rules requires cognitive abilities and requires higher intelligence, where cognitive abilities decrease as a person ages (Bruine de Bruin et al., 2020).

c. Everyone's cognitive abilities and decision-making style are different. Cognitive abilities that affect decision making include overconfidence and numeracy that correlate with past cost savings, resistance to sunk costs. Meanwhile, according to Suparno, 2018 in (Lande et al., 2022) suggests several decision-making styles as follows: Directive decision-making style, a decision maker with this style makes decisions by directing or giving instructions. Furthermore, analytical decision-making style, a decision maker with an analytical style will use the basis of analysis of an event that actually occurs. Conceptual decision-making style, namely people who make decisions that use the basis of certain concepts of the reality that occurs. And Behavioral decision-making style, a person with a behavioral decision-making style is a decision maker who uses the basis of analysis of the behavior of the people around him.

d. External events, some external events can influence decision making, including the educational background that has been taken, social environment and personal experience. For example, adolescents who come from a good environment have cognitive abilities that support better decision-making abilities than adolescents who have experienced punishment at school.

According to (Rahmawati, 2019), there are many factors that can impact someone's decision-making ability.

- External factors include one's position, the problems and situations being faced, and the influence of other groups.
- Internal factors include: personality and character and experience in making decisions.

After conducting the Spearman 'rho correlation test, the significance obtained is less than α ($0.00 < 0.05$), so the correlation found in this study is significant, with a significance level of 95%. The correlation coefficient obtained is 0.447. The correlation coefficient shows the level of relationship between the moral metaphor variable and the student decision-making ability variable. From the interpretation of the correlation coefficient, the level of relationship with the coefficient of 0.447 is included in the medium correlation category with a positive correlation direction (Subandriyo, 2020). The positive relationship means that it has a directly proportional relationship. These results indicate that the higher the student's moral metaphor, the higher the decision-making ability. Especially about human ethics in test animals. This is in accordance with research conducted by (Tramowsky et al., 2022) which states that the relationship between humans and animals is facilitated by moral metaphors conceptualized in students' knowledge.

Conclusion

Based on the data in this article, it can be stated that there is a relationship between students' moral metaphors and high school students' decision-making ability about human ethics in animals with a positive relationship and moderate correlation. The use of students' moral metaphors about human ethics in animals in order from highest to lowest accounting metaphors, freedom metaphors, ruler metaphors, moral purity metaphors, empathy metaphors. The average score of students' moral metaphors is 74.7, including good and the average score of students' decision-making ability is 59.6, including weak.

There is a positive relationship between moral metaphors and students' decision-making ability with a correlation coefficient of 0.447. This figure shows the strength of the medium correlation. With this, it can be explained that the higher the student's moral metaphor about human ethics in animals, the more it can support the student's decision-making ability about human ethics in animals.

Conflict of Interest

We certify that there is no conflict of interest with any financial, personal, or other relationships with other people or organization related to the material discussed in the manuscript.

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IMPLEMENTATION OF FARMED ANIMAL WELFARE STANDARDS AND ITS IMPACT ON ENVIRONMENTAL AND PUBLIC HEALTH IN BALI - INDONESIA

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Abstract

The pain and stress endured by pigs, chickens, and freshwater fishes raised for their meat and eggs have increased scrutiny on food producers and retailers. This scrutiny is challenging and may be difficult for some to accept. Lack of understanding of good animal welfare standards and fear of additional production costs involved in implementing better farming practices deter farmers from doing the right thing. This study evaluates the implementation of animal welfare standards on layer, pig, fish, and broiler farms in Bali and its impact on public health and the environment. The findings show that the implementation of animal welfare standards is far from optimal, resulting in negative impacts on animal and human health. Improper use of antibiotics in farmed animals increases the risk of antibiotic resistance in humans. Additionally, poor waste management risks causing water and environmental pollution, potentially damaging ecosystems and public health. This study was conducted to assess the standard of animal welfare practices in animal agriculture in Bali, Indonesia. The objectives were achieved through a survey of 204 farming sites across nine districts with respondents selected by purposive sampling. Data were collected based on certain considerations, including 54 pig farms, 48 broiler farms, 48-layer farms, and 54 freshwater fish farms consisting of catfish, tilapia, and pomfret. The evaluation of animal welfare implementation in Bali identified that, in addition to inadequate capacity-building training for farmers, inappropriate use of antibiotics, absence of waste management sites, and poor legal compliance in obtaining permits related to farming activities, farms were lacking in animal welfare. This research emphasizes the importance of raising awareness and implementing better animal husbandry practices and strict supervision to ensure animal welfare, public health, and environmental sustainability.

Keywords: Farmed animal welfare, public health, waste management, antimicrobial resistance, environmental sustainability

Biography of presenting author

Fiolita Berandhini earned her MA in 2024 after completing her studies in Animal Protection Law at The National Academy of Legal Studies and Research (NALSAR) University of Law in Hyderabad, India. She founded Animals Don't Speak Human (ADSH) and serves as its director. She joined the Indonesian Bar Association PERADI in 2019 and practices law for Berandhini & Partners. She worked with a number of Bali law firms, interned at KONTRAS (Commission for the Disappear and Victims of Violence), worked as a Dolphin Campaigner at Jakarta Animal Aid Network, and actively supported multiple environmental campaigns at Greenpeace Indonesia prior to founding ADSH.

Veterinary Cooperative Care on Belgian Malinois Dogs

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Abstract

Veterinary examination, handling, and treatment may trigger stress in dogs. Stress influences white blood cells in the body. A stress aggressive/anxious/fearful-dog may bite during veterinary procedures. Therefore, minimizing dog stress on veterinary visit is crucial for both dogs and veterinarians' team. The purpose of this study is to minimize stress in dog during veterinary procedure. Two female Belgian Malinois dogs were conditioned for subcutaneous injection. Dogs were trained with cues such as "sit", and "stay" to held position for 3 minutes. The site of injection was sterilized with alcohol swab. Three ml sodium chloride solution was given to the dog by subcutaneous injection. The reward after subcutaneous injection was a ball or boiled chicken meat. The reward was chosen based on dogs' personal preference for the reward (ball drive or food drive). The dog responses during and after subcutaneous injection were observed. Then the dogs' behaviors were analyzed descriptively. One of the dog showed focused on the reward and the other dog showed focused on the handler during subcutaneous injection. There were no tense posture and no aggression during subcutaneous injection. Desensitization and conditioning/training helped to minimize dog stress during veterinary procedures. Dog training had many benefits. In the long run, owners who had trained dog would had no intention to abandon their animal. In addition, dog welfare and human-dog bond will improve with dog training.

Keywords: dog welfare, Belgian Malinois, conditioning, dog training, subcutaneous injection

Introduction

Veterinary clinics are a source of stress for most dogs [9,13]. Dogs' physiological and behavioral stress response acutely raised during veterinary examination [5]. Veterinary examination and unfamiliar situations are two of many factors that trigger dogs' fear during veterinary consultations [6]. Dogs can display fear and then lead to fear-aggression bites on veterinary procedures [19]. Therefore veterinary, veterinary nurse or even the dog's owner have risk of getting bitten while examining, handling, and treating dogs.

Stress in dogs can influence physiological and immunological response. Neutrophil, lysozyme and fecal cortisol will decrease, while lymphocytes will increase when acute stress occurs [16]. Prolonged stress in dogs will increase leucocytes, neutrophil granulocytes and decrease lymphocytes and also neutrophil granulocytes [11].

Research on working dogs as subjects is less than pet or companion dog research or study [6, 20]. As a working breed, Belgian Malinois or Belgian Shepherd dog breed is on the 6th list of dog breed that has potential serious bite risk from veterinarians' perception in the United States [10]. While in Indonesia there was an incident a Belgian Malinois dog breed killed a domestic household in the year 2019. This study aims to conditioning Belgian Malinois dog breed during subcutaneous injection. Therefore the dog will feel less stress and be more cooperative on veterinary procedures. Indirectly, the conditioning training will improve animal welfare and minimize the risk of dog bite during veterinary procedures.

Material and Method

Subject and study site

Two year old female Belgian Malinois dogs were chosen as subjects of this study. Both dogs were born in Indonesia. Dog 1 was 21,3 kg while Dog 2 (KNPV-bloodline) was 23,2 kg. Dog husbandry and training were conducted with animal welfare consideration. Dogs' medical examinations were conducted twice in a year (every six months). Dogs were fed with commercial Mera Dog® Agility twice a day based on their body weight (2-3% of their body weight) and exercise. Dogs got potty break 4 - 7 times a day and dogs walk 30 minutes twice a day. This study was conducted on Security Group Artha Graha K9-Unit at Puncak, Bogor.

Dog Training and Conditioning

Dog 1 was trained (obedience training) in Security Group Artha Kennel. Dog 2 was boarded on obedient training at Alex Vonwater dog trainer (Tangerang) from 4 to 9 months years old. Both dogs were trained with cues "sit" and "stay". During "stay" cues dogs must contract their muscles and hold their position for 30 seconds to 45 seconds. After the dog holds their position then the dog will be given a cue or marker "Good!!" or "Ya!!" then rewarded with ball or boiled chicken meat (positive reinforcement). Dog 1 preferred a ball (Picture 1) while Dog 2 preferred boiled chicken meat (Picture 2) as reward.



Picture 1. Ball as reward for Dog 1



Picture 2. Boiled chicken meat as reward for Dog 2

Dog 1 was trained to “stay” and focused on the reward. Dog 2 was trained to “stay” and focused on the handler eye. When the dog held their position on “stay” cue, the dog's subcutaneous injection site was pulled gently two-three times then the dog was rewarded (Picture 3). After the dog got used to the touch on the subcutaneous injection site, an alcohol swab was given on the injection site during “stay” cue, then the dog was rewarded. For the last phase of training, the dog was given fake needle injection after alcohol swab during “stay” cue (Figure 4). After the fake needle injection, the handler gave another marker/cue “good!” or “ya!” before rewarding the dog.



Picture 3. Dog 1 site of subcutaneous injection was gently pulled during “stay” cue



Picture 4. Fake needle injection was given to Dog 1 during “stay” cue

Subcutaneous injection

Three ml sodium chloride was inserted to 3 ml syringe. The dog was given alcohol swab during “stay” cue. Then the dog's skin was gently pulled for subcutaneous injection. Then subcutaneous injection was given by the veterinarian. From the alcohol swab to subcutaneous injection was conducted under 30 seconds. Only when the dog held its position without breaking its focus, then the dogs would get reward. After the subcutaneous injection was conducted, both dogs got to play or engage with its handler for 45 seconds.



Picture 5. Three ml sodium chloride for subcutaneous injection

Behaviour observation

Dog behaviour and training for cooperative carer were recorded with camera mobile phone. Dog behaviour (Table 1) was analysed during and after subcutaneous injection through video. Any stress sign from dog's body language (lip licking/yawning/tense posture) or avoidance or aggressive behaviour to the needle/syringe/veterinarian as negative "stimuli" was analysed descriptively.

Table 1. Dog's behaviour ethogram was adapted from [1] and [3].

Table 1. Dog's behaviour ethogram was adapted from [1] and [3].

Behaviour		Description
Ear position	Ear pinned	Ears pulled back from normal position
	Ear relaxed	Ears held in normal position
	Ear erected	Ears pointed upward and forward
Tail position	Tail tucked	Tail between the hind legs or held tight between the hind body
	Tail still	Tail is held still without any movement
	Wag vigorously	Tail is moved at fast rate
	Wag slowly	Tail is moved at slow rate

Table 1 (continued). Dog's behaviour ethogram was adapted from [1] and [3].

	Behaviour	Description
Other behaviour	Yawn	Widely opening mouth <u>accompany</u> with vocal sound
	Lip licking	Moving up the <u>tounge</u> to the upper lip
	Sniff	Trying to smell in the air/stranger/surrounding
	Body shake	Rapid movement to move the fur coat along body
Vocalization	Bark	A short lasting loud noise from the dog mouth
	Whine	Low pitched whimpering or howling
	Growl bark	Buzzing sound coming from dog throat
No Reaction	No Reaction	Not reacting to the stranger or the changes happening in the surrounding (the stressor did not cause any difference to dog's emotional state)

Result and discussion

Dog 1 and Dog 2 could perform obedience “stay” cues and held their position for 45 seconds before they got a reward. Both dogs showed erect ears, tail still, and focused on its reward. Dog 1 focused on the ball (Picture 6) while Dog 2 focused on the handler (Picture 7) during the subcutaneous injection. There was no reaction from both dogs during alcohol swab, slowly pinching the dog’s skin for subcutaneous injection, and 3 ml sodium chloride subcutaneous injection. Based on this dogs’ behaviour observation during subcutaneous injection in this study, both dogs did not feel stress during injection. Both dogs could endure the pain from needle injection while focusing on the reward after the subcutaneous injection procedure. After subcutaneous injection, both dogs showed engagement to its handler.



Picture 6. Dog focused on the ball reward during subcutaneous injection



Picture 7. Dog 2 focused on the handler during subcutaneous injection

There was no lip licking, yawning, tense posture and no vocalization behaviour observed during and after subcutaneous injection. Both dogs also would interact with the handler after injection. Dog 1 showed playfulness (tail-wag slowly) towards handler and the veterinarian (Picture 8), while Dog 2 performed obedience training with motivation (Picture 9) after the subcutaneous injection. Based on literature study, tongue out, snout lick, paw lift, and body shake are dogs' behaviour indication of stress [1, 18]. These behaviours are accompanied by increasing heart rate and salivary cortisol [1]. Other study [3] finds that the tail still is a sign of relaxed dogs. While an ear erected is a sign of a focused dog.



Picture 8. Dog 1 wagged its tail slowly and would interact with the handler and veterinarian after subcutaneous injection.



Picture 9. Dog 2 performed obedient training with high motivation and relaxed posture after subcutaneous injection.

There was no aggressive behaviour towards humans in this study. Dog 1 showed friendliness towards humans. Based on [17], female dogs tend to show less aggressive behavior to other species than male dogs. Female dogs show aggressive behaviour during defending its offspring. Female dogs also show more friendliness towards other species than male dogs.

This study was conducted on K9-Unit Security Group Artha (K9-Unit SGA) Kennel at Puncak, Bogor. These dogs were not transported to any veterinary clinic. These Dogs experienced training, conditioning and subcutaneous injection on its environment. It might be one of the reason for both dogs did not feel stress during subcutaneous injection.

This study found that Belgian Malinois dog could be trained or conditioned for veterinary procedures purpose. With this dog-training or dog-conditioning for cooperative care, the dogs felt less stress and reduced dog anxiousness/aggression toward the veterinary team. Based on other literature, dogs from working breed, show-lined breed, and dog for breeding bloodline shows less fear than companion/pet dog during veterinary examination and unfamiliar place or situation [6].

Cooperative care is a training protocol that provides some measure of predictability and clarity which can reduce stress from handling [8]. Other cooperative care training has been studied by [15] on working breed dog/canine athlete. Her study used positive reinforcement training method on the dog so the dog will voluntarily perform head dunk for exercise-related cooling or ocular/nasal flush. Training or conditioning for blood collection in other animals such as lion [2], minipigs [7], chicken [12] and tiger [14] have been conducted. Since the stress is reduced during blood collection, haematology analysis will be more accurate.

The practical applications of cooperative care have additional effects on overall wellness and also reduce the chances of aggressive behavior that may lead to human injury [8]. Furthermore, dog training or conditioning for veterinary cooperative care will contribute to dogs' welfare. The dog will feel less stress during veterinary examination. (1) Freedom from fear and distress and also (2) Freedom from pain, injury, and disease (Five Freedoms Animal Welfare) will be fulfilled with veterinary cooperative care.

Understanding dog or canine behaviour will improve human-dog relation and prevent unwanted behaviours that often lead to abandonment [3]. Dog training and conditioning often lead to great human-dog bond or relation. This study emphasizes the benefit of dog training or conditioning to minimize dog relinquish to shelter. In addition, dog training and conditioning not only works for Belgian Malinois dog breed. Pet dog and mixed breed dog can also be trained to improve human-dog relationship.

CONCLUSION

Cooperative care with positive reinforcement training on Belgian Malinois dog breed could be conducted. Subcutaneous injection during veterinary treatment did not make Belgian Malinois dog aggressive or stress with cooperative care. Dog welfare could improve with dog training or conditioning.

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Cultural Relevant Approach: Exploring Speciesism and Animal Advocacy in Sundanese Culture

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Abstract

This article examines the cultural and local approaches in Indonesia in relation to animal advocacy, specifically Sundanese culture as the 2nd largest race and nearest people that we can reach. With no research found in this topic, we found it crucial for animal advocates to have more dialogue about culture, speciesism and animal advocacy. With thematic analysis in qualitative research with speciesism theory, These analyses revealed that understanding speciesism is crucial to know, on the level of understanding speciesism influences how people will think about other species. Anthropocentric speciesism and pet/companion animal speciesism are there in everyone, even though they may not know the label of these. These two can be lessened with driven empathy dialogue to not harm animals, as kindness is usually involved in anthropocentric ways. These results should be taken narrative when considering how to frame messages as we are still in the early stage of animal movements. Specifically, advocating for animals and taking people involved emotionally may require animal advocates to spend more average time rather than typical street outreach as a tactic to change animal advocacy in a more sustainable way to change people's habits and values over speciesism.

Keywords: Cultural Approach, Speciesism, Animal Advocacy, Empathy, Sundanese Culture

Introduction

Animal Welfare has its own concept in a simple, variety and challenging way for public understanding (Alonso et al., 2020). A lot of people may argue about the willingness to care on a certain level, the understanding of care in public with every species is different. One example is between from what they mean to the human animals. Putting the idea of animals on a different level like one is for food, one is for companionship. Contributing to the idea of speciesism, in 1970 the term was coined by Richard D Ryder in a privately published pamphlet. There are two ways we manifest this idea to animals. First, Exploited for consumption, medical experiment, hunt for entertainment, no basic rights of living. Next, we love and develop a good emotional attachment to our companion animals like dogs, but chicken lives in suffering (factory farms). Some previous research has shown speciesism in two different tendencies: speciesism where people are far superior rather than other creatures (anthropocentric speciesism) and the priority of dogs over other animals (pet speciesism) (Caviola & Capraro, 2020).

Theses point of view leads to people's desire to be superior on inferior, it brings to the influences of animal's live directly from choosing where to donate. choose meat free food, mistreatment, abusive treatment to animals. We feel like everyone can relate to this idea and most of us have the speciesism value

No research has been found in Indonesia on speciesism and cultural aspects; the fact is that Indonesia is a country as the largest archipelago in the world with its own rich culture. We choose Sundanese culture as our base and nearby culture near Jakarta, as the 2nd largest race in Indonesia with 15% contributing to our total population and coming from West Java, Indonesia (Good stats, 2022). By that reason, we found crucial point as animal advocates ourselves to develop such an understanding with we believe people, culture, and behaviour are interconnected values in society as Melville J. Herskovits and Bronislaw Malinowski stated every existence in society has a strong correlation with its culture. This term is often called Cultural-Determinism, people as social creatures have their customs, life philosophy within themselves. Customs associate a set of rules, unwritten rules about how they act and behave with others. Within that, we want to help animal advocates, as per meaning those we try to spread the messages individually and organized wise. We present our article as following:

- To examine the correlation between local and cultural context in advocating for animal advocacy from Sundanese perspective
- To analyse impact understanding of speciesism with their animal use in daily basis
- To explore how local advocates have the effective messages to spread animal justice issues in Indonesia

These main findings will be useful for the improvement of animal advocacy in Indonesia. Animal Advocacy refers to everyone who speaks up for non-human animals in any given scale in our society. The number of community based creature assurance developments has appeared a noteworthy increment in Indonesia (Aji, 2019). As stated in Animal Alliance Asia report, Indonesia animal movement is in the first stage /normal times according to Bill Moyer's Movement Action Plan (MAP). Recent research also found that the top 3 social justice issues are Employment, Health and poverty (Purpose, 2024). Animal issues might appear in Food security priorities issues, which in the 9th out of the 10 scales. Understanding the portion is insignificant for the animals, living in the human-centric making it all logical. Notice that although a slow change in animal movement, the urgency lives through a particular way of the existence of our culture. The criticalness to amplify understanding between cultural and animal advocacy is fundamental, it adds more diversity in animal movement. This is important notes that liberation and empowerment driving changes in diverse background (Kinefuchi, 2024).

We hope to be able to bring more awareness in cultural and different approaches for advocates, publics, students, and people who work in animal organizations. This paper pays particular attention to becoming an effective approach in animal advocacy. Firstly, we have to embrace our identity and adjust it accordingly to speak up for animals, which are designed only for us. Secondly, at the end of the 20th century, it's still a rare concept with concrete definition (Hild & Schweitzer, 2019): thirdly, this paper provides insight for considering some cultures with specific adjustment such as Bataknese, Javanese, Maduranese,etc.

We believe it can redirect your direction about achieving better engagement with the Youth, schools, organization, local people and everyone who cares about animals. Undoubtedly, the final point is that animal movements are made richer, more new advocates, and given more written paper for maximal potential, insight, and growth by contributing the changes for nonhuman animals.

Material and Method

This study conducted with the help of local people in Indonesia, especially people who are Sundanese, has been living long enough in Sundanese areas like West Java. We applied qualitative methodology with semi-structured interviews based on the idea of speciesism. Starting with an online questionnaire shared with people in Sundanese background. Then we conducted an interview with the main focus to explore Sundanese culture, speciesism and animal advocacy. Before the interview, we have given them the survey with video attachment of speciesism by Vegan Outreach. They will then explore with us the idea of speciesism, culture and animal advocacy. We aimed for flexibility and adaptability in semi structured interviews (Ruslin., et al 2022) to explore more in a 30 minutes interview over zoom with a total of 6 people with their permission and willingness to give this information confidentially.

The research comes from a rich variety for the author's background in animal advocacy with each concern for us to have a more cultural approach. From the recording interview, we did thematic analysis to identify patterns and themes within participants' responses related to our research question as a base. Thematic analysis is an amazingly important analytics tool for creating a development basis into a wonder beneath examination or further theory-building (Christou, 2023).

Through this method, the authors pursue to serve as a future reflection for animal advocates in Indonesia to achieve a better world for farmed animals.

Results and Discussion

a. Sundanese Culture

In Sundanese culture, the existence of traditional customs is still heavy and the people are carrying it out at their event. This brings most people or groups, a tradition involving animal scarification. On the other hand, for some people in their rituals or traditions, who elevate themselves to a level of inner conflict and confusion, when one does not want to involve the tradition related to animal use. Specifically talking about those who do not consume animals and therefore animal scarification is a difficult reconsideration. One of our interview stated that:

"Because I am a vegetarian, when my family asked me to consume chicken and step on eggs at my wedding, I refused to do so because I couldn't bear to make such sacrifices to animals."

Besides that, the second interviewee argued Sundanese food apparently does not involve many animal products but more on plant-based food. They stated as following: "I often consume liwet rice in Sundanese restaurants with tempeh, tofu, sambal and vegetables. I have to be careful because there are anchovies in it. However, several Sundanese restaurants provide a variety of plant based options rather than meat-based."

The third interviewee mentioned about the influence of Chinese and Jakarta cuisines in Bogor has led to a blend of culinary practices, but Bandung retains a stronger focus on traditional Sundanese Flavors.

"Some of Traditional food in Bandung are animal-based, but quite a lot is changing within the food towards more plant based. I've tried satay, which is usually made from chicken flesh but replaced with mushrooms, there also buns with a nut filling substitutes."

The conducted interview process with some interviewees with the aim of finding the correlation between local and cultural context in advocating for animal advocacy from Sundanese perspective shows that in some customs, traditions and culture that are related to animal sacrifice can be changed. it extends the moral value of them, the value of nonviolence to other creatures living side by side.

b. Speciesism

Speciesism manifests as discrimination based on species, similar to racism, where certain animals are cherished while others are viewed solely as food. This societal belief is deeply rooted and difficult to challenge. According to our interviewee just after first time listening to speciesism video said that:

"That was speciesism, according to my understanding, speciesism means there is indeed discrimination related to species, so it doesn't apply equality treatment, so it's similar to racism, which based on race, and this case is on species. That's the example, right?? it's like we can really love pets (dogs or cats)."

There is a growing awareness of speciesism, which promotes the idea that all creatures, not just humans, deserve respect and consideration in our dietary choices. The interview opened the idea of inclusivity for all beings. It takes empathy to understand speciesism on a deeper level . According to our next interviewee:

"Every species has their own level of empathy towards all living beings and that's the motivations behind adopting a vegan lifestyle for health and environmental reasons."

In this period of time, many people still don't know about speciesism. Perception regarding certain animals like dogs as pets, others like cows as food. Even further racism applied in classification of animals as farmed animals, wild animals and domesticated animals (pets/companion animals). With this thought, it drives us far from the ideal state where we should have the same right to live. This ingrained belief is difficult to alter, as it has been taught across generations. One of the pattern we observed is:

"Yes, in the end the value grows in us, dogs are meant to be kept, not eaten, then cows are meant to be slaughtered and eaten. this learning point started in our early age and it's not easy to change that, right."

Furthermore, some groups are working to fight this unjust to have no discrimination based on species. The other interview declared that “A hope for future where all species are respected and appreciated equally.” Another statement enriches this idea, “There is a desire to create a campaign that challenges the compartmentalization of species, showing that all living beings are the same.”

The list of those interviewed about speciesism with several participants in order to analyse the understanding of speciesism to animals on a daily basis, generates that the general public are having hard time to accept the idea of equality. Discrimination based on different species should not stand in this segment of life on the Earth. While we still have a long way to go to be that equal, findings in our anthropocentric and companion animal speciesism in our everyday language use (Leach et al., 2022). Additionally, it identifies speciesism as ‘collective phenomenon’ citing the authors from previous research on Speciesism in everyday language which describes almost all of us use the spiciest language in daily conversation, movies, social media, websites, announcement (Leach et al., 2022)

c. Animal Advocacy

Social justice issues remain occurring in our lives. Animal justice issue is one of the unrecognized, unpopular issues in society. Many people have the understanding that animals are objects to be consumed. By contrast, the idealism and value for people who care about animals and advocate for animal justice. Different values drive people to see animals as subjects on their own. Cultural norms heavily influence dietary choices, making it hard for individuals to adopt vegetarian or vegan lifestyles, as they are often raised with different values regarding food and animals. our interview also feel the same conflict in themselves:

“What is the difference? Is it more about culture? Because it has been passed down from generation to generation, maybe it’s similar to racism, they’ve been taught from generation to generation from their elderly. We’ve been indoctrinated at certain points.”

Empathy is a way to influence people surrounding them in their environment, to be seen as sentient beings, not animals for food. with this resonates to one of our interviewee,

“I do not feel like I have the urge to consume animals and carry out traditional ceremonies to sacrifice animals.”

Although they have a hard time, it influences how they communicate with the main family and try to spread empathy by talking about animals. This suggests empathy can grow over a family who does not understand their value but remain there in confusion and develop more feelings like empathy towards animals.

After conducting the interviews, observation and analytics to reach the goals of exploring how local advocates convey effective messages to spread the issue of animal justice. Generally, it is quite difficult for animal advocates to speak up about animals, and there is a tendency towards traditional teaching and views from the generation to be sacral, that is, the value to help them shape their identity.

For this case, we explore introducing and including empathy to have them not to harm the animals in the first place. As it is often described by researchers, empathy is a recognition of cognitive and psychological processes (Kassa, 2023). It's also a way to persuade people in others' point of view to have better and kinder responses toward something that people do not agree on. Furthermore, a mutual understanding in empathy and similarity can help us in advocacy. This open variety of advocacy is achievable in everyday practice and theory based.

We analysed from 6 interviewees in almost three months finding no research between culture based and our local culture (Sundanese) in animal advocacy, it drives us to begin as pioneers to start this dialogue. With thematic analysis in qualitative research with speciesism theory, These analyses revealed that understanding speciesism is crucial to know, on the level of understanding speciesism influences how people will think about other species. Anthropocentric speciesism and pet/companion animal speciesism are there in everyone, even though they may not know the label of these. These two can be lessened with driven empathy dialogue to not harm animals, as kindness is usually involved in anthropocentric ways. It starts with companion animals then farmed animals.

These findings suggest in effective animal advocacy speciesism can be explored more in dialogue in their own culture, like in this article, it is Sundanese culture. Additionally, reading more on cultural based text is encouraged by us to make them feel seen, to reach the empathy of others. These results should be taken narrative when considering how to frame messages as we are still in the early stage of animal movements. Specifically, advocating for animals and taking people involved emotionally may require animal advocates to spend more average time rather than typical street outreach as a tactic to change animal advocacy in a more sustainable way to change people's habit and value over speciesism.

Conflicts of interest

The authors declare no conflict of interest.

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Alleviating Samsara within the Concept of Metta-Karuna: Ethical Reflections on Animal Domestication through the Philosophy of Mahayana Buddhism

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Abstract

The Anthropocene era marks the domination of nature by humans. In the process, humans also control animals to be exploited for their own interests. The problem of speciesism is the starting point for humans in assuming that animals are objects that can be utilized arbitrarily without any ethical considerations. Humans have physiologically altered and regulated the lives of animals through the phenomenon of domestication. The failures and disabilities inflicted on animals make every domestic animal live a life of suffering. This article attempts to address the ethical issues regarding the relationship between animals and humans in the phenomenon of animal domestication through the lens of Mahayana Buddhism. Through metta-karuna, animals can be understood as an end in themselves. This article treats the problem through hermeneutics and semiotics based on ecophenomenology so that sources such as reliefs and ancient texts of Mahayana Buddhism can be drawn relevant to the ethical problem of animal domestication. Thus, metta-karuna can become the moral foundation of animal-human relations so that the relationship is formed from clean, wise and unconditional love.

Keywords: animal domestication, metta-karuna, antropocentrism, relation, Mahayana Buddhism

Introduction

My concern regarding animal welfare issues comes from the fact that discourses about the environment are often reduced in terms of the relations between humans and nature. Environmental issues frequently focused on problems that are experienced by humans based on the impact that directly harms them. As an example, these days, conversation about pollution and climate change is raised and really taken into consideration when these issues have an extreme impact on human life. For that reason, environmental commonly concerns do not recognize and include animal health and welfare issues. This brings us back to the current situation, an era dominated and intervened in by humans in every aspects of the earth, which also called as the Anthropocene era.

The Anthropocene era is considered to have begun in the late 18th century when the term was introduced by Marsh in *Man and Nature* (Zalasiewicz et al., 2011). This claim is supported by Crutzen (2002), who stated the beginning of the Anthropocene, characterised by the detection of increasing CO₂ and CH₄ concentrations in the air in polar ice. However, human influence and interference is thought to have begun in the Holocene era, when the *Homo habilis* species, known as the handy man, began to use tools and fire for hunting and gathering (Zalasiewicz et al., 2011). This indicates how humans have actually used their technology to utilise and control the environment for their own benefits. With the dawn of this era, humans have officially become the leading actors in changing the Earth's ecosystems as a whole. Through their massive and destructive behaviour, humans have succeeded in transforming the biosphere into an anthroposphere.

The cumulative effect of human activities over years is a fundamental and massive change in the way the earth functions. Nature must continue its suffocating life under human control because humans feel entitled and successful in subjugating the ecosystem in their grasp. Animals, as the being that is always related and close to humans, are not excluded from human exploitation of ecosystems. Man's dominance over nature parallels man's dominance over animals; the asymmetrical relationship between humans and animals places animals in an inferior position to humans. This is supported by human nature as *Homo rationale*, which distinguishes the human species from other non-human species – as well as human's role at the top of the food chain. By that, it is difficult for humans to understand and empathise with beings outside their own species because of their superiority. In this way, the inability of human beings to relate to animals has historically been summed up in a term called speciesism.

According to Duignan (2013), speciesism is the act of treating a species differently and positioning one species as having a higher moral importance than another. The term speciesism was popularised by Peter Singer in *Animal Liberation* (2009), which addresses the issue of animal exploitation. As the Anthropocene era continues to unfold, the phenomenon of animal domestication needs to be brought into a more serious discourse. As speciesism has become a mainstream issue, the dominance of humans over animals has become increasingly normalised.

¹ According to Ducos (1978), the domestication of animals is a form of human action in the social and biological control of animal life (cited in Russell, 2002). Biologically, humans have morphologically modified animals into forms that are adapted for human needs. For example, the need for more meat and fat, better quality milk and eggs, and anatomy in pets is considered more pleasing by humans. Meanwhile, socially, humans have brought domesticated animals into the circle of human life by training the behaviour of domesticated animals to follow what humans want; one of the behaviours that most domesticated animals have is a more docile nature.

Historically, domesticating animals was viewed as a way to bridge human-animal relations for living in harmony (Zeder, 2012). In today's reality, animal domestication is seen as a common phenomenon to satisfy all human interests. The dogs and cats adopted by humans, the cows used to produce milk and meat, the chickens used to provide daily food for humans, and other animals used for entertainment, breeding, transport and more are the results of 11,000 years of animal domestication (Lear, 2012). Without humans being aware of it, domesticated animals have supported their primary and tertiary needs. The ability of humans to create and modify behaviour and physiology over other non-human species seems to clarify the relation between animals and humans as asymmetrical. It is also argued that the domestication of animals provides too many benefits to humans and very few to none for the animals (Clutton-Burock, 1994 in Russel, 2002).

Eventually, the intervention and damage that humans have inflicted to nature, including animals, has been too exploitative. From here, Mahayana Buddhism is proposed as the solution to the ethical problem of domesticating animals without interfering with their lives through the value of metta-karuna. The philosophy of Mahayana Buddhism and the values espoused by the Bodhisattva provides a new perspective for assessing the imbalance in the relation between animals and humans by referring to ancient texts and manuscripts interpreted through hermeneutics. The stories in the Jataka are also presented to see how Mahayana Buddhism's philosophical view of animal-human relation is constructed with an emphasis on metta-karuna. The unequal relationship between humans and animals can also be understood through the Middle Way, so that the philosophy of Mahayana Buddhism can be practically applied for the contemporary life today. Therefore, in order to understand it as a whole, semiotics and hermeneutics is used with an ecophenomenological perspective that departs from my intentionality as a Buddhist. Thus, this research returns to Mahayana Buddhism as the ultimate solution to the question of animal domestication, which has been raised to provide a new perspective in the current Anthropocene era.

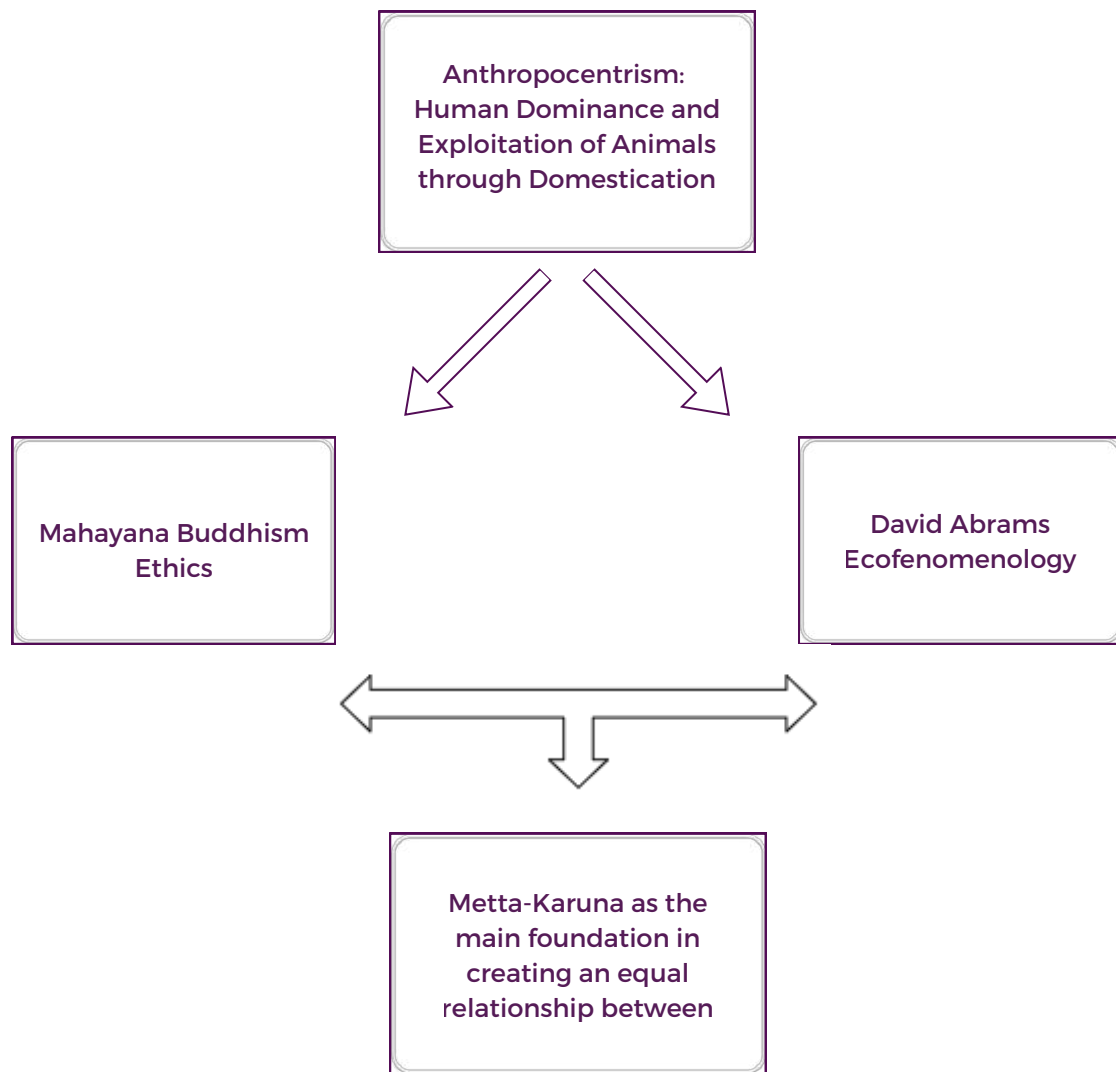


Figure 1. Theory and methodological framework

The research flow in this paper refers to the attached chart. The main question raised in the background section focuses on anthropocentrism and its influence on the phenomenon of animal domestication. Further, David Abrams' ecophenomenology is used as an initial tool, allowing individual intentionality to be present as a reference when analysing sources. The interpretation of the ancient texts and reliefs of the Borobudur temple (through the Jataka) cannot be separated and stand alone without being followed by my background as a Buddhist. Hence, the interpretation is done in two ways, namely semiotics and hermeneutics, which are heavily influenced by my individual experience in dealing with the anthropocentric era. Semiotic studies are used to understand the sign and metaphors found on the carvings of Borobudur temple, which are used to explain the animal and human world by means of parables. The main concept in this article, however, is interpreted from the Suttas with a hermeneutic that is again based on my experience. It is then necessary to present ecophenomenology as a tool for observing and evaluating the inequality and imbalance of human-animal relations in the process of animal domestication, which leads to exploitation.

In the context of ecophenomenology, this paper uses the thought of David Abrams in *The Spell of the Sensuous* (1996), who returns to human life as inextricable part of the environment. Abrams (1996, p. 19) argues that the body is an entity that is more than an object because it ends and integrates with the ground only to be reborn from the same source. According to Abrams (1996, p. 26), it is a misconception to perceive the environment only in terms of the natural resources that can be utilised by humans. Through ecophenomenology, I apply it to the reading and interpretation of Buddhist texts, starting from my bodily experience, which understands that our experience as human beings cannot be separated from our environment. Indeed, as a component of nature, human perception always involves the subjective experience of nature itself, giving rise to empathy based on a shared experience². From this perspective, and without letting go of my experience as an individual who is intimately connected to the world that animals inhabit, I then consider how to ethically and empathetically interpret the problem of animal domestication in the Anthropocene era.

With the use of those tools, the philosophy of Mahayana Buddhism becomes the most important part of the theory in this research because of its role in providing answers to the problems that have been identified. Utilising the concept of metta-karuna, Mahayana Buddhism can examine ethical issues of animal domestication that can be practically considered relevant today. In contrast to other schools of Buddhist philosophy, Mahayana Buddhism offers an idea that has more ethical implications for others because it goes back to its main difference, which is the emphasis on the Bodhisattva as an entity who have achieved nirvana. A Bodhisattva is One who vows to postpone His nirvana for the liberation and perfection of other beings (Dharmasiri, 1989). This is later proved by the Jatakas, in which the Bodhisattva sacrifices Himself for the comfort of other beings. The application of the attributes of Mahayana Buddhism embodied in the Bodhisattva has universal ethical significance because it values every living being equally. The philosophy of Mahayana Buddhism explains empathy through the Bodhisattva and recognises that every life is sacred³ and must be valued to the fullest extent. With this in mind, I will then use two characteristics of brahmavihara⁴, metta and karuna, to apply in the context of exploited domestic animals.

¹ In this context, David Abrams believes that the human misconception of nature is the way in which we alienate ourselves as part of the whole of nature – as an entity that has the right to dominate nature by creating a new civilisation for the benefit of humans, the Anthropocene era.

² The four noble qualities or great values of a Bodhisattva that are the source of goodness (*kusalakamma*)

Metta-Karuna is used to explain the ethical implications that empathy can determine the moral position of humans in their relations with other non-human species. In contrast to other traditions' perspectives on metta-karuna, Mahayana Buddhism offers a much broader form of it that is not limited to human relationship with other humans. These concepts are the two prerequisites for a Bodhisattva to attain nirvana. For the Buddha, the metta-karuna trait reflects perfection as it is considered the most ideal attitude towards all beings (*sattesu samma patipatti*) (Thera, 1993). Based on the Paritta, metta reads *sabbe satta sukhita hontu* (may all beings be happy) and karuna reads *sabbe satta dukkha pamuccantu* (may all beings be free from suffering). These two components cannot be applied separately as they have implications and causality that are interrelated; metta as love that can connect every living being, followed by karuna as compassion filled with empathy (Sujiva, 1991, p.4). In this way, the two balance each other out in the understanding of the moral responsibility of humans in interacting with other beings.

Mahayana Buddhism, with its emphasis on metta-karuna, cannot be separated from sunyata and non-violence (*ahimsa*). Although metta-karuna as a concept can explain how ethical relationships are established between one being and another, sunyata needs to be presented as a more comprehensive explanation that focuses on the ontological and metaphysical position of human as beings who live together with other beings in a circle of suffering. Sunyata is a teaching of Buddhist philosophy that defines human existence and reality as a whole⁴. When translated, it is understood to mean emptiness, but in fact sunyata is actually referred to as a holistic view of voidness (Shizuteru, 1982). Sunyata is used as a basis for understanding the existence of human beings as well as other beings beside themselves who live in the world as equals. The concept of sunyata determines the ideal ethical action towards other beings in Mahayana Buddhism, which goes back to metta-karuna. In conclusion, the three concepts mentioned above provide a connection that leads to an answer and an ethical position that can be applied to the issue of animal domestication.

⁴ According to the *Sunna Sutta* in *Sutta Nipata* 35.85, the Buddha explained to his disciple, Ānanda, that nature is the *sunna* and everything is the *sunna* of existence.

Animal Domestication: Man's Effort to Dominate and Exploit Animals

Before humans dominated every nature, the intersection of human life with animals has occurred since humans first hunted and employed animals to support human needs. This influences how humans use their technology to integrate animals into their lives, manifested in the act of domesticating animals. In order to satisfy the ever-increasing interests and needs of human beings, man is seeking all means to alter the physiological form and behaviour of animals in order to make the best use of them. Broadly speaking, the process of animal domestication can be divided into three types by commensal, prey, and direct means (Teletchea, 2019, p. 4). Commensal is a form of domestication initiated by animals that voluntarily enter human habitation, like dogs, cats, and chickens. Second, as the name suggests, domesticating animals by prey involves humans hunting animals, such as goats, sheeps, and cattles. The third method is a form of domestication with direct human intent through the capture of animals such as horses and donkeys. Although divided into three types, the process of animal domestication is generally understood as a breeding process that is completely controlled by humans. This reproductive process has modified their anatomy, physiology, behaviour, and genetics to the detriment of their lives. In the process of domestication, humans sacrificed many animals to achieve desired species (Ormandy et al., 2011).

In farmed animals categories, domestication is usually aimed at maximising production, either in the form of meat, milk, or eggs (Sandoe et al., 1999). Farmed animals as a fully commercialised species are unethically bred using cramped and inappropriate housing to minimise costs. The impacts felt by farmed animals directly cause suffering in their lives, such as that experienced by Belgian Blue cattle, which are domesticated specifically for meat production, due to their deformed tongue and jaws (Farstad, 2018). As a result of the need for a high protein content in their meat, Belgian Blue cattle suffer from muscular, reproductive, cardiac, and respiratory problems. Meanwhile, cows that are bred specifically for milk production have obvious digestive, mastitis, lameness, and reproductive problems (Sandoe et al., 1999, p. 319).

In addition to domesticated cattle, broiler chickens experience similar problems as which include lameness, joint dislocation, tibial dyschondroplasia⁵, and femoral necrosis⁶ (Sorensen, 1992 in Sandoe et al., 1992, p. 314). This condition

⁵ Abnormal growth of the tibia that leads to weakness

⁶ Premature cell death in the lower body

makes it difficult for the chickens to walk, run, and even stand up without causing them stress and pain. In contrast to chickens and cattles, farmed pigs tend to have more problems with their mental health. The issues experienced by farmed pigs include aggression towards fellow pigs, as well as frustration and stress which is vented through biting their own pens and tails (Casa, 2017, p. 3). It is also common for farmed pigs to develop sores on their feet and nails due to a lack of attention to the piggery. In special cases, like sows, the piglets are separated from their mother immediately after birth, causing excessive psychological distress to the mother (Sanjaya, 2023). With commercial and production goals in mind, ethical considerations of breeding farmed animal welfare are barely addressed. Animals that are deemed to be sick are eventually killed or conditioned so as not to disrupt the operation of a farm⁷.

Even domesticated animals, such as dogs and cats, suffer the same fate due to domestication caused by humans. In particular, a breed of cats and dogs exist that suffers from health problems because it was bred without ethical considerations, named the brachycephalic breed. Brachycephalic cats (flat-faced cats) typically include British Shorthair, Persian, Scottish Fold, and Himalayan breeds, will usually have breathing difficulties, skin problems, epiphora, psychological conditions, and poor joints (Bertselli et al., 2023). Brachycephalic cats often have dental deformities that make it difficult for them to eat their daily diet and inflammation of the gums that is quite difficult to heal (Igna & Igna, 2021). Without human's guide, brachycephalic cats struggle to live a life without their suffering of having to live with all the diseases that have accumulated as a result of the domestication process. Eventually, the domestication of animals by humans makes them increasingly dependent on humans for their survival.

Brachycephalic dogs (Bulldogs, Boston Bull Terriers, and Pugs) experience similar problems too. One of the most common disorders is one that affects the shape of the nostrils, causing the dog to have difficulty breathing (Dupre & Heidenreich, 2016). Smaller brachycephalic dogs are more prone to respiratory problems, while larger brachycephalic dogs tend to have digestive, cardiovascular, along with hip and elbow dysplasia problems. In the process of breeding, the appropriateness of the cage and the health of each dog are often neglected. This is also known as the puppy mills, the practice of breeding dogs with little regard to animal welfare in order to reduce costs and maximise profits (Maybruck, 2020). This method results in dogs with physical abnormalities and psychological problems due to the suffering caused by human interests. As long as the domestication process is carried out with the physical characteristics of an animal in focus, animal welfare is difficult to be addressed.

⁷ In this context, the aggressiveness of pigs is usually solved by cutting their tails from a young age to prevent them from biting their own tails. For chickens, their beaks are cut or melted to prevent them from pecking each other when stressed

Whether farmed animals or pets, domesticated animals experience similar problems living a life of suffering under human control. Human control over domestic animals is not only at the level of breeding, but also their survival, where domesticated animals have to sacrifice their wellbeing and freedom of life for the benefits of humans. Human efforts to exploit and dominate animals finally materialised in the age of Anthropocene, when domesticated animals have become dependent on human beings. Human intervention in the domestication process has led to animal-human relations that threaten the sustainability of the ecosystem. The physiological deformations and psychological impacts caused by domestication cripple the nature of animals as creatures that should be able to survive without relying on humans for their welfare. Human intervention in changing the instinctive and natural characteristics of animals causes ecosystems to become sick and fragile because animals are no longer considered as subjects who lived for them.

Animal's Position in Buddhism

In Buddhism, the view of animals and other beings is clearly addressed in Pancasila and the Paritta. Pancasila in Buddhism is established as the main moral foundation for its adherents to be obligatory, it also has a more practical nature so that it is more easily understood by its adherents. The first precept is *Pāṇātipātā veramaṇī sikkhāpadaṃ samādiyāmi*, which means I promise not to kill or harm living beings. Based on this first precept, the concept of non-violence (ahimsa) is understood as a form of moral principle espoused in Buddhism. In this way, Buddhism has generally envisaged a form of loving-kindness and compassion that is reflected towards all living beings, including animals.

Buddhism, as a religion with a doctrine of rebirth, has a quite different view compared to other religions in interpreting the division of nature. In Buddhism, there are 31 realms of life that are further divided into three main forms, namely the sensuous realm (kamaloka), the material realm (rupaloka), and the immaterial realm (arupaloka) (Mahathera, 2001, p.10). The sensuous realm is a world based on desire in which animals and humans coexist together. However, animals live in the miserable category of nature (Kamaduggati Bhumi) while humans live in a world full of both suffering and pleasure. The human world is considered heavenly because it has a balance between the two (Mahathera, 2001, p. 19). Unlike humans, animals live in a world full of hardship and anxiety because they have to survive by killing each other. Because of their different lives, the position of animals in Buddhism is largely seen as one of greater suffering. The discussion of animal-human relations in Buddhism is therefore no longer unfamiliar.

Metta-Karuna: Loving-Compassion without Bounds

Metta-Karuna as an ethical value, interpreted as loving-kindness and compassion, is a universal principle described in Mahayana Buddhism that acts as an ethical guideline in dealing with the exploitation of animals by human intervention in the Anthropocene era. This principle is explicitly stated in the Karaniya Metta Sutta in Sutta Nipatta 1.8 in the following verses:

Ye keci panbhut'atthi
Tasa va thavara va anavasesa Digha va
ye mahanta va Majjhima
rassakanukathula

Dittha va yeva adittha
Ye ca dure vasanti avidure Bhuta va
sambhavesi va
Sabbe satta bhavantu sukhitatta Mata
yatha niyam puttam
Ayusa ekapuuta manurakkhe Evam pi
sabbabhutesu Manasam bhavaye
aparimanam
Mettan ca sabba-lokasmim Manasam
bhavaye aparimanam Uddham adho ca
tiriyanca Asambadham averam
asapattam

The verses explain how metta-karuna is positioned as an ethical solution in practical for every living beings. One who can practise metta-karuna is one who is bestowed with a benevolent mind that is not influenced by lust and arrogance. He who possesses metta-karuna should be honest, determined, unwavering, gentle, and humble (Karaniya Metta Sutta: 143). The most perfect form of love is abundant love; Love that is unmoved by all kinds of worldly and sensual greed. Love that is full of virtuous thoughts. Metta does not discriminate against any living being without exception. Love is not only limited to the relationship between humans and other humans, but it is a comprehensive love for the relationship between animals and humans. Whether the animal is small, big, fat, long, or short, love must be understood as a value in human beings that is holistic (Karaniya Metta Sutta: 146-147). Regardless of their condition or appearance, all animals deserve to be loved and honoured for their existence in the same way that humans treat other humans. The love of metta is a universal value and the application of metta removes the hierarchy that exists between all living beings.

Metta is a love that is not attached to selfhood. Metta is compared to the love of a mother who is willing to sacrifice her life for the life of her only child (Karaniya Metta Sutta: 149). Metta is a value that develops in the mind and heart to warmly, selflessly and willingly reach out for the happiness and well-being of other living beings. Through metta, all sentient beings are understood to live a life that is not entirely different from the one in which all sentient beings live a life of suffering.

Therefore, the outpouring of love to other living beings must avoid the intentions of attachment. Metta is not a value attached to the desire to dominate and control other beings, nor is it manifested in a mistaken view that has positioned humans and other beings as unequal. Love for metta is a quality without the intention of exploitation and is not based on any interest. It is not a love for self-interest or for fulfilling the interests and desires of other beings. Metta stands as love for itself.

Metta cannot stand alone, it is followed by the feeling of compassion or karuna. It is karuna that eliminates greed (lobha) and hatred (dosa) within oneself, while seeking to relate to other beings with metta. Karuna gives perspective to the suffering of other beings. It is karuna who brings the value of metta into practical life. The value of karuna eliminates the attachment and indifference that humans have towards living beings other than themselves. Karuna directs human beings to open their eyes and hearts as wide as possible to extend love to all beings. Through karuna, humans realise that suffering is experienced not only by humans as impermanent beings, but also by animals whose lives are never separate from suffering, especially the suffering inflicted by humans. Humans often imagine a more pleasant and free life for animals. One of these is the life of a cat, where humans imagine the life of a cat free from the burdens and problems of life. In reality, humans who have domesticated cats have put them in a more difficult position to survive. They are forced to live a difficult life because their physiology is regulated by human desires in animal breeding. Without karuna, humans cannot open their eyes to the suffering in all spheres of life. This is how karuna is understood in the verse *sabbe satta dukkha pamuccantu*.

Based on this explanation, it is understood that metta-karuna is an inseparable ethical value. The two go hand in hand because they balance each other. Metta without karuna is imagined as a feeling of love without compassion in trying to see that animals are equal to human beings because both are inseparable from⁸ samsara. The attachment to the sense in loving with the intention of possessing and ruling over a being is neutralised by compassion. On the other hand, karuna cannot be liberated without metta, because karuna can fall into compassion, which leads to the lust for self-existence⁹ - where humans conclude that they are the supreme being, seen as the Saviour of animals from suffering.

⁸ The cycle of suffering which can also be defined as life and the state of endless rebirth

⁹ Attachment to self (*attavadupadana*) and attachment to lust (*kamupadana*). These two attachments are those described in the *Majjhima Nikaya I: Culasihanada Sutta*, which contains the Buddha's Short Discourse on the Lion's Roar. The Buddha mentions four kinds of attachment (*upadana*) which are the main cause of the suffering of sentient beings.

These two attachments are the reasons why humans assume that love can be shown through the phenomenon of animal domestication. Humans assume that by domesticating animals, the relationship between humans and animals can be understood as equal because it creates a mutualistic relationship. In reality, humans use animals as objects to be exploited, while animals need humans because of the primary dependency that humans have created for themselves. Human lust in dealing with animals creates a desire to further objectify domestic animals. This misunderstanding of the mutualistic definition between animals and humans reflects how humans have ultimately succeeded in altering the ecosystem for their own benefit. With metta- karuna, the imagined equal relationship is fully interpreted as it should be, without the desire to own, use and exploit any animal.

Metta-Karuna is the value that underpins all human actions and expectations in relation to animals in the Anthropocene era. Through metta-karuna, humans re-acknowledge their true position in the environment, which is then manifested in their efforts to create relationships with animals. Through the lens of benevolence, animals are interpreted as subjects who are also bound from suffering like humans. Every animal deserves to be loved and does not deserve to be subjected to unwanted suffering. Without any intention, without any attachment and without any conditions, metta- karuna becomes a moral basis for humans to determine how they should deal with the environment around them, specifically with animals.

Sunyata: Dynamic Human-Animal Relationships through Metta-Karuna

Metta-Karuna, as the most perfect form of loving-kindness, arises from the understanding and experience of the human body as it realises the true essence of nature (Sheng- yen, 2005). The idea of metta-karuna develops from an individual's understanding of the important philosophical principle of Mahayana Buddhism, as the foundation of every ethical impermanence and interdependence that are inseparable in the relationship of every being. Through an understanding of the experience of the self as mirrored in the essence of nature, an individual can achieve the true application of metta-karuna. Like the number zero, sunyata is both the end and the beginning of all phenomena (Shizuteru, 1982). It is not fully understood as emptiness, but also defines something that is full. Sunyata is understood as the most concept offered, so that the understanding of metta-karuna cannot be separated from sunyata.

Sunyata is Nagarjuna's teaching in the *Mūlamadhyamakakārikā*¹⁰ where he conveys that reality is nothing more than meaningless physical phenomena (Tola and Dragonetti, 1981). In MMK¹¹ 17.33, Nagarjuna says that all forms of existence (desires, physical body, senses, passions, etc.) are likened to mirages like an imaginary city in the sky. Nagarjuna goes on to say that everything is an interdependent phenomenon and the result of an inextricable causal chain (Tola and Dragonetti, 1981). This causal sequence (*paticcasamuppada*) is explained in the *Assutava Sutta* in *Samyutta Nikaya* 12.62, which explains the formula of the universe¹². Based on the *Assutava Sutta*, dependent reality is formulated to be with the birth of this, the birth of that and likewise with the non-birth of this, the non-birth of that. With its context of sunyata and individual selfhood, the formulation is equivalent to understanding that to exist (as an individual) is to be empty because it is not bound by the substance of selfhood, but also to exist is to place oneself in a position that is not detached from relations with other subjects. Thus, Nagarjuna offers two forms of truth, namely dual truth, so that the understanding of sunyata is not understood as a value that is both nihilistic and absolutistic (Cheng, 1981, p. 455). Dual truth allows one to understand both transcendent truth and truth in the world as a living existence in *samsara*.

Worldly truth explains how a human being understands that what happens in nature is always interrelated. The relationships that bind humans to humans and humans to animals are forms of nature that are interdependent, so only through perception and physical needs can an individual realise these truths in the world. On the other hand, transcendental truth shows that each individual and sunyata itself is free of any essence. Transcendental truth does not position reality as empty, but as a way to avoid attachment and speculation about substance (Cheng, 1981). Sunyata is thus used as a position that underlies the dynamic relationship between humans and animals through *metta-karuna*. The state of sunyata in the perception of relationships, substance and phenomena in reality can realise *metta-karuna*, which is pure without ego and selfishness.

¹⁰ A book used as a reference in the Mahayana Buddhist tradition

¹¹ Abbreviations for *Mūlamadhyamakakārikā*

¹² *Imasmim sati, idam hoti Imass*

uppada, idam uppajjati

Imasmim asati, idam na hoti

Imassa nirodha, idham nirujjhati

Sunyata, as a concept that explains the roots of both nirvana and samsara¹³, places the individual self in the understanding that every sentient being who lives it is bound by that state. The emptiness in the individual considers that relationships in the world are also formed on that emptiness. Relationships need to be developed universally, not only between humans, but also humans need to relate directly to animals. The relationship is then based on the ethical value of metta-karuna built through sunyata, which sees relationships without any intention and positioning oneself lower, higher or equal to other individuals. In other words, the relationship between humans and animals should be understood in a state of tathata (James, 2007).

Tathata is an intrinsic value that explains how an individual manifests sunyata in aspects of his or her life, including relationships with animals (Verdu, 1925). Tathata describes an achievement of self-determination and limitation when an individual has understood sunyata. Through the state of tathata, an individual can understand how to see animals as such. The relationship formed on sunyata places the position of animals with humans in a relationship that is interpreted without intentions, interests and attachments. One can only understand the relationship with animals as it really is through the abilities one develops within oneself. The ability to love selflessly and unselfishly is formed by his success in releasing the ego within himself. With tathata, an enlightened individual who understands the whole self, the empty self, creates a relationship with animals that is full of metta-karuna.

Sunyata explains how a relationship should be established between humans and animals. A relationship that is no longer fixated on the selfhood of the individual or the animal. Beginning with a clear understanding of the universe, that every being is always bound and empty at the same time, metta-karuna grows in faith and wisdom instilled in the individual. The circumstances that bind every being, human or animal, explain that no being can escape the bondage of suffering called life¹⁴. For this reason, sunyata plays a role so that the love that is cultivated does not cause new suffering or arise from suffering again. With full and clear consciousness, the human-animal relationship formed on the basis of metta-karuna transcends all forms of suffering, so that it is practically based on something true in itself, which is the return to sunyata.

¹³In MMK 17.20, Nagarjuna explains that there is no difference at all between *samsara* and *nirvana*. Both understand that there are dependencies in worldly phenomena, but at the same time there is no substance in them. Both the conditions that bind the individual to the illusion of the world that causes suffering and the individual's detachment from that illusion are no different. (Wynne, 2015).

¹⁴In the *Brahma Net Sutta*, which explains the *Bodhisattva* precepts, the 20th secondary precept states that every being has been our mother, father, brother, sister, grandfather, grandmother and sibling (animals are no exception). They were born from us and vice versa. Every being that is still in the cycle of *samsara* should be treated with *metta-karuna* so that all sentient beings eventually attain liberation (*nirvana*).

The Metaphorical Imagery World of Jataka: The Embodiment of Metta-Karuna in Bodhisattva Stories

The emphasis on metta-karuna as the basis for creating an equal relationship between the two can be seen through the meaning of the symbols in the reliefs of the Borobudur temple. The reliefs tell the story of the Bodhisattva's life journey in dealing with a world full of suffering. The stories are conveyed in the Jataka, which tells the journey of Bodhisattvas who are born into various forms of life - such as animals, humans, gods, and great beings. The world in the Jataka illustrates how Mahayana Buddhism places every being in an equal position, including animals. Each being is depicted as having its own will and consciousness to act and choose what it wants to do. Through the metaphors used, the Bodhisattva's story tries to convey that every animal is a being with full awareness of itself and is as valuable as a human being.

The first relief tells the story of the Bodhisattva who is reborn as a deer called Sarabha who selflessly helps people that is recorded in the Sarabhamigajataka (Jataka 483). These reliefs depict a king riding a horse with one of its legs cut off, followed by several soldiers (fig. 2). The soldiers behind him carry a sword, a bow and some arrows. The horse's severed leg is the result of the soldiers' catch, which is to be offered to the king, who likes to hunt. On his way to the forest, the king fell into a puddle by his own fault while chasing a fleeing deer (fig. 3). The next relief shows the king in an anjali¹⁵ to Sarabha in front of him. In the third, the Bodhisattva as Sarabha finally saves the king.

¹⁵ The *anjali* gesture in Buddhism is a form of respect, usually performed in prayer by placing the palms of both hands together.

This can be seen by the fact that the king is no longer trapped in the puddle. The king, riding Sarabha, has returned to his palace, out of the forest (fig. 4). In the subsequent story, the king is said to have asked Sarabha to follow him to the palace and become the palace deer. Sarabha, who had selflessly helped the king, refused the king's request and decided to return to the forest.



Figure 2. Relief 90 at Borobudur Temple (Bhikkhu Anandajotti, 2020)



Figure 3. Relief 91 at Borobudur Temple (Bhikkhu Anandajotti, 2020)



Figure 4. Relief 92 at Borobudur Temple (Bhikkhu Anandajotti, 2020)

In the next relief, the Bodhisattva is born as the radiant and exemplary Ruru deer, which is written in Jataka 482 entitled Ruru Jataka. The Bodhisattva as the Ruru deer is a figure completely free of ego and greed. In figure 5, the Ruru deer on the right is very beautiful and majestic. Meanwhile, on the left, there is a human in an anjali worshipping him. The Jataka says that when the Ruru deer heard a man's cry for help in the wilderness, he quickly approached the man who was far away, floating in the river. This can be seen in the background that surrounds them, namely the shape of the water on the lower left and the trees behind it.



Figure 5. Relief 96 at Borobudur Temple (Bhikkhu Anandajotti, 2020).

The last relief explains the story of the Bodhisattva's rebirth as a wise king. The story is told in the Dummedha Jataka (Ja 50) about a prince who has just succeeded his father. The Bodhisattva is urged to follow the ritual sacrifice of living beings to the deity.

The Bodhisattva as king is seated on His throne surrounded by his subjects in the anjali posture on the left relief (fig. 6). The attitude of the people shows a form of pleading to the king to carry out the ritual. In the centre relief, the Bodhisattva, who dislikes the ritual tradition, orders his people to stop sacrificing living beings.



Figure 6. Relief 40-42 at Borobudur Temple (Bhikkhu Anandajotti, 2020)

Through these reliefs it can be understood that in every life of the Bodhisattva, whether born as a human being or as an animal, the value of metta-karuna is never forgotten when the Bodhisattva is in relationship with other beings. In every situation and condition, the Bodhisattva makes metta-karuna the main consideration in his relationship with other beings. For example, in the story of the Sarabha deer, the Bodhisattva never asked for any reward from the king, who had even hurt and hunted a horse. The form of love aligned with the Bodhisattva's actions is symbolically shown in His efforts to stop the sacrifice and suffering of other living beings.

The world of imagery depicted in the birth of a Bodhisattva signifies how every living being has Buddha nature. In mind, form and consciousness, every living being, including animals, has the same opportunity to be reborn as a Bodhisattva .

¹⁶ Quoted from the *Brahma Net Sutta* in the *Sakyamuni Buddha* passage

The metaphor of rebirth that the Bodhisattva goes through also defines that no living being is considered less valuable than the Bodhisattva. In figure 2 and 4, animals are valued as beings worthy of respect and honour. Regardless of species, each animal is seen as a whole individual with its own subjectivity. The actions performed by the Bodhisattva in his animal life are symbolic of His inner awareness. In each animal life that the Bodhisattva goes through, each animal comes to the conclusion that it is a being that can speak for itself¹⁷. The symbolisation of metta-karuna from humans to animals is also manifested in figure 6 - where the Bodhisattva is a king who does not involve His ego in making decisions. Without engaging in false compassion for the sacrificed animals¹⁸, the Bodhisattva shows how a person born as a human being loves and spreads compassion through his story.

The Jatakas are a direct interpretation of the Bodhisattva's story and life in different worlds which reflects how metta-karuna is applied to all beings without exception. Both with his human and animal abilities, He stands as a being who equally extends metta-karuna to others to free them from suffering. Each sculpture in the relief depicts the equality of beings between animals and humans, who are always related in every form of life, returning to emphasise the form of metta-karuna. As such, metta-karuna, as one of the characteristics of the Bodhisattva, becomes the basis for interpreting the relationship established between animals and humans.

¹⁷ In the Jatakas, the Bodhisattva was reborn in different kinds of animals. These include swans, buffaloes, monkeys, rabbits, cranes, monkeys, woodpeckers, crows, elephants and many more. While living as an animal, the stories often show the Bodhisattva using His life-like abilities to help other beings (animals, jinns, humans or gods) escape the cycle of suffering. The stories are taken from Jataka 407, 308, 278, 73, 146, 314, 316, 347, 385, 399 and others. Some reliefs in the Borobudur temple that are not directly related to the Jatakas also depict the Bodhisattva's life as an animal full of sacrifices for other creatures. This example can be seen in reliefs 112 to 114 (Bhikkhu Anandajotti, 2020).

¹⁸ False sympathy and compassion are human attempts to understand the suffering of other animals by imagining their own suffering, thereby creating new forms of suffering.

The Middle Way as an Actualisation of Buddhist Ethics in the Anthropocene Era

In contrary to the holistic Western ethical approach to the environment, Mahayana Buddhism offers a Middle Way in understanding the relationship between animals and humans. The ethical application of metta-karuna's values is a manifestation of the awareness of self and nature developed through the concept of sunyata. In this way, metta-karuna develops a form of tenderness towards itself and towards all living beings (Herrigel, 1999: 79 in James, 2007). It is not an awareness of becoming one with nature and creating harmony with every animal, but rather an awareness that every life is sacred because it binds every being to samsara. Understanding that animals also live in suffering from the moment they are born means that there is nothing that can be done but not to inflict more suffering on them.

The Middle Way through the ethical lens of Mahayana Buddhism accommodates any position that intersects the relationship between humans and animals in the anthropocentric era. In a more general definition, the Middle Way of Mahayana Buddhism epitomises how virtue ethics is applied in a broader and holistic setting, where the nature of metta-karuna opens up human views and responsibilities towards their surroundings. The ethical emphasis of metta-karuna encourages people to return to the roots of all sin, which is ego and desire, which create suffering. Each individual's life, which is inseparable from samsara, is confronted with the attitude manifested in the self in order to form a Middle Way ethical position in creating a relationship with other living beings without exception. The ontologisation and radicalisation offered in Mahayana Buddhism introduces an offer that touches on both ecological and social perspectives in the face of what is in the human being and its consequences for every living being. Ethical choices breathe in the way a human being acts and is sensitive to the suffering that no being can escape in the cycle of life. Suffering as something absolute and unavoidable for every being as a process of samsara is a realisation of how the life of every being must be understood as a valuable essence in itself.

Therefore, to return to the issue of human exploitation and domination in animal domestication, human interests and selfishness have full control in determining intentions in relation to animals. However, the process of animal domestication cannot be considered entirely bad for animals, as the phenomenon has occurred throughout history, making domestic animals part of the current ecosystem¹⁹. Yet, the consequences of what humans have done in domesticating animals have resulted in too much detrimental impact on the animals. Both in the process and in the way humans determine how domestic animals survive, the welfare and freedom of each sacrificed animal is not usually taken into consideration. In practice, domesticated animals are defined by their impact and effect on human life. Pets and farmed animals are seen as products of domestication that help people's lives, so they are assumed to be worth exploiting, even if they may cause more suffering and relational inequality.

¹⁹ According to Clark, Potter & Harding (2006), some animal domestication (in the form of genetic reproduction) is done to increase the lifespan and disease resistance of animals. However, such domestication is done to meet the needs of animals as agricultural products, so ethical considerations are still needed in the process.

For this reason, metta-karuna is the right answer as the fundamental nature of relating to animals in the Anthropocene era in order to abandon all forms of human intentions and interests. Metta-Karuna becomes an ethical consideration that reorients human attitudes in living with other beings in the cycle of samsara. This position encourages people to develop loving-kindness and compassion, which considers that each being has the right to stand for itself without being controlled and used for the benefit of other beings. This is not in a way of complete rejection of relationships that are already bound by suffering, but by re-embracing relationships through metta-karuna so that every human relationship with animals is interpreted as a symmetrical relationship that is pure and without intention. Through this view, Mahayana Buddhism offers a Middle Way that manifests in the form of unconditional and unlimited love as the starting point for a human being to understand their own nature towards the environment.

Conclusion

Man's power to conquer the nature in the anthropocentric era is evident in his efforts to exploit animals in the phenomenon of domestication. The asymmetrical relationship between humans and animals is a result of the assumption that humans are a superior species and therefore have the right to utilise animals to the fullest for the benefit of their own species. Through bodily experience from an ecophenomenological perspective, this imbalanced relationship is raised as an ethical issue that needs to be considered in the Anthropocene era. Without consideration for animal welfare, humans have domesticated has caused both mental and physical harm to domestic animals. Domestic animals are then interpreted as nothing more than objects and/or products that are used to meet the needs of human civilisation to this day. The meaning of domestic animals as a subject will never be addressed when humans continue to deal with animals with the intention to dominate.

With this in mind, Mahayana Buddhism comes to offer a new perspective as an ethical foundation in relation to animals in the Anthropocene era. Through the value of metta-karuna, humans can realise how pure and wise compassion, speaking as it is in the relationship created between humans and animals. In the Anthropocene era, domesticated animals have become a component of the ecosystem which makes it difficult to open new gaps for humans to try to fix the damage that has been done massively. Through the realisation of full self-awareness, metta-karuna is engaged as an ethical guideline in creating an equal human-animal relationship, so that the animals are interpreted as individuals who have the right to live valuable lives without suffering in the Anthropocene era.

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Unveiling Tradition: The Urgency Behind the Controversy of Dog Meat Consumption and Trade in the Modern Era

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Abstract

Dogs are commonly seen as pets, companions, and partners. Yet, there are places where dogs are utilized for sustenance. One such place is Indonesia, where approximately 7% of the population consumes dog meat somewhat regularly. This practice is morally incorrect and indirectly endangers public health, particularly through the potential transmission of zoonotic diseases. One of the main zoonotic diseases linked to dog meat trade and consumption is rabies, which if left undetected and untreated, will inevitably result in the loss of one's life. On one hand, improper handling of live dogs could lead to the transmission of rabies; on the other hand, improper handling and preparation of dog meat could result in multiple foodborne illnesses, as the dogs consumed are not always bred specifically for consumption but may also be caught in the wild. From the moral standpoint, dogs have been domesticated for thousands of years to become our companion and have spent just as long by our side, which makes eating them wrong. While many people agree with this standpoint, vocal minorities who continue to defend the dog meat trade, driven by the profits they gain from this unjust practice. Furthermore, this practice is internationally condemned due to the cruel methods used in handling these dogs. In Indonesia, the dog meat trade and consumption has significantly contributed to the spread of rabies, with 5% of sellers and consumers reportedly infected with rabies. Overall, the dog meat trade causes more harm and suffering than good and should therefore be stopped.

Keywords: dog meat trade, moral, zoonotic diseases, Indonesia, rabies, public health, ethical issues, animal cruelty

Introduction

Dogs are closely connected to human life. The domestication process of dogs and cats has been going on for a really long time. Dogs were domesticated from wolves (*Canis lupus*) around 15,000 years ago. Some also suggest the domestication process started around 100,000 years ago. This suggestion was based on genetic proof (fossil and DNA). The domestication process has turned dogs into their own species, *Canis familiaris* (Saputra, 2016).

The domestication of dogs has always been interconnected to humans since it has started. One of the many possible reasons dogs were domesticated is a social bond between dogs and humans, which includes a mutualistic relation between them. Humans would provide sustenance and a safe environment to manage their survival, while dogs contribute to humans by exhibiting beneficial behaviours that enable them to help us by being companion animals, guard animals, assisting humans with disabilities, and even supporting police work (Tancredi and Cardinali, 2023). The history of the domestication of dogs is deeply rooted in this social bond and mutualistic relationship. Over generations, dogs have played a role in assisting human tasks and have continued to serve as human companions, support in military work, and more.

Meat is an essential food source for the body, obtained from the slaughter of livestock animals. Animals that do not fall under the category of livestock should not be used as food sources, one example being dogs. Dog meat is not considered a proper animal-based food product for consumption, the reason being its health and safety aspects are unknown due to a lack of research and no specific regulations permitting the use of dog meat as food, let alone for consumption (Sutrisno and Suganda, 2020). Rabies-related issues connected to the trade and consumption of dog meat have become a global issue, with several countries being major contributors to the practice of slaughtering dogs for meat. These countries include China, South Korea, Thailand, Vietnam, the Philippines, India, and Indonesia. According to World Health Organization's (WHO) data from 2008, approximately 55,000 people die each year from rabies, with 95% of cases occurring in Asia and Africa (Dore, 2014).

In Indonesia, 7% of the population consumes dog meat. This has led to an increase in the spread of rabies in the country, threatening the health and lives of its citizens. Additionally, the trade and slaughter of dogs in Indonesia are carried out in inhumane and brutal ways, drawing international criticism from organizations like Humane Society International (HSI). In the health sector, Indonesia has faced condemnation from the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO) for endangering public health and violating expert recommendations on rabies control (HSI, 2018). The dog meat trade in Manado, specifically at Tomohon Market, has garnered attention from both domestic and international actors due to its extreme and brutal practices. This has also had psychological impacts on children who witness the cruelty involved in the slaughtering process (Maya and Pattipeilohy, 2021).

Dog meat should not be consumed by the public because it is not classified as a food product derived from livestock animals, making it unfit for consumption. From the health perspective, consuming dog meat carries the risk of spreading dangerous diseases and viruses, such as rabies transmission, tapeworm infections, and acute diarrhea. These health risks are particularly high if the meat comes from sick or rabies-infected dogs (Suputra et al., 2020). Additionally, some individuals involved in dog slaughter use unsafe and inhumane methods, such as improper stabbing or slaughtering, which can lead to complications like blood clotting and bacterial growth in the dog's carcass (Azanella, 2022).

Consuming dog meat is not an activity which is seen as moral by many people, as dogs are and have been seen as emotional and sentient companion animals across generations. They have evolved from wolves that were domesticated between 23,000 and 15,000 years ago, dogs hold a unique cultural significance (Perri, 2021). The process of capturing, farming, and slaughtering dogs often disregards humane treatment, leading to both physical and mental suffering for the animals. Dogs are frequently subjected to cruel practices, such as improper transportation and slaughter methods that violate animal welfare principles. Good animal welfare is defined by adherence to the Five Freedoms: freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury, or disease, freedom to express normal behavior, and freedom from fear and distress (Febrianti et al., 2023).

Materials and Method

a. Literature Study

A literature study is required to deepen the theory that will be used by collecting and processing data and information from books and online sources, such as journal articles, theses, and dissertations published in the last 10 years. This information will enhance the researcher's knowledge of the issues being studied. To ensure the novelty and quality of the information used in the research, online sources will be sourced exclusively from trusted and reputable academic platforms, specifically accessed through Google Scholar and GARUDA.

Results and Discussion

The consumption of dog meat that is still practiced in some countries including Indonesia, poses significant health risks. Many zoonotic diseases can be transmitted through dog meat consumption, such as rabies, echinococcosis, which affects vital organs, and parasitic infections like toxoplasmosis, which in pregnant women can lead to miscarriage, physical disabilities, and meningitis (Sutrisno and Suganda, 2020; Suputra et al., 2020). One of the most fatal diseases is rabies. Rabies is a global issue, with approximately 55,000 deaths each year, with 95% of cases occurring in Asia and Africa (Dore, 2014). According to data from the World Organisation for Animal Health (OIE), a person dies from rabies every 15 minutes worldwide, with most victims being young children in developing countries (OIE, 2019). Ninety five percent of rabies cases are caused by bites from rabid dogs. These cases are spread across various countries, including Indonesia which is a developing nation. A Report by Four Paws International mentions that the U.S. Centers for Disease Control and Prevention (CDC) has reported that dogs in dog meat markets continue to spread rabies. Studies have shown that 5% of those that are consuming or selling dog meat are infected with rabies. Further research on the dogs involved in the dog meat trade revealed that their brains contained RNA from the rabies virus. The trade of dog meat in various regions of Indonesia has been ongoing even before the country gained independence. It is estimated that around 1,000,000 dogs are killed annually for consumption (Ditjen Pencegahan dan Pengendalian Penyakit, 2016). In Indonesia, the consumption of dog meat by around 7% of the population increases the risk of this disease and has drawn international condemnation due to the brutal methods of trade and slaughter (HSI, 2018; Maya and Pattipeilohy, 2021).



Figure 1. The Rabies Situation in Indonesia from the year 2013 - 2023

Source: Directorate General of Disease Prevention and Control, Ministry of Health of the Republic of Indonesia, 2023.

Based on Figure 1, the highest number of Rabies Animal Bite Cases (GHPR - Gigitan Hewan Penular Rabies) was reported in 2023, with 182,775 cases. The GHPR cases in 2023 show an increase compared to the previous year. The number of Anti Rabies Vaccine (VAR - Vaksin Anti Rabies) cases reported in 2023 also increased compared to 2022, from 74,888 to 136,696 cases. Similarly, the number of positive cases and deaths (LYSSA) increased from 96 to 146 cases. In 2023, the provinces with the highest number of GHPR cases were Bali, with 72,522 cases; East Nusa Tenggara, with 18,924 cases; and North Sumatra, with 10,360 cases. GHPR cases must be promptly managed, including by administering VAR.

There are two driving factors behind the trade and consumption of dog meat in Indonesia. These factors are:

1. Tradition Factor

It cannot be denied that the consumption of dog meat in society is closely linked to traditions practiced by certain ethnic groups in Indonesia. With the many ethnic groups in Indonesia, there are also diverse customs and traditions. As a result, it is not uncommon for people to justify the consumption of dog meat as a way to "preserve cultural or ancestral traditions." For example, in Minahasa, dog meat is considered a part of local cuisine and is prepared into a dish known as "Rintek Wuuk." This tradition has been ongoing for a long time in Minahasa, North Sulawesi. Other than that, there are "Lapo" or eateries serving traditional food from North Sumatra. It is not unusual for some Lapo to offer dishes made with dog meat as the main ingredient. This presents a serious issue, as on one hand, people engage in this practice to preserve their cultural or ethnic traditions, but on the other hand, it violates animal welfare and can have harmful effects on human health.

Based on the existing facts, it is difficult to argue that the positive effects of the tradition of consuming dog meat outweigh the negative ones. This includes the potential for zoonotic diseases to affect humans who consume it, which could also spread easily to other people. This reason alone should be enough for society to stop consuming dog meat, as the impact is not only on the individual but can also affect others.

2. Economic Factor

One of the driving factors behind the trade and consumption of dog meat seems to be economic. Many people perceive the sale of dog meat as highly profitable, which entices some to pursue it. For example, several dog meat sellers in Solo, Central Java, have claimed that their businesses can generate revenue of up to IDR 11,000,000,000 (eleven billion rupiah) per month which equates to approximately 700,000 USD in November of 2024 (Kresna, 2016). However, it cannot be denied that this is also accompanied by dishonest sellers who prioritize personal gain and disregard the negative impacts on consumers, as discussed in the previous section. Additionally, the lower price of dog meat compared to chicken or beef is another reason some people prefer to buy and consume dog meat over other meats like chicken and beef.

However, from the community's economic standpoint, it seems that the trade of dog meat has become a primary source of income for some individuals. It can be said that the trade of dog meat has become a cornerstone of the economy for certain communities. Therefore, it would be very difficult to call for a halt to the trade and consumption of dog meat in society. If such a measure is enforced without careful consideration and preparation, it could potentially harm or even destroy the local economy. Naturally, the best solutions should be put forward to address this issue. These solutions must prioritize both critical aspects of society, ensuring that the economic needs of the community are preserved while also fulfilling animal welfare concerns. However, it must be reiterated that all parties involved, both the community and the government need to work together. This issue involves shared interests, and thus collaboration is necessary to resolve it.

The profit gained from the trade of dog meat does not seem to be the only reason why some people consume it. There is a more saddening reason why some individuals are forced to consume cat or dog meat as food. For example, a 64 year-old boarding house owner in Semarang was found to have abused a cat and consumed its meat for diabetes treatment. However, a more tragic reason was revealed, he claimed that he did not have enough money to buy beef or chicken, so he consumed cat meat as a way to meet his daily nutritional needs.

This is truly saddening as it shows that some people out there are struggling to survive and are trying to meet their daily nutritional needs, even with ingredients that pose significant health risks. Therefore, this case should serve as a lesson and a point for development, especially for the government, to ensure that such incidents do not happen again.

The consumption of dog meat causes significant health problems and involves inhumane practices. Efforts to control the dog meat trade must be strengthened through public education about its health risks and the implementation of animal welfare principles. Stricter law enforcement against the trade and consumption of dog meat is necessary to protect public health and improve animal welfare. One example of regulation related to the trade of dogs and cats is found in Undang-Undang Nomor 18 Tahun 2009, which addresses Animal Husbandry and Animal Health. However, this law seems to only cover animal welfare in general and is often seen as insufficient in addressing the prohibition of the trade of dogs and cats in Indonesian society. While the Animal Welfare Law is intended to limit cruelty and crimes against animals, in practice, there is a lack of legal supremacy due to the poor implementation of the law, with limited support from society, the government, and other involved authorities. Additionally, the existing law seems to be more of a formality than an actionable measure. The regulations appear to be meant for reading, not for serious implementation. The public has also normalized these actions and justified the violations that occur. Undang-Undang Nomor 18 Tahun 2009 also fails to address the livelihood issues of people whose main income comes from selling dog meat. The government does not provide alternative livelihood suggestions or support for these traders. As a result, they continue trading because they lack other sources of income, and there is no resolution or assistance from the government.

The Undang-Undang Nomor 18 Tahun 2009 law was later updated with Undang-Undang Nomor 14 Tahun 2014. However, it is unfortunate that this law only addresses animal welfare in general and is often seen as inadequate in regulating the prohibition of dog and cat trade in Indonesian society. Despite the update with Undang-Undang Nomor 18 Tahun 2009, many parties still feel that this regulation lacks specificity in addressing the prohibition of dog and cat trade in the community. The implementation of this law requires stricter supervision and enforcement to be effective in controlling the dog trade. Furthermore, additional regulations explicitly banning the trade and consumption of dog meat should be considered to address existing legal loopholes. The public also needs to be educated about the health risks associated with consuming dog meat and the importance of animal welfare in daily practices.

This study emphasizes the importance of implementing the five freedoms of animals in every aspect of animal handling. The application of the five freedoms is important in ensuring that animals are treated well and are free from physical and mental suffering. These five freedoms include freedom from hunger and thirst, freedom from discomfort, freedom from pain, injury, and disease, freedom to express normal behavior, and freedom from fear and distress. Implementing these principles in every aspect of animal handling will significantly improve animal welfare and reduce the suffering they experience. Fulfilling these principles helps ensure that animals are treated well and free from physical and mental pain (Febrianti et al., 2023). Although dogs and cats are not humans, they are capable of having feelings and emotions. They are able to experience emotions such as happiness, anger, sadness, and fear. It is heartbreaking to imagine how dogs and cats feel when they are beaten continuously until they lose consciousness or even die, just to satisfy human desires to consume them. It is unimaginable how much fear, sadness, anger, and pain they experience, yet they are unable to do anything to defend themselves against humans. This clearly violates Animal Welfare, which should serve as a guide for how animals should be treated throughout their lives.

Conclusion

Awareness among all parties about the fact that dog meat is not a food source and that it should not be traded must be increased. This is not only based on moral grounds but also due to the numerous harmful effects on public health that come with it. One of these is the spread of zoonoses, which cannot be overlooked. There are many zoonotic diseases that can occur simply by consuming dog meat, such as the spread of rabies, echinococcosis that damages vital organs, parasitic infections like toxoplasmosis, and others. However, despite the numerous associated diseases, some people remain reluctant to abandon the practice of consuming dog meat, citing tradition or economic factors. Therefore, it is essential to develop regulations to address the issue of dog meat trade and consumption in Indonesia. Additionally, education about the dangers of zoonosis needs to be further increased to raise awareness among the public about the harmful effects of consuming dog meat. However, this responsibility should not fall solely on the government; all members of society must play a role in addressing the trade and consumption of dog meat in Indonesia.

Conflict of Interest

We declare that there is no conflict of interest in the writing of this study. All data and findings presented are based on objective and careful analysis, without being influenced by the interests of any third parties. The primary goal of this journal is to provide accurate and useful information regarding the health and food safety issues related to the consumption of dog meat, as well as its impact on human health and animal welfare. All resources used in the writing of this paper are fully transparent, and there is no affiliation with any parties that may benefit from the results presented.

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The cultural differences between Asia and the Western regarding the performance of animal shelter employees influenced by work stress and compensation.

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Abstract

This study analyzes the cultural differences between Asia and the Western and their impact on the performance of animal shelter employees, focusing on the effects of work stress and compensation. The collectivist culture in Asia tends to emphasize group harmony, loyalty, and subordination to organizational interests, while the individualist culture in the West places greater emphasis on individual well-being, self-expression, and personal rights. These two cultural approaches result in significant differences in how employees respond to work stress and compensation, with implications for productivity levels, burnout risks, and organizational sustainability.

The study employs a literature review method with a comparative analysis of various relevant sources to identify cultural patterns and their implications for employee performance. The findings indicate that, while the collectivist culture in Asia helps maintain group commitment, limited compensation and insufficient attention to employee mental health often reduce work quality. Conversely, the individualist approach in the West provides employees with greater access to emotional and financial support, thereby enhancing overall performance.

Keywords: Animal shelter, employee performance, Organizational culture, work stress, compensation

Introduction

Employees in animal shelters face unique work pressures, including the emotional burden of caring for injured or abandoned animals, as well as physical challenges such as daily maintenance and facility management tasks. These challenges are often exacerbated by high work stress and inadequate compensation (Maslach & Leiter, 2016). Cultural factors play a crucial role in determining how organizations address employee needs, including their responses to work stress and compensation policies (Hofstede, 2001).

This study aims to explore how collectivist cultures in Asia and individualist cultures in the Western influence employee performance in animal shelters through two main dimensions: levels of work stress and compensation. The primary focus of this research is to identify the implications of these cultural approaches for employee well-being and the quality of services provided to animals in need.

Materials and Methods

This study employs a literature review approach, focusing on relevant empirical and theoretical studies. The primary data sources include:

1. Studies on organizational culture and its impact on human resource management (Hofstede, 2001).
2. Research on work stress and its effects on employee productivity (Maslach & Leiter, 2016).
3. Case studies of animal shelters in Asia and the Western addressing compensation policies and employee welfare (Kim & Egan, 2011).

Comparative analysis was used to examine cultural patterns and their impact on work stress, compensation, and employee performance across the two regions.

Result and Discussion

1. Collectivist Culture in Asia

The collectivist culture in Asia emphasizes group harmony, hierarchy, and loyalty to the organization (Hofstede, 2001). In the context of animal shelters, these values often create pressure on employees to prioritize organizational needs over personal needs. This leads employees to hesitate in expressing work stress or dissatisfaction with compensation, fearing they might be perceived as disloyal or disruptive to group harmony (Kim & Egan, 2011)

However, this approach has significant drawbacks. Studies indicate that the burnout rate is higher among animal shelter employees in Asia compared to their Western counterparts, primarily due to the lack of mental health support and stress management training programs (Maslach & Leiter, 2016)

2. Individualist Culture in the West

In contrast, the individualist culture in the Western emphasizes individual rights and the balance between work and personal life. Employees in animal shelters in the Western tend to be more vocal in asserting their rights, including demands for fair compensation and a healthy work environment (Hofstede, 2001).

Institutional support, such as counseling services and wellness programs, is more commonly found in animal shelters in the Western. This helps employees manage work stress more effectively, which positively impacts productivity and employee retention (Robbins & Judge, 2013).

3. Compensation and Its Impact on Performance

Adequate compensation serves as a crucial factor in motivating employees, enhancing job satisfaction, and fostering loyalty (Maslach & Leiter, 2016). In Asia, budget constraints frequently hinder organizations from offering competitive salaries. Conversely, organizations in the Western are often better equipped to provide compensation aligned with employees' workloads, resulting in improved service quality.

4. Implications for Employee Performance

These cultural differences create distinct performance patterns. In Asia, although employee loyalty to the organization is high, unmanaged work stress often reduces the quality of their work (Kim & Egan, 2011). Meanwhile, employees in the Western exhibit more consistent performance due to better welfare support and compensation policies (Robbins & Judge, 2013).

Conclusion

Cultural differences between Asia and the Western significantly influence how employees in animal shelters respond to work stress and compensation, ultimately affecting their performance. The collectivist culture in Asia presents challenges such as a lack of welfare support, while the individualist culture in the Western provides a model that better supports employee well-being. To enhance employee performance in both regions, management policies need to consider these cultural dynamics.

Conflict of Interest

I certify that there is no conflict of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the manuscript.

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The Role of Animal Lovers' Communities in Advocating for Legal Protection Against Animal Cruelty

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Abstract

Animal violations manifest in various forms, often leaving laypeople uncertain of the appropriate course of action. The fear of a complicated reporting process and its potential repercussions discourages individuals from seeking legal recourse. This study analyzes existing legal frameworks protecting animal welfare and highlights the pivotal role of animal lover communities in supporting laypeople through a case report approach. Employing a qualitative methodology with descriptive approach, this study identifies gaps in public knowledge and confidence regarding legal reporting mechanisms. The findings reveal that while Criminal Code Article 302 provides protection against animal abuse, laypeople require advocacy and education from animal lovers' communities to effectively navigate the reporting process. These communities play a critical role in empowering individuals to act against cruelty. The strengthening of community networks can enhance legal advocacy and public awareness. Animal lovers are encouraged to join these communities to expand their knowledge and contribute to the collective efforts to address animal cruelty.

Keywords: Animal Advocacy, Legal Protection, Animal Cruelty, Community Support, Laypeople Education

Introduction

Animal torture and abuse constitute criminal acts that necessitate intervention by law enforcement authorities. The definitions of torture and abuse according to the KBBI (Indonesian Dictionary) are as follows:

1. Torture is defined as the process, method or act of inflicting suffering. Torture refers to punishing by causing suffering (injuring, mistreating, etc.), acting in a manner that causes suffering (injuring, mistreating, etc.), and acting cruelly towards others by inflicting harm (mistreating, etc.).

2. Abuse is defined as an arbitrary or unjust treatment (torture, oppression, etc.).

Meanwhile, according to KBBI, "hewan" and "binatang" are synonymous terms. Hewan is defined as binatang, while binatang refers to a living organism capable of movement (changing locations) and responding to stimuli, but lacks reasoning ability (such as dogs, buffaloes, and ants).

According to veterinarian Zulfikar Basrul Gandong, animal welfare can be assessed utilizing three indicators: physical well-being, mental health, and natural behavior (Febrianti et al., 2023). Efforts to enhance animal welfare in Indonesia have garnered increasing public attention. However, there remains limited actionable follow-up (Sari and Rasji, 2021), and public awareness regarding appropriate animal treatment remains insufficient (Irawan and Dwiprigitaningtias, 2019).

Article 1, Paragraph (3) of the 1945 Constitution declared Indonesia a rule of law state, affirming the country's commitment to justice. Consequently, law enforcement must be implemented appropriately and resolutely. Animal abuse is a violation that must be substantiated through legal processes. The resolution of criminal cases is the responsibility of law enforcement authorities to gather evidence by conducting investigations and inquiries to ensure that the defendant is subjected to appropriate punishment. Punishment can serve as a form of moral education for the offender with the objective of deterring recidivism (Maharani, 2020). Satjipto Rahardjo asserted that law enforcement is a process for actualizing legal aspirations (Rahardjo, 2000). The stage of lawmaking must be accompanied by tangible implementation in the quotidian life of society; only then can the law be effectively enforced (Irawan, 2019).

Animal welfare has received insufficient attention from the public and government of Indonesia. This deficiency has led to the emergence of animal advocacy groups that address concerns regarding animal welfare proponents. Animal welfare advocacy organizations aim to improve the condition and treatment of animals. Their activities encompass a range of interventions including sterilization, vaccination, animal rescue efforts, education, and advocacy (Marzuqi, 2018).

The presence of witnesses is crucial in resolving criminal cases. However, there is notable reluctance among individuals to assume the risks associated with providing testimony in criminal proceedings. The general public often lacks the legal knowledge possessed by those familiar with the law regarding the rights, obligations, and legal protections available to witnesses. Animal advocacy groups play a significant role in this context by supporting the enforcement of laws pertaining to animal abuse cases and assisting lay individuals in reporting animal cruelty incidents.

To the best of our knowledge, there is a dearth of research examining the assistance provided to individuals who serve as witnesses or victims in cases of animal abuse. Moreover, the role of animal advocacy groups in terms of their engagement with society as lay individuals has not been comprehensively studied. This study was conducted to elucidate the regulations applicable to perpetrators of animal abuse and to investigate the role of animal advocacy groups in providing support and advocacy for the general public.

Materials and Methods

This research employs a descriptive approach, wherein the objective is to provide a comprehensive overview of the subject under investigation based on the collected data, which is subsequently presented systematically in accordance with the facts pertaining to a specific field. The methodology utilized is qualitative, indicating that the research findings are articulated in a narrative format, emphasizing the events that transpired and the consequent impacts they generated.

Results and Discussion

The Criminal Law Act Regulating Animal Abuse

One of the legal statutes that can serve as a foundation for criminal proceedings in cases of animal abuse is Law No. 1 of 1946, concerning the Regulation on Criminal Law. The legislation delineated in the Criminal Code (Kitab Undang-Undang Hukum Pidana / KUHP) aims to provide legal measures to address such issues, enabling the state to impose appropriate punishments and sanctions on offenders. The articles pertaining to animal abuse/cruelty are as follows:

1. Article 70 bis stipulates that an offense under Article 302, Paragraph 1, is classified as a misdemeanor, and if imprisonment is imposed, the maximum duration of the sentence is eight months.
2. Article 170 stipulates that any individual who openly and collectively employs violence against a person or property is subject to a prison sentence of up to five years and six months. However, for those found culpable, the penalties are as follows: a prison sentence of up to seven years if it results in injury, a prison sentence of up to nine years if it results in serious injury, and a prison sentence of up to twelve years if it results in death.
3. Article 302 stipulates that a prison sentence of up to three months or a fine of up to four thousand five hundred rupiahs may be imposed for committing minor abuse against an animal. Actions that result in pain lasting more than a week, disability, serious injury, or death may lead to a prison sentence of up to nine months or a fine of up to 300 rupiahs due to animal abuse. Furthermore, the properties of the offending animal may be confiscated. This article is frequently cited in research on cases of animal abuse.
4. Article 540 stipulates that a prison sentence of up to eight days or a fine of up to two thousand two hundred fifty rupiahs may be imposed on any individual who utilizes an animal for work beyond its capacity, in a manner that causes pain and suffering to the animal, or on any individual who employs a lame, disabled, pregnant, or nursing animal for work under unsuitable conditions, and fails to provide adequate nutrition or hydration.

A person can be punished if they violate the legal provision for an act they have committed, which is subject to criminal penalties. This process cannot be easily carried out by anyone. Some elements must be fulfilled for someone to be considered to have committed a criminal offense. Article 302, Paragraph 1, Clause (1) of the Criminal Code (KUHP) explains that the elements of a crime include subjective and objective elements. Subjective elements include intentional actions. The elements included in the objective elements are

1. Anyone
2. Without a legitimate purpose
3. By exceeding limits to achieve a goal
4. Causing pain, injury, or harm to health
5. An animal

Formulation of a criminal offense involves the following elements:

1. Causing pain
2. Causing injury
3. Harming health
4. An animal

The prosecutor and the judge must be able to prove the following things:

1. The intent of the perpetrator to cause and inflict pain
2. The intent of the perpetrator to cause injury
3. The intent of the perpetrator to harm the animal's health
4. The knowledge of the perpetrator that their actions are directed at an animal.

If, during the evidentiary process, certain aspects do not align with the aforementioned statements, then the alleged perpetrator cannot be deemed culpable due to the absence of the requisite intent as stipulated under Article 302 of the Criminal Code (KUHP).

The nominal fine specified was applicable at the time of the regulation's enactment in 1946. The Criminal Code (Kitab Undang-Undang Hukum Pidana) underwent a revision in 2023, which will be implemented in 2026, three years subsequent to its promulgation. According to Law No. 1 of 2023 on the Criminal Code, three articles govern animal abuse:

1. Article 336 stipulates that imprisonment for up to six months or a maximum fine of IDR 10,000,000 may be imposed on any individual who:
 - a. Disturbs an animal in a manner that endangers human safety.
 - b. Disturbs an animal that is being ridden, pulling a cart or wagon, or transporting goods.
 - c. Fails to prevent an animal from attacking a person or other animals under their care

2. Article 337 stipulates that the penalty for animal abuse is imprisonment for up to one year or a fine of IDR 10,000,000 for any individual who injures or harms an animal or endangers its health beyond reasonable limits, or without justifiable purpose. If the act results in the animal suffering for more than one week, becoming disabled, sustaining severe injury, or dying, the perpetrator may be sentenced to up to one year and six months in prison or a fine of IDR 50,000,000. An animal owned by the perpetrator may be confiscated and transferred to an appropriate facility. This article is analogous to Article 302 of the Criminal Code.

3. Article 338 stipulates that a prison sentence of up to one year or a fine of up to IDR 10,000,000 may be imposed on any individual who (a). Utilizes and exploits an animal beyond its capacity, potentially harming its health, threatening its safety, or causing death; (b). Administers substances or medications that may jeopardize an animal's health (c). Exploits parts of the animal's body or organs for improper purposes

Articles in the Criminal Code (KUHP) explicitly regulate violence and cruelty towards animals. However, these regulations are not well comprehended and may even be unknown to the general populace. Those capable of grasping the purpose of regulations are typically law enforcement officers, legal practitioners, and individuals with relevant education and communication skills. Consequently, these regulations are less effective in terms of enforcement and application.

Legal Protection for Victims or Witnesses Reporting Animal Abuse Crimes

Law No. 13 of 2006 on Witness and Victim Protection stipulates that a witness is an individual who can provide testimony for the purposes of investigation, prosecution, and examination in court regarding a criminal act that they have witnessed, observed, or personally experienced. Conversely, a reporter is defined as an individual who provides a report, information, or statement to law enforcement regarding a crime that is imminent, in progress, or that has already occurred. However, the legislation does not explicitly address whether an individual who reports a criminal offense such as violence, torture, or animal abuse is entitled to legal protection under this statute.

The Role of Animal Lovers' Communities

A community is a social group characterized by shared interests and common objectives. Individuals within a community possess similar intentions, beliefs, needs, and other attributes. Syahyuti (2005) elucidates that the term "community" originates from the Latin words "cum," signifying togetherness, and "munus," denoting mutual giving. Wenger, McDermott, and Snyder (2002) defined a community as a collective of individuals who share concerns or interests with one another and deepen these through knowledge, fostering ongoing interaction. An alternative perspective by Soenarno and Rahmawati posits that a community is the identification of social interactions constructed on various dimensions of functional needs (An'nisa, 2022).

Communities play a crucial role in supporting reporters, particularly victims and witnesses, when incidents occur. A community functioning as a supporter fulfills three primary functions: facilitator, educator, and representative of society. Additionally, there are supplementary roles, wherein the support person assumes a technical role for the reporter they are assisting. The fundamental task of the supporter was to facilitate the resolution of the reporter's problems. The five essential activities undertaken to provide assistance were as follows (Susantyo et al., 2018):

1. Providing Motivation: The objective is to offer an understanding of the value of cohesion, social interaction, and empowerment through an awareness of the reporter's rights as a member of society.
2. Raising Awareness and Training Skills: This entails combining knowledge development with the individual's capacity to address a problem.
3. Self-Management: The group must demonstrate the ability to select leaders and manage its activities independently.
4. Mobilizing Resources: This method involves aggregating individual resources to create social capital that ensures ownership and sustainable management.
5. Building and Developing Networks: This ensures that each member has the ability to establish and maintain networks, thus enhancing their skills and interactions within the community

Based on these points, it is clear that communities play an important role for individuals. For laypeople as animal lovers, animal lover communities can serve as a means to gain in-depth information. A community made up of individuals from various educational backgrounds can share knowledge with each other due to their shared interest in animals.

Animal lover communities take at least three essential activities for laypeople, namely:

1. Providing information to fellow animal lovers on matters such as cases of abuse, vaccination or sterilization, lost and found animals, or other activities related to animal welfare.
2. Sharing knowledge among individuals regarding everything related to animal welfare.
3. Building networks among fellow animal lovers to become more connected and united in order to enhance animal welfare.

Case Report of Animal Cruelty with Animal Lovers' Community Advocacy

In 2019, an incident of animal cruelty occurred in the Central Jakarta area, wherein the defendant Aris Tangkelabi administered caustic soda to six puppies belonging to Jelli, his sister-in-law. According to the Central Jakarta District Court Decision Number 101/Pid. Sus/2020/PN Jkt.Pst 75, the defendant was found guilty of animal abuse, resulting in the death of five out of the six puppies. Consequently, the defendant received a sentence of three (three) months' probation and a fine of IDR 1,000,000 (one million rupiahs) (Maharani, 2020). Jally, the owner of the puppies, sought assistance from Natha Satwa Nusantara. Subsequently, the Natha Satwa Nusantara Foundation reported the case with the expectation that the defendant, Aris, would receive a more severe sentence than that imposed by the judge.

Another incident transpired in Bali in 2023, involving the abduction of a dog named Ila by two individuals for consumption. Animal Defenders Indonesia, acting as advocates in this case, successfully secured a 2-month prison sentence for Dani, one of the defendants. Putu remains classified as a fugitive (DPO-Daftar Pencarian Orang) at present. This case published in Animal Defender Instagram.

The most recent case in 2024 concerning illicit trade in dogs is currently being addressed by the Animal Hope Shelter Indonesia. Canines were collected from the Sragen area for sale and consumption. The incident commenced in December 2023, following a report accompanied by video evidence depicting a truck with an open cargo bed containing numerous dogs, presumably destined for slaughter (Puspapertiwi, 2023). This case garnered significant attention and heightened public awareness of critical animal welfare issues in Indonesia. As of November 2024, with the assistance of the Animal Hope Shelter, an investigation to identify those responsible for the dog trade remains ongoing.

Based on the aforementioned cases, it is evident that communities play a crucial role in providing support when animal abuse incidents occur. Animal advocacy groups comprise individuals with expertise in various fields who share a common concern for animal welfare. This collective effort has enabled the general public to report cases of animal abuse with increased confidence.

Conclusion

1. Violence against animals in any form constitutes a criminal offense that may be subject to sanctions in accordance with the provisions delineated in the former Criminal Code (Kitab Undang-Undang Hukum Pidana) under Articles 302 and 540, as well as the revised Criminal Code under Articles 336, 337, and 338.
2. Animal welfare advocacy organizations fulfill a critical societal function by providing support and representation for individuals reporting incidents of animal cruelty or those affected by such acts. Moreover, these organizations play a significant role in raising public awareness and disseminating comprehensive information regarding animal welfare issues. These organizations collaborate closely with law enforcement agencies to facilitate thorough investigations and effective prosecutions of animal cruelty cases. Moreover, they frequently offer shelter and rehabilitation services for rescued animals, with the ultimate goal of facilitating their adoption or reintroduction into appropriate habitats. Additionally, animal welfare advocacy groups actively engage in lobbying efforts to enhance existing legislation and promote the implementation of more comprehensive animal protection laws.

Conflict of Interest

We certify that there are no conflicts of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the manuscript.

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Analysis of “Five Domains Model of Animal Welfare” in Whale Sharks Ecotourism in Indonesia

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Abstract

The whale shark (*Rhincodon typus*) is a species of the subclass Elasmobranchii and is the largest fish in the world. Due to their migratory patterns to plankton-rich coastal waters, whale sharks are becoming a major ecotourism attraction in tropical regions, including Indonesia. This ecotourism generates profits of up to hundreds of billions of rupiah per year. However, ecotourism practices are suspected to have a negative impact on the welfare and sustainability of whale shark populations. This study aims to analyze the impact of ecotourism activities in Indonesia on five aspects of whale sharks welfare, referring to the Five Domains Model of Animal Welfare. In addition, this research also aims to analyze solutions that can be applied so that whale shark ecotourism in Indonesia can not only provide economic benefits but also maintain the sustainability of the whale shark population and welfare. The method used is a literature study by comparing the results of whale shark research in various countries, as well as animal welfare analysis that refers to the Five Domains Model. The results show that ecotourism activities with poor regulation have negative impacts on whale sharks, such as injuries, pathogen infections, nutritional deficiencies, increased body temperature, loss of natural behavior, and expression of stress. These negative impacts indicate that the five aspects of animal welfare in the Five Domains Model, which include nutrition, environment, health, behavior, and mental stat, are not being met. To address these whale shark welfare issues, the regulation of whale shark ecotourism in Indonesia needs to be improved. Indonesia should adopt better whale shark ecotourism practices, such as in Ningaloo Reef, which is the baseline for various whale shark ecotourism in the world. Some of these practices are limiting operator licenses, tightening regulations, emphasizing education, ecosystem restoration, and implementing conservation fees. Good and sustainable ecotourism will provide economic benefits for the community while still paying attention to the welfare aspects of these endangered whale sharks.

Keywords: Whale Sharks, Ecotourism, Animal Welfare, Five Domains Model.

Introduction

The whale shark (*Rhincodon typus*) is the largest fish species in the world. Whale sharks body length reaches 18 meters to 20 meters, larger than the size of a school bus. The body weight of the whale shark can reach up to 34 tons. This shark is characterized by white spotted pattern on the dark dorsal skin, while the ventral skin is brightly colored. This white spotted pattern is used as an identification indicator between individual whale sharks. The whale shark's skin is very thick, consisting of a firm, pigmented epidermis, in which the denticles are embedded, and a very thick, supple, white dermis with dense, collagenous connective tissue. The whale shark's body is spindle-shaped and fusiform, with the widest part in the center and increasingly pointed towards the ends (Rowat & Brooks, 2012). The whale shark's caudal fin is heterocercal, where the upper lobe is larger than the lower lobe (Dove & Pierce, 2022). This species belongs to the class Chondrichthyes, subclass Elasmobranchii, order Orectolobiformes, and family Rhincodontidae (Pierce & Norman, 2016).

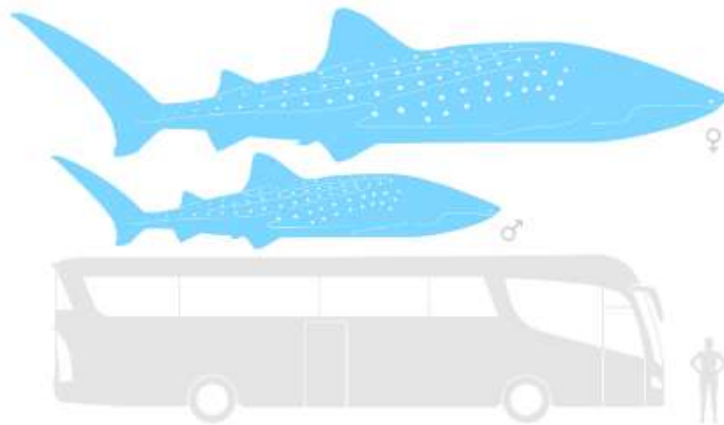


Figure 1. Whale Sharks Size Comparison

[Source: EL PAIS Science, 2023]

Whale sharks are filter-feeders, which means they swim with their mouths open to filter out food particles or small organisms in the water column. Whale sharks have a broad, flattened head and a terminal mouth that can measure more than 1.5 meters across. The whale shark's mouth contains up to 300 rows of small teeth, as well as 20 specialized filter pads designed to filter plankton and small fish from the water. The filtering of food is done by swimming with the mouth open. They use modified gill combs to filter prey as the water flows through their gills. The main prey of whale sharks are zooplankton, such as copepods, sergestid shrimp, mysid shrimp, crab larvae and fish eggs. In addition, whale sharks also prey on nekton such as small fish and squid (Legaspi et al., 2020; Montero-Quintana et al., 2020; Dove & Pierce, 2022).

Whale sharks live in tropical to subtropical seas around the world, usually between latitudes 30° N and 30° S (Rowat & Brooks, 2012). They are often found in surface waters or are pelagic. Whale sharks prefer warm seawater temperatures, between 21 and 30 degrees Celsius (Adisubroto & Pardede, 2021). To adapt to changes in temperature and the dynamic distribution of food availability, whale sharks perform seasonal migrations and aggregations in certain areas. Significant whale shark aggregations have been observed in areas such as Australia, Mexico, Indonesia, Philippines, Belize, Mozambique, Djibouti, Maldives and Seychelles (Djunaidi et al., 2020). Whale sharks can travel thousands of kilometers each year. Due to their predictable migration and aggregation patterns, whale sharks have become a popular tourist attraction in several tropical countries, including Indonesia. Because they tend to be docile and harmless, tourists can interact with whale sharks, such as observing from a boat and swimming with whale sharks (Araujo et al., 2014; Legaspi et al., 2020; Adisubroto & Pardede, 2021).

In Indonesia, there are a number of whale shark ecotourism destinations, namely in Probolinggo, Gorontalo, Teluk Saleh, Kaimana, and Teluk Cendrawasih (Djunaidi et al., 2020). One of the most famous, easily accessible, and relatively cheap is the whale shark ecotourism in Botubarani, Gorontalo. Since 2017, the presence of 20 individual whale sharks has been recorded in this region (Adisubroto & Pardede, 2021). To see whale sharks, tourists only need to cross the waters as far as 50 meters from the shoreline by boat. Because they tend to be docile and harmless, tourists can experience the sensation of observing whale sharks at close range, swimming or diving with whale sharks, and even feeding whale sharks. Whale sharks can be observed throughout the year, the peak being from May to July. The ecotourism has been running for the past few years and generates considerable economic benefits. Profits from Botubarani whale shark ecotourism have been recorded at Rp 250,000,000,000 per year or around Rp 21,000,000,000 per month (Djunaidi et al., 2020).



Figure 2. Whale Sharks Ecotourism in Botubarani, Gorontalo

[Source: Trip Advisor, 2024]

Despite the huge benefits, whale shark ecotourism is controversial because it is thought to interfere with animal welfare aspects for whale sharks (Montero-Quintana et al., 2020). According to the World Organization of Animal Health, animal welfare is the physical and mental condition of animals in relation to the conditions in which they live or die. According to World Animal Protection, animal welfare is good when the animal is healthy, fit, free to express natural behavior, free from suffering, and in a positive state of well-being. According to Law Number 18 of 2009, animal welfare is all matters relating to the physical and mental state of animals according to the size of the natural behavior of animals that need to be applied and enforced to protect animals from improper treatment of animals (Animal Friends Jogja, 2019). Animal welfare can be measured by the Five Domains Model of Animal Welfare concept created by David Mellor. The Five Domains describe the important rights that animals must obtain to achieve their welfare. Quoted from the World Animal Protection article, the Five Domains Model consists of:

1. Nutrition
2. Environment
3. Health
4. Behavior
5. Mental State

The five elements of animal welfare are interrelated and will affect all factors if one is not met or disturbed. Animal welfare principles apply to all animals, from pets, farm animals, wild animals, to animals that are dangerous to humans (Animal Friends Jogja, 2019). Therefore, whale sharks as aquatic and wild animals also deserve welfare. Unfortunately, several studies have shown that ecotourism activities can interfere with the welfare of whale sharks. In addition, whale sharks have been categorized as protected and endangered animals (Pierce & Norman, 2016; Adisubroto & Pardede, 2021).

Since 2002, whale sharks have been categorized in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which is a class of species that are not currently threatened with extinction but will become endangered if trade is not controlled (Adisubroto & Pardede, 2021). In 2022, whale sharks were categorized as Endangered on the IUCN Red List of Threatened Species. Based on research conducted by the Safina Center, the global whale shark population is currently around 119,000 to 238,000, which has decreased by more than 50% in the last 75 years. This decline is particularly pronounced in the Indo-Pacific region, where the population has plummeted by around 63%. This population decline is due to intentional or unintentional capture, ship collisions, and unsustainable ecotourism (Pierce & Norman, 2016; The Safina Center). In Indonesia, based on Ministerial Decree Number 18 of 2013, whale sharks are categorized as protected species. However, research on whale sharks in Indonesia is still rare (Adisubroto & Pardede, 2021).

Whale shark research in Indonesia is quite important to be conducted and developed because Indonesia is a tropical country that is a migration route for whale sharks. Whale sharks also play an important role in maintaining the balance of the ecosystem, especially for controlling the population of plankton and other small animals that become their prey. Conservation efforts are urgently needed to address this threat. These efforts include raising awareness among local communities, whale shark research, implementing sustainable ecotourism practices, and strengthening legal regulations regarding whale sharks (Pierce & Norman, 2016). In addition to maintaining whale shark populations, conservation-minded ecotourism also provides sustainable economic benefits to communities (Legaspi et al., 2020; Adisubroto & Pardede, 2021)

This research aims to analyze the impact of ecotourism activities on the five aspects of welfare in whale sharks in the Five Domains Model of Animal Welfare. In addition, this research also aims to analyze solutions that can be applied so that whale shark ecotourism in Indonesia can not only provide economic benefits but also maintain the sustainability of whale shark populations and welfare.

Materials and Methods

This research was conducted with literature studies from internet, such as books, articles, journals and other sources to explore data on the negative impacts of ecotourism on whale shark welfare. Because the lack of data on whale shark research in Indonesia, researcher used research data in other countries, which have the application of whale shark ecotourism similar to that in Indonesia, as a reference in analyzing biological aspects of whale sharks, such as health, physiology, and behavior. The animal welfare analysis is referring to the Five Domains Model of Animal Welfare that was developed by David Mellor. To analyze the implementation of more sustainable ecotourism solutions, researcher compared the whale shark ecotourism regulatory system in Indonesia and in other countries that have more structured whale shark ecotourism regulations.

Results and Discussions

Negative Impacts of Ecotourism Activities on Whale Sharks

Whale shark ecotourism, particularly in Indonesia, includes whale shark feeding activities. This feeding activity causes whale sharks to have a tendency to settle in ecotourism sites rather than migrate (Araujo et al., 2014).

Tabel 1. Residency Duration of Whale Sharks in Oslob (Araujo et al., 2014)

	Non-fed Whale Sharks	Fed Whale Sharks
Residency Duration Mean	22 days	45 days
Longest Residency Duration	63 days	572 days

A study in the ecotourism site of Oslob, Philippines showed that fed whale sharks had a longer stay compared to unfed whale sharks. Unfed whale sharks had an average duration of presence of 22 to 63 days. Meanwhile, fed whale sharks have an average duration of presence of 45 days, with some individuals reaching 572 days. This longer duration of presence will increase the duration of interactions with humans, which can lead to a variety of negative impacts on whale shark welfare (Araujo et al., 2014). Here are the explanation of those negative impacts.

1. Injuries

Studies in Oslob revealed the presence of wounds on the bodies of whale sharks in ecotourism sites. The length of time whale sharks spend at the surface during feeding caused injuries due to friction with boats or boat propellers (Araujo et al., 2014). A study in the South Ari Marine Protected Area also showed that 76% of the 708 whale sharks identified were injured. During whale shark aggregation season, limited areas of ecotourism waters become heavily congested with whale sharks, tourists and boats. This can increase the risk of injury from physical contact between whale sharks or with tourists and boats (Thomson et al., 2017)



Figure 3. Whale Sharks Scars

[Source; Araujo et al., 2014]

Whale sharks that are accustomed to being fed will also associate boats as a food source. This leads whale sharks to approach fishing boats that could harm or injure them (Voa Indonesia, 2023).

2. Pathogens Transfer and Infection

Contact between humans and whale shark skin will increase the risk of pathogen transfer to whale sharks (Scuba Junkie, 2024). In addition, fish have a protective mucou layer on their skin. Contact with humans will damage this protective layer, making whale sharks vulnerable to infection (Pacific Rim, 2018).

3. Nutrition Deficiency

The feed provided by humans is usually fish bait or krill shrimp on a continuous basis. This type of feeding does not provide the proper nutrition that whale sharks eat in nature. In the long term, whale sharks can experience health problems due to nutritional imbalances (Scuba Junkie, 2024).

4. Increasing Body Temperature

AL study in Oslob showed that whale sharks spend six times more time at the surface of the water when at feeding sites. The long duration in the warm water causes the whale shark's body temperature to increase. An Increase In in body temperature is followed by a 7.3% increase in metabolic rate, which can lead to a waste of energy (Araujo et al. 2020).

5. lost the Natural Foraging Behavior

A study in the Gulf of Baja California, Mexico ecotourism site showed that whale sharks were 24% more likely to forage before human disturbance than after. This proves that the presence of humans has a negative effect on whale shark feeding behavior and can reduce food intake as an energy source (Montero-Quintana et al., 2020).

When fed by humans, whale sharks become accustomed to eating and swimming vertically. This way of swimming consumes more energy (Mongabay, 2023). In addition, the transition from a vertical position to swimming is more energy-consuming than swimming from an already free-swimming position (Schleimer, 2015).

6. Stress

A study at the Gulf of Baja California, Mexico ecotourism site revealed that whale sharks increase alertness and stress after being approached by swimmers or boats. Some of the behaviors that indicate stress are changing direction, accelerating swimming, or diving suddenly after receiving disturbance. During the observation period in this study, whale sharks also did not show habituation, but continued to exhibit stressful behaviors when disturbed. This suggests that disturbance from humans or vessels can disrupt the natural behavior of whale sharks and cause stress (Montero-Quintana et al., 2020). Stressed whale sharks tend to lose their appetite, reducing their energy intake and decreasing their desire to reproduce (Gatra & Furqan, 2024). The number of disturbances from humans or boats arises because of the lack of strict ecotourism regulations, low tourist compliance with regulations, and low tourist awareness of whale shark welfare. As many as 93% of surveys conducted in Philippine whale shark ecotourism showed that tourists did not stay more than 2 meters away as required by regulations (Legaspi et al, 2020).

However, the long-term impacts of ecotourism activities on whale sharks remain unclear. This is due to the limited number of individuals that can be observed, unknown reproductive behavior, and long lifespans (Pacific Rim, 2018).

Non-fulfillment of the Five Domains Model of Animal Welfare

The various negative impacts that have been shown indicate that the five aspects of animal welfare in the Five Domains Model are not fulfilled. The following is an explanation of the misalignment of whale shark ecotourism with the Five Domains Model of Animal Welfare.

1. Nutrition

The nutrition domain explains that animals should have access to unlimited, sufficient, species specific, nutritionally balanced, varied and clean food and water (World Animal Protection).

In ecotourism in Indonesia, whale sharks are often fed to lure them in. Human feeding, which is dominated by the same type of food every day, cannot provide a balanced diet for whale sharks as it would in nature (Scuba Junkie, 2024).

2. Environment

The Environment domain explains that animals should have a comfortable environment in terms of temperature, substrate, space, air, odor, noise, and predictability (World Animal Protection).

The density of ecotourism sites means that whale sharks receive a lot of disturbance from crowds of tourists and boats. Ecotourism sites are prone to pollutants, such as compounds in sunscreen that can damage the mucous layer of whale shark skin. The amount of plastic waste pollution in coastal areas is also harmful to whale sharks (The Safina Center, 2022).

3. Health

Domain Health specifies that animals must be in good health, disease and injury can be prevented or treated appropriately (World Animal Protection).

In ecotourism sites, it is a sad fact that most whale sharks have wounds or scratches due to boat friction or boat propellers (Araujo et al, 2014; The Safina Center, 2022). Unstrict regulations and low tourist awareness lead to physical contact between humans and whale sharks. This physical contact increases the chance of pathogen transfer from humans or vice versa. Physical contact from humans can also damage the mucous layer of whale shark skin, making whale sharks more susceptible to infection (Pacific Rim, 2018; The Safina Center, 2022; Scuba Junkie, 2024).

4. Behavior

The Behavior Domain explains that animals are free to express a variety of natural behaviors such as exploration, foraging, socializing, playing, retreating, and others (World Animal Protection).

Whale sharks in ecotourism sites become dependent on human feeding. This causes whale sharks to associate vessels as a food source, including dangerous hunting or fishing boats (Voa Indonesia, 2023). Whale sharks may also lose their natural foraging behavior, which will reduce their food intake and fitness (Montero-Quintana et al., 2020).

In ecotourism sites, whale sharks spend more time in the water surface area, which will increase their body temperature and metabolic rate. A high metabolic rate will cause a waste of energy in whale sharks (Araujo et al. 2020). When feeding, whale sharks will often swim in a vertical position. The vertical swimming position consumes more energy than swimming in a normal position (Schleimer, 2015; Mongabay, 2023).

5. Mental State

With the fulfillment of the previous four domains, an animal's mental state will be dominated by positive states, such as pleasure, comfort, and vitality, while reducing negative states such as fear, frustration, hunger, pain, or boredom (World Animal Protection).

Research shows that in ecotourism sites, whale shark welfare is often not met in terms of nutrition, environment, health and behavior. Unfulfillment of these four domains leads to poor mental state. After being approached by swimmers or boats, whale sharks exhibit an alert or stressed attitude. Stress is indicated by the behavior of changing direction, accelerating swimming, and diving suddenly (Montero-Quintana et al., 2020). Stressful conditions will cause whale sharks to lose their appetite and be reluctant to reproduce (Gatra & Furqan, 2024).

Analysis of Sustainable Whale Shark Ecotourism Solutions

As a tropical country, Indonesia benefits greatly from whale shark ecotourism. However, the animal's status is endangered as its population continues to decline. Therefore, the Ministry of Maritime Affairs and Fisheries (KKP) issued the National Action Plan for Whale Shark Conservation 2021 - 2025 (NAP Whale Shark) through the issuance of the Minister of Maritime Affairs and Fisheries Decree No. 16 of 2021. This plan contains various strategies for whale shark protection efforts, one of which is to realize community-based sustainable whale shark tourism inside and outside conservation areas. The Director General of Marine Spatial Management also issued Technical Guidelines for the Implementation of Whale Shark Tourism through Decree No. 41 of 2022 (Gatra & Furqan, 2024).

But in its implementation, clear and strict regulations have not been applied to whale shark ecotourism in Indonesia. Weak regulations and low public awareness have caused ecotourism activities to pay little attention to the conservation and welfare of whale sharks. There are many violations in ecotourism sites, such as tourists not keeping their distance from whale sharks, touching or even riding whale sharks, and feeding whale sharks. Some ecotourism operators also do not enforce the conservation fee, and do not limit the number of tourists or boats so that the ecotourism site becomes overcrowded and endangers whale sharks (Gatra & Furqan, 2024).

To find solutions for the implementation of sustainable whale shark ecotourism in Indonesia, Indonesia should adopt the system implemented in whale shark ecotourism in developed countries (Voa Indonesia, 2023). Therefore, in this study, a comparison was made with the regulation of whale shark ecotourism in Ningaloo Reef, Australia. Ningaloo Reef is a world-renowned whale shark ecotourism destination and one of the oldest. At this location, whale shark ecotourism is well regulated and takes into account conservation and animal welfare. Ningaloo Reef is also used as a baseline for other whale shark ecotourism sites around the world (Korman, 2015). The following are some of the regulations implemented at Ningaloo Reef whale shark ecotourism.

1. Ecotourism Operator License

At Ningaloo Reef, ecotourism operators must have a license. The license is selectively granted by the Department of Environmental Conservation. That way, those who can have a license are those who are truly committed to protecting the nature, including the whale sharks welfare and conservation (Korman, 2015). In view of this, ecotourism licenses in Indonesia should be more restricted and standardized by the national government.

2. Tighten Regulation and Code of Conduct

The regulation of whale shark ecotourism in Indonesia does not yet have national standards, but only based on regulations from local governments and local communities. Mahardika Rizqi Himawan, Whale Shark Indonesia project leader, said the management of the new tourist attraction should come under a single organization capable of watching over the protected animals, which are prone to extinction (The Jakarta Post, 2016). In Ningaloo Reef, whale sharks ecotourism is directly supervised by the Department of Land Conservation and Management and Department of Environmental Conservation (Gatra & Furqan, 2024). That way, whale shark ecotourism will have regulations that can be strictly enforced and structured.

Whale shark ecotourism in Indonesia, in Gorontalo for example, already has an COCs or code of conduct in interacting with whale sharks. The code of conduct includes maintaining a distance of about 3 meters from the head and four meters from the tail, not touching, and not provoking. But in practice, there are still many mischievous tourists who break the rules. Indonesia needs to fix this so that whale shark ecotourism regulations and public awareness can be strengthened. In developed countries, whale shark ecotourism COCs are presented in an attractive form, such as with videos or posters. Tour guides also actively educate and always remind tourists to comply with existing regulations to respect the welfare of whale sharks (Voa Indonesia, 2023).

3. Staff and Tourist Education

At Ningaloo Reef, staff received training and courses from DEC (Department of Environmental Conservation) about whale sharks to ensure they can educate tourists with accurate information. While on the vessel, staffs presented the information to the tourists, including biological, ecological, and conservation of whale sharks. Handouts for tourists are also provided to increase awareness and compliance with conservation guidelines (Korman, 2015). Good educational methods should be implemented in Indonesian ecotourisms.

4. Restoring the Whole Ecosystem

Restoring the entire ecosystem, including coral reefs, mangroves, and seagrass, is crucial. This allows for varied tourism activities such as snorkeling, mangrove tours, and bird watching, with whale shark sightings as an added bonus. A healthier ecosystem could also attract more whale sharks for foraging, reducing the need for provisioning. In this way, provisioning can be reduced or even stopped (Korman, 2015).

5. Conservation Fee

In Australia, ecotourism operators charge extra for conservation fee. In other words, tourists must pay Payment for Environmental Services (PES). By paying PES, it is hoped that tourists can help support whale shark conservation efforts so as to create sustainable ecotourism with attention to conservation aspects (Voa Indonesia, 2023).

Whale shark ecotourism ticket prices in Indonesia vary by region. The price range per person is from tens to hundreds of thousands of rupiah (CNBC Indonesia, 2024; detikBali, 2024). However, there are some ecotourism operators that do not apply conservation fees (Gatra & Furqan, 2024).

Conclusions

This research shows that ecotourism activities in Indonesia do not have good regulations yet, which have a negative impact on whale sharks, such as causing wounds, risk of pathogen infection, lack of nutrition, increased body temperature, disruption of natural behavior, and experiencing stress. These negative impacts indicate that the five elements of the Five Domain Model of Animal Welfare are not being fulfilled; nutrition, environment, health, behavior, and mental state.

As a solution, Indonesia should adopt better whale shark ecotourism regulations, for example in Ningaloo Reef, Australia. Some things that can be adopted are license requirements for ecotourism operators, strengthening regulations and reinforcing the Code of Conduct, emphasizing education for operators and tourists, conducting ecosystem restoration, and enforcing conservation fees.

Despite the huge economic benefits of whale shark ecotourism and the lack of evidence of long-term impacts on whale sharks, conservation efforts must be made to maintain the welfare and sustainability of endangered whale shark populations (Pacific Rim, 2018). This effort requires contributions from various stakeholders, ranging from the central government, local government, tour operators, non-government organizations, academics, to local communities (Gatra & Furqan, 2024)

Conflict of Interest

We certify that there is no conflict of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the manuscript.

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Government Officials' Involvement in the Illegal Wild Animal Possession: What Can We Do When The Protectors are Among the Offenders?

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Abstract

Endangered wild animals are protected by law to prevent their extinction, yet they continue to face threats from hunting and the illegal pet trade. The dilemma lies in the disturbing reality that, in some cases, buyers of these protected species are government officials themselves—a fact highlighted by recent viral news stories. This raises critical questions about the effectiveness of law regulation. How can we ensure the survival of these precious species if those who are supposed to understand law the most are among the offenders? This paper explores the inadequacy of legal measures alone in curbing illegal wild animal trade, especially when government officials participate in this activity despite clear legal prohibitions. This study suggests that public accountability through social stigma may offer a more effective approach. By publicly exposing these violations, we can create an environment where possessing endangered wild animals is not a mark of status but a source of shame, pressuring offenders to return animals to conservation authorities. Public involvement is essential in establishing a culture that discourages the private possession of endangered species, fostering a societal norm where the conservation of wild animals is respected and reinforced not only by law but by collective ethical standards.

Keywords: Endangered wild animal, protected species, law, ethics

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Introduction

Wild animals play a critical role in maintaining the balance of ecosystems. Each species contributes to the intricate function of nature, whether through pollination (Lacher et al., 2019), seed dispersal (Fuzessy et al., 2016; McConkey, 2018), or to stabilize the food chain (Ali and Chakravarty, 2015). However, many wild animal species are now endangered due to habitat loss, deforestation, climate change, and poaching (Bowyer et al., 2019). The consequences of losing these species extend beyond biodiversity loss; they threaten the stability of ecosystems and the services they provide to humanity. Therefore, endangered wild animals must be protected by preserving them in their habitat through conservation efforts (Bolam et al., 2020) as well as the proper implementation of law and regulation (Woinarski et al., 2017).

In Indonesia, the law strictly forbids the possession of protected endangered wild animals, recognizing the importance of conserving these species. Based on Law Number 5 of 1990 regarding Conservation of Natural Resources and their Ecosystems, no one is permitted to capture, injure, kill, keep, possess, maintain, transport, and trade protected animals alive or dead (Undang-Undang No. 5 Tahun 1990, article 21, paragraph 2). Offenders who illegally keep such animals can face severe penalties, including imprisonment for up to five years and fines reaching up to 100 million Rupiah (Undang-Undang No. 5 Tahun 1990, article 40, paragraph 2). This legal framework highlights Indonesia's seriousness in the effort to protect endangered wild animals.

Despite these regulations, recent viral news stories have unveiled troubling instances of government officials possessing protected wild animals illegally (Garda Animalia, 2022; Maulana, 2022). Many of these revelations emerged on social media, with similar patterns of the owner seemingly showing off their unusual "pet". This is a common trend circulating the social media, where wild animals are used as symbols of status and luxury (Tricorache and Stiles, 2020). However, when the person committing it is a government official and the animal itself is a protected species, surely it prompts public outcry. It also has the potential of causing a sense of unfairness or distrust, and threatens the foundation of law in society (Myung, 2022). These incidents paint a troubling picture: even those who are well aware of the law may still engage in illegal activities.

This paper examines potential strategies that can be conducted by the public to highlight and seek justice against a select few "misguided" government officials involved in the illegal trade and possession of protected wild animals. By examining past incidents, we can explore possibilities to enforce better law enforcement, accountability, and eventually protect the endangered wild animals.

Materials and Methods

The methods employed in this study consisted of a literature review and an exploratory descriptive approach. These methods were utilized to investigate the phenomena related to government officials' involvement in the illegal possession of protected wild animals. This study aims to examine the prevalence of such activities and the public's response through social media. The literature review was conducted to assess the already published mainstream news surrounding government officials involved in the illegal possession of protected wild animals, specific to Indonesia and for endemic species only. The identity of each government official will not be mentioned in detail, to secure anonymity and objectivity. Once the data is collected, it will be analysed to generate results: who disclosed the news, reported to authorities, and whether or not changes occurred. It would then highlight the need for public accountability and demand for government officials as a whole to unite and give a good example in the efforts to support the proper wild animal conservation.

Results and Discussion

The illegal trade and possession of protected wild animals in Indonesia remains a significant concern. It is made worse when high-ranking government officials are involved. Several recent cases between the years of 2020 and 2024 have highlighted this troubling trend, revealing a disconnect between those tasked with enforcing wildlife protection laws and their own actions that showed otherwise.

In 2020, a government official from Pelalawan, Riau Province, Indonesia, made the headline of owning an infant gibbon (Santoso, 2020; Syukur, 2020). The news caught the social media when the government official uploaded a video of himself "playing" with the gibbon, by taunting the gibbon to his pet dog. Not long after the news was made public, the gibbon was found to be dead. The information was not clear whether or not the passing of the gibbon had any correlation with the previous activities; however, it caused public outcry. Further investigation showed that aside from the deceased gibbon, the government official also possessed an endangered slow loris and an endangered estuarine crocodile, which ended up being confiscated by the authorities (Syukur, 2020).

In 2021, a government official in Badung, Bali, Indonesia faced backlash after he posted a content of himself playing with an infant siamang gibbon (Suadnyana, 2021). After the content became viral, the official surrendered the siamang gibbon to the Bali Natural Resources Conservation Agency (BKSDA). The BKSDA highlighted that the siamang gibbon kept by the official was indeed illegal, because siamang gibbons are not native to Bali and therefore must be smuggled illegally.

Also in 2021, several protected wild birds were confiscated from the residence of a government official in Aceh, Indonesia (Saifullah, 2021). Authorities found one golden hornbill (*Rhyticeros undulatus*), one black eagle (*Uctinaetus malaynesis*), four white-bellied kites (*Haliastur indus*), and three crested kites (*Nisaetus cirrhatus*). Further investigation was conducted to find out how these wild birds could be kept in the official's residence illegally.

In 2022, a government official in North Sumatra, Indonesia, was criticized for uploading a content of himself owning a golden cat to his social media (Iswinarno, 2022). The golden cat might look like an ordinary house cat at first glance; however, it is actually a species of protected wild animal from the Felidae family. Again, the news went viral and caused public condemnation that a government official should not keep a protected wild animal.

Also in 2022, a government official from Siak, Riau Province, Indonesia, was also found to be in possession of a gibbon that was kept in a cage in his property (Garda Animalia, 2022). The government official claimed that he did not know that the wild animal is from a protected species, and that it was a gift from a friend. The gibbon was later confiscated by authorities.

Again, in 2022, a former government official from Bener Meriah, Aceh, Indonesia, was involved in the possession and trade of skin and bones of an endangered Sumatran Tiger (*Panthera tigris sumatrae*). The case was conducted from information by a local, who claimed there was someone offering to sell a tiger skin. Eventually, authorities confiscated one entire skin of a Sumatran Tiger and its bones, excluding the fangs (Garda Animalia, 2022).

In another case in 2022, a government official in Langkat, Aceh, Indonesia was arrested for the suspected case of human trafficking as well as possession of several protected wild animals in his residence (Garda Animalia, 2022). The protected wild animals found and was later confiscated were one Sumatran orangutan (*Pongo abelii*), one Sulawesi black monkey (*Cynopithecus niger*), one Javan hawk-eagle (*Spizaetus cirrhatus*), two Bali starlings (*Leucopsar rothschildi*), and two myna (*Gracula religiosa*).

These cases reveal a stark reality: those who are supposed to understand and uphold law the most, are sometimes among the offenders. These cases also highlight a striking disconnect between the strictness of written law and its enforcement. Offenders often claim ignorance that they are unaware that the animals they kept are protected, as if the laws were not strict in the first place. Why would anyone dare to commit actions that could lead to severe punishment? Perhaps the penalties aren't intimidating enough, or maybe they believe themselves immune to the law. Either way, this apparent disregard underscores the need for stronger awareness and accountability measures.

However, it is worth noting that these cases were perpetuated only by a small percentage of government officials and do not reflect government officials as a whole. Although, it still has the potential to undermine public trust in governmental institutions; as the common saying goes, "It takes only a few bad apples to spoil the whole barrel." We surely do not want the public to have a distrust of their own government. Furthermore, it threatens the conservation efforts needed to protect Indonesia's endangered wild animals. One could argue, it might fuel the illegal wild animal trade even more with the notion: if government officials can do it, then civilians can do it too.

So, what can we learn from this situation? Based on these past incidents, we noticed that most of the illegally owned endangered wild animals are known to the public through social media. Then, social media users or the public would create conversations about it; thus, spreading a news that went viral. In turns, the conversations led to the attention of proper authorities to investigate and eventually created change to the situation by confiscating the wild animals.

Therefore, it can be said that we, the public, can do something towards this issue. We learn that it is crucial for the public to participate actively in holding these officials accountable. By leveraging social media platforms to expose illegal practices, we can create a cultural shift where keeping protected wildlife is viewed as shameful rather than a status symbol. There must be a collective demand for law enforcement to take decisive action against those who violate wildlife protection laws, regardless of their position.

These public efforts are in line with the newly published Minister of Environment and Forestry Regulation Number 10 of 2024 regarding Legal Protection for Individuals Fighting for The Right to a Good and Healthy Living Environment. As the regulation explained that activism for the improvement of the environment cannot be criminalized; therefore, it should create a sense of safety and an increased spirit for the public to remind the authorities of any illegal possession of protected wild animals by government officials.

In addition to public efforts to expose illegal activities, raising awareness is key to preventing these violations from happening in the first place. The public can spread knowledge about proper conservation efforts, emphasizing that protecting endangered species means preserving them in their natural habitats, not keeping them as pets. Engaging well-known public figures can further amplify this message, helping to garner sympathy and trust across wider audiences. Increasing visibility for reputable conservation organizations can also educate people on the importance of wildlife rescue, rehabilitation, and release programs. Furthermore, we can advocate for stronger laws, stricter regulations, and harsher penalties to ensure greater accountability and prevent illegal wild animal possession at all levels.

When government officials who break the law by keeping protected wild animals—whether due to ignorance or otherwise—are prosecuted, it sets a precedent that keeping such animals is a shameful act rather than a symbol of luxury or status. This shift can help foster an environment where the illegal possession of endangered wild animals is widely condemned, with consequences awaiting offenders—whether through legal action or public reaction.

Conclusion

Despite existing laws against the illegal trade of protected wild animals, reports indicate that some government officials continue to engage in these practices, underscoring that legislation alone is not enough to enforce wildlife protection principles. Immediate action, along with law enforcement, is needed to reshape the narrative around the illegal possession of protected species. Increased public participation is essential; through social media and collective efforts, people can expose illegal activities, educate others, give visibility to conservation organizations, pressure authorities, and demand accountability from leaders. This aligns with the newly published Minister of Environment and Forestry Regulation Number 10, which safeguards environmental activism. By fostering a culture where illegally keeping protected wild animals is a source of shame rather than a status symbol, we can better support the conservation of Indonesia's endangered wild animals.

Conflict of Interest

We certify that there is no conflict of interest with any financial, personal, or other relationships with other people or organizations related to the material discussed in the manuscript. The use of online articles highlighting viral news about government officials keeping protected wild animals is not intended to cast blame or generalize all government officials, but rather to provide examples of past incidents and suggest ways to improve for the future. The selection of online articles featuring already viral news is intended to demonstrate that all information provided is already publicly known and accessible to anyone; it is neither secret nor defamatory.

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Animal Welfare and Bioethics in Islam : Ethical Perspectives and Environmental Responsibility

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Abstract

Islam offers strong evidence in favor of the significance of animal welfare and also offers substantial support for the significance of animal care. The Quran, Hadith and Sunna have a rich legacy of the Prophet Muhammad's صلى الله عليه وسلم how to treat animal with kindness. The aim of this study is to examine the ethical perspectives within Islam related to animal welfare and environmental conservation, examine Quranic verses and sayings from the Prophet Muhammad's صلى الله عليه وسلم that support environmental preservation and investigate the prospects and difficulties of implementing Islamic environmental conservation and animal welfare principles. This research conducted using a qualitative literature-based approach, focusing on an in-depth review of Islamic texts, scholarly articles, and secondary sources that explore Islamic ethics in relation to animal welfare and environmental conservation. The use of animals for human needs is specifically mentioned in the Qur'an. Kindness and compassion for animals are lessons that can be found when examining the Qur'anic. Prophet Muhammad's صلى الله عليه وسلم prohibited humans from injuring or tormenting animals and also forbade the disciples from killing harmless little animals like frogs, bees, ants, and so forth. The Quran goes into great depth about Noah's storm, which is where wildlife protection is specifically mentioned. Restrictions on gathering honey, Islam holds that there should be enough honey left in a honeycomb to feed bees, and that it is admirable to have more honey left in a honeycomb during the winter than is necessary to do so. Islamic law's preservation of wildlife sport hunting, animal baiting, and the slaughter of wild animals for purposes other than food are generally forbidden. To address the challenges and ensure the ethical treatment of animals, government should fostering dialogue between Islamic scholars and environmentalists that can help harmonize religious ethics with modern environmentalism.

Keywords: Animal Welfare, Islamic Ethics, Conservation, Environmental.

Introduction

The urgent need for ethical approaches to animal welfare and environmental conservation arises from escalating challenges such as habitat loss, industrial exploitation, and climate change. These problems cover a broad spectrum, including animal exploitation for industrial purposes, and climate change that jeopardizes ecological balance. In light of this, environmental preservation and animal welfare are emerging as crucial issues that require coordinated attention. Islam offers strong evidence in favor of the significance of animal welfare. Islamic teachings strongly advocate for the ethical treatment of animals. Islam offers substantial support for the significance of animal care, and the Hadith and Sunna have a rich legacy of the Prophet Muhammad's صلى الله عليه وسلم. Islam emphasizes humanity's responsibility as Khilafah (stewards) of the Earth, highlighting that the natural world, as God's creation, holds inherent value.

Animals have long been used by humans to fulfill a variety of purposes. Since they are an integral component of human civilization, they are entitled to some rights that humans have to provide. Justice, compassion, and responsibility for all living things—including animals and the environment—are fundamental values contained in the Quran and Hadith. Islamic beliefs emphasize that preserving animal welfare is both a moral and a religious duty, since several chapters in the Quran and sayings from the Prophet emphasize that mistreating animals is a sin. As a comprehensive worldview that touches on nearly every aspect of human life, Islam offers a strong ethical perspective in response to these challenges, providing guidance on how humans should treat animals and protect the environment as part of their divine responsibility toward God's creation (Sarwar et al., 2021)

The aim of this study is to examine the ethical perspectives within Islam related to animal welfare and environmental conservation, explore the concept of animal welfare in Islam, focusing on the core principles found in the Quran and Hadith regarding the treatment of animals and their rights, examine Quranic verses and sayings from the Prophet that support environmental preservation and the sustainable use of natural resources in order to analyze Islamic teachings on environmental conservation and investigate the prospects and difficulties of implementing Islamic environmental conservation and animal welfare principles in the contemporary world, particularly when tackling global environmental catastrophes.

Materials and Methods

This research conducted using a qualitative literature-based approach, focusing on an in-depth review of Islamic texts, scholarly articles, and secondary sources that explore Islamic ethics in relation to animal welfare and environmental conservation. This study utilizes both primary and secondary data sources to explore Islamic ethical teachings on environmental conservation and animal welfare. Primary data will be drawn from key Islamic texts, including the Qur'an, Hadith, and Fiqh (Islamic jurisprudence), focusing on verses, sayings of the Prophet Muhammad's ﷺ, and legal rulings that address the relationship between humans, nature, and animals. Secondary data will include academic articles and scholarly papers on Islamic ethics, animal welfare, and environmental sustainability, which provide contemporary interpretations of Islamic teachings on these issues. Additionally, books and monographs by renowned Islamic scholars and environmentalists, particularly those discussing Islamic environmentalism, eco-theology, and animal rights, will be reviewed to offer a deeper understanding of how Islamic principles intersect with modern concerns about the environment.

Result and Discussion

Islamic Texts and Animal Welfare

Islam holds that all living things, including people, animals, birds, and insects, are Allah's creations and should be respected. Islam strongly encourages its adherents to treat animals with kindness and refrain from mistreating them. Numerous instances of compassion, love, and understanding for animals may be found throughout the history of Islamic civilization, the Holy Qur'an, and the Hadith. Islamic traditions hold that animals have a special place and function in the hierarchy of creation. At their core, they were developed to meet the various needs of humanity. Humans, on the other hand, are accountable for the welfare and have been instructed not to waste their lives (animals) (Awan et al., 2018). Islamic teachings strongly advocate for the ethical treatment of animals. Islam offers substantial support for the significance of animal care, and the Hadith and Sunna have a rich legacy of Prophet Muhammad's ﷺ. the concern for animals. The use of animals for human needs is specifically mentioned in the Qur'an. Kindness and compassion for animals are lessons that can be found when examining the Qur'anic and traditional teachings more closely (Wersal et al., 1945). For instance, Laws and regulations are determined by the following five pillars of Islamic law: 1. The Quran 2. Hadith (the Prophet Muhammad's ﷺ. customs and sayings) 3. Ijma (the Prophet Muhammad's ﷺ. Companion Consensus) 4. Qiyas (analogical inference) 5. Ijtihad (Judicial exercise based on the sources mentioned above (Yusof and Wook, 2021)

Islamic teachings on animal charity are not limited to the Qur'an. The Hadith and Sunna include a wealth of tradition regarding the Prophet Muhammad's صلى الله عليه وسلم. concern for animals. Prophet Muhammad's صلى الله عليه وسلم prohibited striking, branding, or marking animals on the face and denounced the practice of beating them. He praised those who were gentle and cursed and reprimanded those who abused animals. He also enacted drastic measures to stop the custom of chopping off live animals' humps and tails for eating. "A good deed done to an animal is as meritorious as a good deed done to a human being, while an act of cruelty to an animal is as bad as an act of cruelty to a human being," according to one Hadith that mentions Prophet Muhammad's صلى الله عليه وسلم (Rahman, 2017)

Hazrat Muhammad (صلى الله عليه وسلم) was sent to earth to show kindness and compassion for both humans and animals (Al-Qur'an, Surah Al-Anbiya, 21:107)

- a. In this context, Prophet Muhammad's صلى الله عليه وسلم prohibited humans from injuring or tormenting animals.
- b. At several points in time, Prophet Muhammad's صلى الله عليه وسلم forbade the people from dragging, branding, and disfiguring the animals or forcing them to fight with one another.
- c. Additionally, Prophet Muhammad's صلى الله عليه وسلم forbade people from putting the birds in cages since Prophet Muhammad's صلى الله عليه وسلم said that it was a terrible conducted
- d. Prophet Muhammad's صلى الله عليه وسلم also forbade the disciples from killing harmless little animals like frogs, bees, ants, and so forth. The following hadiths illustrate several facets of compassion for animals:
- e. Prophet Muhammad's صلى الله عليه وسلم stated, "Leave its ear and hold it by the sides of its neck," as he passed a man pulling a sheep by its ear. It hurts more to drag an animal by its ears than by its neck.
- f. It was forbidden for the Prophet Muhammad's صلى الله عليه وسلم to beat animals on the face. Because the face is more sensitive than other areas, striking it hurts the animal

Islamic perspectives on Animal Industries

In keeping with the aforementioned discoveries, contemporary halal industry guidelines also stress the need of treating animals and birds with compassion. It is important to treat them in a way that reduces their suffering, anxiety, and discomfort. Water, food, safe handling, medical attention, and a suitable environment for their use and care should all be given to them, taking into account the typical biology and behavior of their species. They should also be fed and given water during the lengthy trip. Birds and animals who have traveled a great distance should first be given time to relax and be given food and drink (Støier et al., 2016)

Islamic Warnings Against Animal Cruelty

Islam has shocked the world by allowing someone to go to “hell” for mistreating animals and to heaven for showing kindness to them. Animals were seen with compassion and care during the dark ages, when it seemed unthinkable that even humans would be treated humanely. The following hadiths open your eyes to this religion's mercy in this situation.

- a. "Helping any living creature will earn you a reward" (Sahih Muslim)
- b. "It is a great sin for man to imprison those animals which are in his power" (Sahih Bukhari)
- c. "The ungentle is the worst of shepherds, causing the beasts to bruise or crush one another." (Muslim Hadith)
- d. "Until you love one another and show mercy to everyone on the planet, you will not have a secure faith." (Abu Dawud, Bukhari, and Muslim Hadiths)
- e. "Have faith in these silent creatures, and ride them when they are healthy enough to do so, and release them when... they (need to) rest." (Abu Dawud)
- f. "No man kills a sparrow or anything else without doing so because it deserves it, but God will question him about it." (Al-Nasai and Ahmad Hadiths)

- g. The death of living things, disobedience to parents, and shirk (polytheism) are the terrible things. (Muslim and Bukhari Hadiths)
- h. "May God punish those who injure animals." (Sahih Bukhari)
- i. "Whoever treats God's creatures with kindness also treats himself with kindness." (Sahih Bukhari)
- j. "Among Muslims, no one plants a tree or sows seeds, and then a bird, person, or animal eats from it, but it is considered a gift of charity for him." (Sahih Bukhari)

The deliberate human endeavor to conserve wild plant and animal species, which protects their habitats as well as the habitats of future generations, is known as wildlife conservation. Although the term "wildlife" typically solely refers to animals, it actually encompasses both flora and wild creatures. The goal of these wildlife conservation initiatives is to protect the environment and threatened animal and plant species for coming generations (Sarwar, 2021).

The Quran goes into great depth about Noah's storm, which is where wildlife protection is specifically mentioned. Hazrat Noah is the prophet who, after Adam, has been given a specific place in the Quran. Another name for him is Adam Sani. He spent over 950 years preaching the faith of Allah, yet his people persisted in their disobedience, which eventually manifested as suffering. They were destroyed by a powerful storm. "We sent Noah to his people, and He stayed among them for a thousand years minus fifty years, the Qur'an says. They were wrongdoers, thus the Deluge swept them away. (Al-Ankaboot 29:14) "My Lord, I have summoned my people day and night," he declared. However, my call merely made their flight longer. (6 Nooh 71:5-6) In addition to destroying Noah's people, the storm also put some animal and plant species in danger of going extinct. "Until, when Our command came, and the volcano erupted, We said, "Board into it a pair of every sort, and your family—except those against whom the sentence has already been passed—and those who have believed." The Qur'an says that you should ride as many pairs as you can. However, there weren't many people who shared his beliefs. We therefore gave Noah inspiration: "Construct the Ark under our watchful eye and with our guidance." And when Our will is fulfilled and the oven reaches a boiling point, put two pairs of all kinds—along with your family, excluding those whose names have already been spoken—into it. Additionally, don't talk to me about the wrongdoers because they will drown.

The word "umm" is used for animals in the Qur'an, in addition to the Noahic tale. "Umm" can refer to a nation or a group of people. The Quran has two instances of this term. Surah Al-An'am states: "There is no animal on land, nor a bird flying with its wings, but are communities like you." This is said twice, once in Surah Al-An'am (2:1) and again in Surah Hud (2:1). Nothing in the Scripture was overlooked by us. They will then be gathered before their Lord.¹⁵ According to this passage, ummah does not imply that all animals are one ummah; rather, it indicates that each of these species is one ummah. This passage also demonstrates that these traits are not unique to humans and animal groupings; in fact, numerous additional verses mention various animal traits, including group traits that are

Numerous instances from the Prophetic Hadith about wildlife protection are enough to demonstrate that the Prophet Muhammad's ﷺ established the framework for the policies that have been in place for the past 150 years to protect wildlife in this contemporary, developed world. (Sarwar, 2021) Hazrat Amr bin Saeed recounts that the Prophet Muhammad's ﷺ gave a speech on the second day of the conquest of Makkah, in which he praised Allah Almighty before saying “ Mecca has been made a sanctuary by Allah Almighty, not by human beings. Therefore, it is not permissible for a person who believes in Allah and the Last Day to shed blood in Makkah or to cut down a tree here. If a person thinks it is permissible to fight here because of the battle of the Prophet Muhammad's ﷺ, then tell him that Allah has permitted His Messenger and He has not permitted you and He has permitted me only for one hour of the day - .And today, the sanctity of Makkah has returned as before, as it was yesterday In his book "Sirat-e-Mustafa aur Asari Sainsi Tahqeeq," renowned scholar and educator Prof. Dr. Syed Mohammad Sultan Shah has expounded on the interpretation of this hadith in the following manner :

- a. Pursuing or hunting it
- b. Tree-cutting
- c. Take out the verdant grass.
- d. Removing any portion of shrubs, trees, etc. When taken into account, it is evident that these are the items that are currently prohibited in game sanctuaries and national parks in order to conserve animals (Sarwar, 2021)

Getting Honey from Bees

The Quran mentions honey and bees, and it has been said that they can heal people. As a result, bees can provide honey, however there are restrictions imposed by Islamic Shari'ah. The following is how Dr. Raza Gharebaghi addresses this in his research article: "Restrictions on gathering honey, Islam holds that there should be enough honey left in a honeycomb to feed bees, and that it is admirable to have more honey left in a honeycomb during the winter than is necessary to do so. (Gharebaghi, 2007)

No Hunting at Night

Islamic law also permits hunting, but only under certain restrictions. The main point of the numerous, intricate guidelines for hunting animals is that they are not permitted to hunt at night. The animals have the right to rest comfortably at night since the Almighty has provided it a time for His creatures to repose. In a similar vein, hunting gear must be maintained as quickly as possible to minimize suffering for the animals. Sports involving animals are also permitted, although those that disregard animal rights are prohibited because, in pre-Islamic times, camel races were organized in which only one camel made it out alive.

According to an Iranian expert, banning sports is against animal rights. Islam prohibits sports that infringe against the rights of animals, even yet it promotes activities like horse and camel racing. Some people ran their camels till only one survived before the advent of Islam. Islam severely forbade this behavior. Some caused animals, such as dogs and roosters, to fight with each other, which was also forbidden by Islamic law (Sarwar, 2021)

Islamic law's preservation of wildlife Sport hunting, animal baiting, and the slaughter of wild animals for purposes other than food are generally forbidden, according to a large number of hadiths. According to Islamic law, wild animals should be permitted to live their lives without interference as long as they do not endanger people. Instead of being housed in cages as pets, birds ought to be free to fly (Foltz, 2006). The importance of balance (mizan) is likewise emphasized throughout the Quran, which also promises retaliation against those who disturb it. .; "Work no confusion on the earth after it has been set in order" (Quran, 7:31, 7:85). Therefore, to promote sustainable development, we need to balance between the needs and interests of human and wildlife protection.

Wildlife Protection Area (Hima)

According to Foltz (2006), there are two organizations in the Islamic legal history that some modern scholars have suggested might be regarded as wildlife preserves. They are known as "harim," which was a "greenbelt" or easement surrounding settlement areas with the primary purpose of ensuring a secure water supply, and "hima," which is a reserve, protected area, or sanctuary. Thus, in Islam, the governing bodies have the right and power to create reserves (hima) for public uses including wildlife management, watershed management, forest and woodland management, and rangeland conservation. The prophet, like later caliphs, established public reserves with the intention of serving the common welfare, while abolishing private reserves that were established for the sole use of strong persons. For wildlife protection and propagation, forest restoration, watershed conservation and enhancement, and range expansion and management, the government should establish a system that serves the most suitable and strategic areas. Depending on the unique goals of each reserve, hunting, grazing, and woodcutting may be regulated or outright forbidden inside such reserve development (Yusof and Wook, 2021)

Challenges to Animal Welfare and Conservation in Islam

despite these strong religious guidelines, there are several challenges to ensuring animal welfare and conservation within Islamic societies. One of the primary challenges is the lack of comprehensive implementation of these ethical principles in some regions, where traditional practices, economic needs, and ignorance often lead to the exploitation and mistreatment of animals. For example, overfishing, habitat destruction, and the unregulated hunting of wildlife remain persistent problems. Additionally, while Islamic teachings advocate for the humane treatment of animals in agriculture, some industrial farming practices fail to meet these standards, driven by the pressures of mass production and economic profitability. Another challenge is the limited awareness among some Muslims regarding the depth of Islamic environmental ethics, which includes a duty to protect animals and preserve biodiversity. Moreover, in some areas, animal conservation efforts conflict with local customs or developmental projects, creating tensions between economic development and ecological sustainability

To address the challenges to animal welfare and conservation in Islam, several solutions can be implemented that align with Islamic teachings while promoting sustainable practices. First, increasing education and awareness about the ethical treatment of animals based on Islamic principles is essential. Islamic scholars and environmental leaders can play a pivotal role in educating communities about the deep connection between faith and stewardship of the Earth, as emphasized in both the Quran and Hadiths. Moreover, integrating animal welfare and conservation into Islamic jurisprudence (fiqh) could help create a more structured legal framework for the protection of animals. Additionally, local communities could adopt sustainable

development models that balance the needs of human populations with the preservation of wildlife habitats, taking into consideration the environmental teachings of Islam. Engaging in modern conservation efforts, such as habitat restoration and wildlife protection, while ensuring that these actions are in line with Islamic values, can also be highly effective. Lastly, promoting ethical consumer behavior, such as supporting humane farming practices and eco-friendly products, can help align everyday choices with Islamic principles of compassion and care for all living creatures. By combining religious teachings with modern conservation strategies, a more harmonious relationship between humans, animals, and the environment can be achieved

Conclusion

Islamic teachings, found in the Quran, Hadith, and Sunna, emphasize the responsibility of humans as stewards of the Earth, entrusted by God to care for all living creatures and natural resources. The principles of kindness, compassion, and respect for animals are central to Islamic bioethics, which extend to the conservation of wildlife, the sustainable use of resources, and the prohibition of unnecessary harm or exploitation. However, despite these clear guidelines, challenges persist in the implementation of these ethical principles, driven by economic pressures, cultural practices, and insufficient awareness in some regions. To address these challenges, it is crucial to raise awareness and education about the intersection of Islamic ethics and environmental conservation. Engaging Islamic scholars, policymakers, and communities in discussions around sustainable practices aligned with Islamic values can promote more humane and ecologically responsible behaviors

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Public Awareness of Layer Hen Welfare and Egg Choice in Indonesia

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Abstract

This study aims to deepen understanding of consumer knowledge regarding the sources of eggs consumed and the factors influencing choices. 575 respondents from various backgrounds, and regions across Indonesia participated in the survey, which focused on eggs from conventional and cage-free farming systems. The results revealed over 50% of respondents assumed that the eggs they consume are from cage-free systems. However, this assumption was inconsistent with image and egg types presented in the questionnaire. In reality, most consumers' eggs originate from producers utilizing battery cage systems, which do not adhere to the Five Freedoms of animal welfare outlined in government regulations. The survey further indicated a significant number of consumers became more aware of the need to enhance animal welfare after viewing the visual media included in the study. Consequently, respondents expressed a willingness to seek information about the source of their eggs, transition to consuming cage-free eggs, and pay a premium for eggs produced through cage-free systems. While most consumers demonstrated basic knowledge of differences between egg types, understanding of welfare implications of various farming systems remains limited. Product labeling, such as 'village chicken' and 'omega', significantly influenced purchasing decisions. However, many consumers did not fully comprehend the information provided on labels. These findings highlight the need for more intensive education to raise awareness and understanding of the importance of choosing eggs from higher welfare focused farming systems, and to support clearer policies regarding egg product labeling.

Key Words: Animal Welfare, Chickens, Eggs, Cage-Free, Farming

Introduction

The type of farming system used for egg laying hens significantly impacts the quality of the eggs produced, influencing certain factors such as nutritional content, taste, texture, and market value. Key aspects of the farming system used, such as feed type, feeding methods, the rearing environment, and the mobility of the chickens, not only affect the quality of the eggs produced, but also the welfare of the hens living out their productive years within these systems.

According to the latest available data from the Indonesian Statistics Agency (BPS) in 2022, over 378.5 million laying hens were farmed to meet the dietary needs of the Indonesian population¹, which in 2023, was 2.2 kilograms per capita per week². While the demand for chicken eggs is certainly high, do consumers consider the source of the eggs consumed, and whether they come from farms that employ humane and appropriate systems for the hens? Animal welfare is a critical issue in the livestock industry, including for hens in egg production. In Indonesia, the majority of eggs available in the market are sourced from conventional farming systems that utilize battery cages³. This type of system has negative impacts on the welfare of laying hens, particularly in fulfilling the five principles of animal welfare that are clearly regulated by government regulations⁴. The conventional farming system, often referred to as the battery cage system, is a method of raising chickens in enclosures resembling a battery, where there are partitions separating each chicken. These partitions are usually made of wire or wood, and each battery cage typically accommodates 1-4 chickens. This setup restricts the chickens' movement to a space no larger than a sheet of A4 paper. Currently, global trends are increasingly advocating for the cage-free farming system, which upholds the five principles of animal freedom: (1) animals must be free from hunger, thirst, and malnutrition, (2) free from discomfort, (3) free from pain, injury, and disease, (4) free to express natural behavior, and (5) free from fear and distress. Unfortunately, consumer awareness in Indonesia remains relatively low regarding the source of their eggs and the levels of animal welfare for laying hens in the systems that produce the eggs they consume daily.

Consumer knowledge about the source of the eggs they consume, as well as the influence of factors such as product labeling and visual media on their choices, is a research focus that requires greater attention. Our study aims to understand public awareness regarding layer poultry farming systems and to evaluate the factors that drive consumers to choose eggs from farms that prioritize animal welfare.

¹ Badan Pusat Statistik Indonesia. (13 Maret 2024). Populasi Ayam Ras Petelur menurut Provinsi.

² Badan Pusat Statistik Indonesia. (8 September 2014). Rata-Rata Konsumsi per Kapita Seminggu Beberapa Macam Bahan Makanan Penting, 2007-2023.

³ Asia Cage-Free Benchmark Report (2023)

⁴ Republic of Indonesia, Regulation 95 of 2012 on Veterinary Public Health and Animal Welfare, Article 83 (2)

The Study also delves into the potential for changing consumer attitudes toward cage-free egg consumption and assesses the readiness of Indonesian consumers to support the transition to more compassionate farming systems. In a paper published in 2023 by Hartcher K, Nuggehalli J, Yang Q, et al. on perceptions of egg producers in Indonesia, one of the factors driving farmers to transition to a cage-free system is market demand. However, there is limited information on the extent of public desire for access to eggs from farming systems with higher welfare standards. It is important to note that while studies on public perceptions of laying hen welfare have been conducted in several countries (Sinclair, M., et al. 2022), similar research is lacking in Indonesia, despite the country being the second-largest egg consumer globally⁵. Therefore, it is crucial for Indonesia to develop its own research on this subject.

Research Methodology

This study employs a quantitative research design with a cross-sectional survey approach. The questionnaire includes 20 questions assessing respondents' perceptions of the visuals presented. The population for this research consists of Indonesian citizens aged 17 to 54. A total of 575 respondents were selected through non-probability sampling, representing various backgrounds and regions across Indonesia. Sampling was conducted using a voluntary participation approach. The sampling process involved two techniques: online and offline. The online survey was conducted using the Google Forms platform, with the questionnaire distributed via social media, email, and online groups. Data collection took place over a four-month period, from July to October 2024.

⁵ Shahbandeh, M. (2024). *Leading egg producing countries worldwide, 2022*

Survey Findings and Discussion

The survey results indicate that 50.6% of respondents believed the eggs they consume come from cage-free farms. However, after being presented with egg labeling information, results indicated only 7.6% were actually consuming cage-free eggs. This highlights a discrepancy between perception and reality, demonstrating that public knowledge about the type of eggs they consume remains low.

After completing the questionnaire which showed different images and video media of laying hen farming systems, 61.8% of respondents expressed a desire to learn more about the source of the eggs they consume. This suggests that only a small portion of survey participants (8.3%) remained unaffected by visual or educational content about inhumane systems, compared to the majority who expressed moral concern for cage-free systems and laying hen welfare. Another particularly noteworthy finding regarding the importance of animal welfare and the influence of realistic imagery or descriptions in shifting consumer behavior is that 46.8% of respondents stated they would switch to consuming cage-free eggs, and 40.3% said they might switch, while 4.7% remained unwilling to make the transition. These findings underscore the significant positive impact that education utilizing visual media can have on public perception.

Perhaps most significantly, almost all respondents were willing (45%) or potentially willing (39.2%) to pay more for cage-free eggs. Only 8.9% were unwilling to pay a premium. This overwhelming majority indicates how increased awareness of animal welfare could impact purchasing behavior.

Questions arise about the misconception that exists between the egg that Indonesian consumers are choosing and perception of the egg's source? Could it be due to label descriptions, names, images, nutritional values, certifications, or packaging of the eggs that fail to accurately reflect the egg source farming systems? Several caged-chicken labels showed images or words that showed smiling chickens, barns, or natural nests with eggs in them. Eggs with wording such as happy/omega/organic, logos professing sanitary conditions, and cardboard eco-friendly packaging were chosen by respondents who believed their eggs were from cage-free hens. Another reason could be a lack of knowledge and understanding about the systems producing the eggs they choose. Studies have shown that consumers are willing to pay a premium for 'native chicken eggs' (Wulandari, et al. 2020). Investigations prove that source hens could be farmed in battery cage systems rather than in free-range systems as the breed name would suggest.

6

While the exact reasons behind this misconception may not be understood from this study, the respondents' perception or expectations regarding these products strongly indicate that education and transparency about egg production systems can significantly alter attitudes toward animal welfare and intent in relation to purchasing animal products.

⁶ An investigation of 'native chicken' eggs sold in a market in Yogyakarta in 2018 found that the source hens were 'arab' breed hens farmed in battery cages, not free range native chicken eggs. Animal Friends Jogja, 2018

Conclusion

This study reveals the low level of knowledge among Indonesians regarding the sources of the eggs they consume, with an initial misconception from most of the participants that the eggs they eat come from cage-free farms. However, after being exposed to visual media, there was a significant increase in awareness, with more than half expressing an interest in finding out more about the source of their eggs, and almost half expressing willingness to switch and pay more for eggs from farms prioritizing animal welfare.

The findings also show a disconnect between the reasoning of many producers, retailers, and the government, to reject efforts related to cage-free transitions, that the general public, particularly those in microeconomic sectors, are unable to afford eggs from cage-free farming systems.

Further professional studies are needed to verify these survey results, in order to support advocacy for regulations that encourage the Indonesian laying hen industry to transition from battery cage to cage-free systems. Such a shift is expected to improve the welfare of millions of laying hens every year. Additionally, the development of an egg labeling and certification system that reflects farming conditions aligned with animal welfare standards is essential, as well as regulations governing the use of labels, logos, and descriptions on the eggs sold to the end consumer. Such regulations would ensure that the products consumed by the public align with their expectations and are based on factual labels that accurately describe the farming conditions of laying hens that produce the eggs.

Finally, massive consumer education campaigns through visual media are crucial to raise awareness about animal welfare, and will empower consumers to choose more compassionate products, ultimately creating the market demand that producers require to transition to cage-free systems, and improve the lives of the laying hens of Indonesia.

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Competing Interest Statement

The authors declare that there are no known conflicts of interest associated with this study. The research was conducted independently without influence from any parties with financial or personal interests that could affect the results or interpretation of the data. All findings presented are the result of an objective analysis based on the surveys conducted, with no ties or affiliations to the farming industry or organizations that could be influenced by the study outcomes. This research aims to support the development of regulations promoting the transition to more compassionate farming systems, free from external influences that could compromise the objectivity of the results.

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Power of Communities as Contributors and Educators on Animal Welfare Law Awareness

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Abstract

In Indonesia animal welfare approaches, there is misconception about Dog treatment, either in social spectrum or regulation spectrum. The regulation of Number 18 of 2009 concerning Livestock and Animal Health does not provide everything necessary to protect dogs' rights, and majority of public is careless about seeing dogs have rights to freedom and rights to live in peace. The logical consequences of this phenomenon lead to unfair treatment between breeding dogs and mongrel, and also the majority of people in Indonesia's perspective on dogs. On the other hand, rechtvacuum that belong in Indonesia animal regulation can't cover a specific guideline and education in regards of animal welfare, thus normalize criminal action in material realm that international law against. Bekasi Dog Lover as community attempt to creating new norms with their social effort, in hope creating ripple effect in animal welfare aspect. This legal-normative article combined with community empirical data show, that it's not impossible to make new legislation and policies that comes from the grassroot to raise animal welfare awareness by implement outdoor regular activities contain education about dog care-treatment, in corporation with the government and any other animal foundation.

Keywords: Law, Dog, Communities, Regulations, Animal Welfare.

Introduction

It's undeniable that within Indonesia's social spectrum, animal lover communities flourish and evolve into animal welfare awareness association. Among numerous well-structured organizations, the Bekasi Dog Lover (Bedovers) comes with its own differentiation and fresh approach to valuing animals, particularly dogs, which they thought about how dogs in particular shall not be divided into rare breeds or normal breeds, but dog as human best friends. To make their vision concrete, they wrote in their constitution, in article four the Bedovers regulation and rules for 2024-2026 period, stating that the Bedovers vision is to make dog not just a pet, but integral member of the family, accepted within society. The Bedovers mission includes refraining from consuming dog meat, ensuring dog welfare, convert how Indonesian Communities perceptions about dogs, and taking responsibility for the welfare of their own dogs (Peraturan dan Aturan Bedovers Periode 2024-2026, 2024).

Thus, this article will explore a bit of how Indonesian grassroots communities value dogs based by animal welfare perception from legal-normative research method, together with implementation by Indonesia government. In the end, this article shall show a rechtvacuum in Indonesia regulation about animal welfare as it goes along with social consciousness that a pet not always bound only with considerable beautiful, cute animal, but rather an animal as a subject of love holistically. Of course, this article far from perfect, either from article presentation or in-depth analysis due to consequences of simplicity and efficiency. Nevertheless, it accurately gives Indonesia norms condition in dog welfare while also carry hope and aspiration to build and improve awareness of animal welfare in Indonesia societies.

Even until now, animal welfare in Indonesia still in least priority either in regulation or in its own public. Based by Animal Protection Index 2020, Indonesia get E-rank as it gives many recommendations in every important aspect for government to improve its legal and policy of this issue (Animal Protection Index, 2020). On the other side, in social spectrum there is couple of evidence of animal crime or animal cruelty which well documented in online media.

As more specific, dog, while as an animal get least law protection due to lack of government initiative, somehow have its own 'discrimination' as a pet due to Islamic Law that live in Indonesia. Majority of Muslim Indonesia heavily influence by Imam Al-Syafi'i epistemology, which consider dog is totally Najis (Kammaruddin, 2017). Thus, it gives impact to social norms that dog somehow allow to abuse and torture.

Other than dog discrimination, there are also traditional beliefs or culture to consume dogs in some parts of Indonesian. Dog meat consumption is become common practice for traditional people in Indonesia, mostly from Bataknesse, Minahasa, and Central Java, to the point there are traditional cuisine named Rica-Rica (RW) and Sate Jamu (Detikfood, 2021; RRI, 2024).

Another example of dog cruelty, Canon the dog in Aceh that abused and killed by municipal police unit that spark controversies, elimination (poisoning) of stray dog at Jabung Barat, Jambi, dog meat trade, dog death by poisoning and been found in butcher house (CNN, 2021; Dinas Perkebunan dan Peternakan, 2022; Humane, n.d.; Kompas, 2023). Abuse of dog by teenager, act of torture and amputation of dog, and many more (Kompas Youtube Channel, 2024; BBC News, 2017). Many more, since based by SMACC 2021 cruelty report, Indonesia is place where the most online video about animal torture is made on the earth (Social Media Animal Cruelty Coalition, 2021).

Thus, all of that phenomenon raises some critical question. If there are thousand online videos about animal torture, include dogs, happen in Indonesia, how about animal cruelty off-the-record? How many dogs have been torture, starved to death by owner, poisoned by neighbor because they think it's najis? Slaughter and consume without known by the others? Sadly, data about it so scarce due to lack of online information and lack of public tools to precisely know how many dogs involve as a victim in crime.

Regardless of consumption of dog meat or dog torture based by religious norms, Indonesia itself actually at 'urgent state' in term of animal protection and welfare due to fact that in 2014, Animal Protection Index give Indonesia D-rank rather than E. It means the implementation of regulations not work effectively and efficiently as intended, since it get worsen.

From a legal perspective, the law of animal welfare mostly regulates in Law Number 18 of 2009 concerning Livestock and Animal Health and Law Number 41 of 2014 concerning First Amendment concerning Livestock and Animal Health, with Indonesian Criminal Code act 302 give very limited and least protection (Law Number 18 of 2009 concerning Animal Husbandry and Animal Health, 2009; Law Number 41 of 2014 concerning First Amendment concerning Livestock and Animal Health, 2014; Indonesian Criminal Code act 302, 2022). It's not yet concrete as a guidance, partly because it still integrated with broader spectrum like livestock.

On the other hand, Indonesia heavily relies in civil law system, with customary law and sharia law as additional supplement to regulate how people in Indonesia live their life (Badan Pembinaan Hukum Nasional, n.d.). This beautiful mix of norms combine with long history of law in Indonesia, lead people tend to think only what is written is law, thus, create interpretations of norms until judicial authority give formal and legal interpretation itself and lead into uncertainty of regulation itself.

This system of law also influences animal welfare act, which still adapt vague written norms to define domesticated animal as a livestock and/or as pet, including dog. To put it simple, no definite norms speak about dog as livestock, as a pet, laboratory animal and veterinary procedure.

Overall, since animal welfare spectrum highly relate not only with written norms, but more into the human consciousness to recognize animal is living being that having rights, it become important to build and improve awareness to handle animal, in this case dogs, from grassroot society. Thus, this article will show how to increase animal welfare consciousness from the grassroot communities, and what kind of policies to create and improve, in regard of increasing animal welfare awareness.

Material and Method

This article was created based on the issue of animal welfare that can be found easily in media online platforms with high credibility which can be seen in the Bibliography section. Another material to construct this article is legislation product of Indonesia, specifically a couple of norms of Law Number 18 of 2009 concerning Livestock and Animal Health and Law Number 41 of 2014 concerning First Amendment concerning Livestock and Animal Health and any other legal product that is necessary to build the legal framework of animal welfare in Indonesia.

The other legal products that use for this article is other animal welfare policies from other nation, particularly British with its British Animal Welfare Act 2006, also international law product related with animal welfare like UNCAHP (United Nations Convention on Animal Health and Protection), UDAW (Universal Declaration on Animal Welfare), and other theoretical journal about Animal Welfare.

Then, the research method used in this article is Action Research (Hasan, 2009). Action Research is a research model that simultaneously involves practice and theory, or combines theoretical understanding with practical implementation, in purpose to evaluate and create improvement of neglected area of study, in this case, animal welfare.

As the reason to utilize Action Research in this article, is because the purpose of this article to evaluate reality of applicability between the norms of law and Indonesia grassroots communities within Animal Welfare frame of mind. Due to efficiency and effectivity to apply the evaluation, this method can hit the critical point of social and legal conditions that need to repair, while it lack of qualitative depth and quantitative amount of data.

Result and Discussion

Further research based by the material collected and method used to aim to answer the important question that already mention. Which provide result include:

Grassroot Community Education Improvement to Give Positive Ripple Impact about Animal Welfare Awareness.

Law can't function without any authority from the sovereign, or not get any respect from the society. Law is the command which oblige a person or persons to a course of conduct. Without a force to back up the words, law won't have any power to achieve its purpose. Law, as product of government, backing up the will manifested as regulation by threats of punishment in order to force create obedience. This thought and implementation known as Legal Positivism (Austin & Austin, 1863).

And as society progress into further development, the paradigm of legal positivity been put into consideration that authoritative rules need social acceptance in order to make law function properly. Since by using force, the only reason people obey the law is because people try to evade legal consequences of disobedience, as H.L.A. Hart mentioned “only officials might accept and use the system’s criteria of legal validity. The society in which this was so might be deplorably sheeplike; the sheep might end in the slaughter-house...” (Murray & Hart, 1972).

The phenomenon of force obedience lead into unimaginativeness to people, that people doesn’t need to live the moral behind the law, as long as they follow what rules stated. So long the people follow what’s written, what’s unwritten it’s not so important. This ignorance mindset of how people that only rely in positivity ends into social structure mentality, including how people treat an animal.

In Indonesia current trend, majority of pet owner often think about give the pet minimal standard of living. As long as pets have shelter and have food, their pets do not require more than that. The problem occurs in this, because it means pet-owner rarely understand what it means to have a pet, which actually to have expansion of their own life circle and extension of value they apply to themselves.

This problem shown from the Bekasi Dog Lovers, as its one of many Dogs community that struggle in their position. This community strive to change paradigm of pet as a property by put a vision and mission of their community. Their vision is to make Dog not only just a pet, but creating set of value that pet is a member of family. While their mission is to promote not consume Dog as food, maintain Dog welfare, changing people mindset about Dog, and increase responsibility of Pet, especially Dog.

Combating Dog Mistreatment.

As the sources said as a community member, there are problem of discrimination inside the dog lover community, the foremost is stigma of Breeding Dog inside the dog lover community and how to tend them, include Indonesia. This stigma comes from the understanding the importance of Dog lineage as a pet. The dog carry carrying lineage and can be toy dog have different biological traits with domestic, rural, village dog.

The lineage affecting behavior, size, health, and compatibility with the owner. In many research journals from Veterinaries, the result speak that the Dog which comes from better environment and have better health care is easier to teach and more cooperative due to high social interaction with human.

On the other hand, Stray Dogs have tendencies to be caution toward other and can be hard to train since they live out from comfortability and far from social interaction of human care, as they presume human is thread for them (Berg, 2016). Means it’s actually harder to taken care for rather than Breeding, benign Dogs due to trauma and survivability live on the streets.

This, Genealogy of Dog Breed not only affect the Dog, but also the owner. To put into perspective, people that can provide themselves with Breeding Dogs, tend to have capability to give special, extra care to their 'families'. The problem lies in people who can't provide themselves well-enough, but yearning to take care of Dogs, to the point compel themselves to have it.

While freedom to have pets is human rights, the animals' necessity also needs to full fill in the hands of the owners, so the Animal Welfare Principles can be implemented without any indication of violation of law. Based by sources, there are couple evidences of mistreatment of Dogs that can be said out of corridor of Animal Welfare.

Siberian Husky that given to eat stale rice, Mongrel which not unvaccinated, abuse of Dogs with beating stick to justify training program, inadequate place of living, and any other treatments which inappropriate for any kind of Dogs. The fault of these condition lies on the owners, however, due to rechtvacuum in Animal Welfare, also minimal sources to get higher education about Animal Welfare, it's hard to tell them that their action resulting penal consequences.

This is the reason Bekasi Dog Lovers begin and keep communicating the importance of Dogs treatment as Pets, as they concern that Dog is not a pet or simply accessories for lifestyle, but a part of family that have enough freedom and love to live their life. Their encouragement and attempt to advise range into training Dogs program.

This program has a goal to ensuring the connection between the human and Dogs, by making regular meetings and events for all dog owners' member. By engage with routines together, both of human and Dogs can establish communication, building trust between the Dogs and the owners, also between other Dogs. In that time, the senior member gave credible advocation between the members of how to treat their pet like a family.

Rabies Vaccine Encouragement.

The other program the community is to cooperate with the government to apply government animal welfare program, such like free rabies vaccine. It's not well known in Indonesia Dog lovers that rabies vaccine and also Dog sterilization actually attempt to promote and support Animal Welfare.

Rabies is zoonotic diseases that easily spread to human from mammal through saliva, and Dog is most animal responsible to transmitted this disease. This diseases fatality is 100% according to World Health Organization (WHO), with death toll 59000 human and 95% happen in Africa and Asia. There are two type of this diseases, first type is Furious Rabies which cause hyperactivities and hallucinations. The second type is Paralytic Rabies, which cause paralysis and coma (WHO, 2024).

In Indonesia itself, WHO record that over allegedly 66.170 rabies cases, there are 74 people positive with it. Most cases come from underdevelopment provinces around east Indonesian. This Rabies can be prevented by vaccinates Dogs and take immunity injection of Rabies diseases. Also, to tackle rabies, attempt to raise awareness to people that Dogs saliva is harmful is something the communities do (WHO, 2023).

Dogs become main reason rabies transmission to human due their close contact environment with human. Stray Dogs over the streets, for example. Often, stray Dogs act like a docile animal to random people to find a chances to get food or simple place to rest themselves, as they asking mercy and sympathy to human. Without proper knowledge, human can be carelessly giving food and play with them, without knowing that Dogs has high probability carry that virus.

Shelter Charity

Other activities of Bekasi Dog Lover communities to encourage grassroot is by giving shelter to Stray Dog. By make collaboration with Dog Shelter Foundation, such as Rumah Kita Indonesia, the communities emphasize a People to not do cull the Dogs, but rather give sterilization to the Dogs and give them shelter to have adopting and rehoming programs (Rumah Kita Indonesia, n.d.).

As mention before, some province in Indonesia prefer to exterminate Stray Dogs with mass eliminating the Stray Dogs. The method of eliminating is varied, often by poisoning, shooting, euthanasia injection, gas chambers, bludgeoning. One of famous mass culling happened in Bali, when government euthanize Dogs due to violation of law (Tony z.top Youtube Channel, 2014).

Another case is mass shooting stray Dogs to control Dogs population at Dompu administration, NTB. This 'hunt' happens when emergency status of rabies outbreak in that region, and the anti-rabies vaccines is not enough to handle all the Dogs. The government then eliminate 1028 Stray Dogs with help of Indonesia Shooting and Hunting Association (Perbakin). Ten Dogs positive for rabies (Eleven Media Group, 2019).

While this method of Stray Dogs population control might occur again due to lack of regulation and low animal welfare awareness, the method of culling Dogs to control Dogs population prove ineffective and only short time solution (Taylor et al., 2017). Primarily reason culling Dogs is not effective because it isn't stopping the sources of replaceable animal which compatible to be rabies reservoirs, such as domestic cat, Bat, rodent, monkeys, and any other mammals living in wilderness.

On contrary, the method of Vaccination, Sterilization and Sheltering/rehoming give more result. Vaccination can prevent the Dogs to be rabies container that can transmit the virus to other, include human. The importance of vaccination is because Dogs contain rabies virus that can't be cure, but the symptoms can always be prevent.

Sterilization is another way to control rabies spreading, because it directly intervening with Dogs population. Dogs can breed more than four babies when they giving birth, as it will give sudden increase of Dogs population. Whereas one of them has positive rabies, all of their siblings likely have big chance to bring the virus. By prevent Dogs natality, the virus propagation will hinder naturally.

Other than that, sheltering/rehoming stray Dogs and domestic mongrel that often get less care treatment can be another solution to solve rabies and dog population problem. By give unwanted Dogs to Sheltering/rehoming credible foundation, the Dogs treatment won't be neglected until they have new owners.

A suggestion to enhance policies about animal welfare, with dogs as primary subjects of law.

The Rechtvacuum

It's not exaggerating when Indonesia regulation concerning of Animal Welfare meet requirement to be said in rechtvacuum condition. Rechtvacuum, or in similar way been said Legal Vacuum, is a term that most law student know as legal-vacuum, which is pre-condition to make new regulation, either using judge wisdom to interpret norms, or to change the norms itself via legal corridor.

It's been said practically and pragmatically, that Rechtvacuum often have its pair. Legal Vacuum define as circumstances where no regulation rules some actual events, while its pairs define as Legal Ambiguity, which a circumstance where the rule of some actual events doesn't provide clear formulation, and the other pair is Legal Inconsistency, a circumstance where the norms contradict each other (Hukum Online, 2022). This concept believes come from Kelsen, as a forefather of Positivist. Kelsen himself speak that:

"A conception of law as social fact is meaningful to us only because we already understand the concepts it uses from a normative jurisprudential point of view. But legal sociology cannot explain the normative meaning of the law as it is understood by those who use legal statements to make claim upon each other." (Vinx, 2007).

In context of Legal Vacuum, that statement clearly speak undeniable facts that in between the written norms and unwritten norms, there is an intermediary to reach agreement in hope achieving functional norms. Whereas dialogue between both spheres reach no agreement, will that situation create Legal Vacuum or not, it's something debatable as the Legal Vacuum condition itself doesn't have clear standard to be said.

To strengthen the basis of Legal Vacuum, it's known that norms can contain morality value or simply a voice on the paper. The condition of written norms without basis of moral is acceptable as long as it's written, as that in Positivist approaches. However, in terms of norms contain morality, Emmanuel Kant speak:

"It is quite easy to state what may be right in particular cases (*quid sit juris*), as being what the laws of a certain place and of a certain time say or may have said; but is much more difficult to determine whether what they have enacted is right in itself, and to lay down a universal criterion by which Right and Wrong in general, and what is just and unjust, may be recognized." (Kant, 1887)

In consistency with Legal Vacuum, what Kant speak about is relate with determination of moral which live inside the written norms itself. The condition that norms exist without morality back it up will create reluctance of implementation and manifestation of its value. Thus, creating intended Legal Vacuum, not because no written norms in regulation, but because no desire to comply and apply it. Thus, this thought heavily pointed to Indonesia reality of Animal Welfare regulation.

The Evaluation Brief Summary.

As mention before, API (Animal Protection Index) give Indonesia E rank in their evaluation of Animal Welfare with the range of evaluation comes from issue, analysis, and then give suggestion of regulation. The measurement to appraise Indonesia quality in commitment of Animal Welfare Application and legal obligation divide into four big factors, named Sentience, Legislation, Governance, and Standards.

Sentience is the first factor of animal sentience recognition and prohibition of animal suffering. In essence, it's a measurement that legal system in Indonesia present Animal Welfare value in the regulation, both normative or procedural.

Second Factor focus in various category animal in regulation. The animal categories ranged from Farm Animal which divide into Rearing Animal, Transport Animal, and Slaughter Animal. The second sub category is Animal in Captivity, which divide into Zoo animal, private wild animal, and fur farming. Third sub category is Companion Animal protection, which divide into Care treatment of companion and stray animal. Dogs fall into Care treatment of companion regulation.

The fourth sub category is Draught and Recreation Animal, which divide into animal used for entertainment and Draught Animal. The fifth sub category is Animal for scientific purpose which relate with science experiment, and sixth sub category is wild animal protection, which heavily related with conservation of wildlife and rare animals.

The third factor is Governance, which focus to evaluate government commitment to realize animal welfare. This Factor observe government attempt to realize animal welfare values by allocating support for subjects that involved directly or indirectly with animals, while also accountability of government about all actions taken.

The fourth factor is evaluation that animal welfare regulation is in line with Organization for Animal Health (OIE) standard, which become standard guidance of animal welfare law and policy together with Universal Declaration on Animal Welfare.

Looking into all the sub category raise from four factor, compare with very least regulation implemented in Indonesia, no wonder most of the suggestion given is urgent improvement of law that inclined with Animal Welfare values which root at Five Freedom and Three Rs (Reduction, Refinement, Replacement). In depth, all the suggestion refers Indonesia to improve the regulation as fast as possible, as it stands in urgency line.

The urgency been said, since there aren't any specific norms to regulate all kinds of categorized animal, unclear classification and usage of animals, lack procedural regulations and policies relate to animals, wrong handling cases in context of animal control, no specific ministry or animal welfare committee to taken care of animals' issues, no initiative to give educational support for animals.

Animal Welfare Theory.

As a considerable new, emerge theory, Animal Welfare Theory of Law somehow having its unique combination between Kantian Moralism and Bentham Utilitarian thoughts. In the context of utilitarian, animal seen as "property", or any other valuable things, which to utilize and exploit it into greater good need tendance carefully. As a "property", animals then have some set of interest which lead their needs are met. They'll provide with food, place to live, been take care of in every necessary way, in purpose to create bigger and wider benefit for human (Stucki, 2020).

On the moral side, the other view of animal welfare theory anchor in ideal sense, by clothing animals with rights of value. Almost similar to human rights, the concept of animal rights fond into fact that animal capable to be hurt and have emotion, while they hardly become subject of moral responsibility, since it's almost impossible to proof they can take account doing something morally wrong (Stucki, 2020).

Put the animal welfare theory which still in further development aside, the principle of five freedom and 3 Rs still in active. The five freedoms principle contain freedom of hunger, thirst and malnutrition; Freedom from fear and distress; Freedom from physical and thermal discomfort; Freedom from pain, injury and disease; and freedom to express normal pattern of behavior.

And 3 Rs refer to Reduction, Refinement, and Replacement. Reduction speak about limiting animal used in research experiment while maintain experiment process to extract precise information. Refinement speak about attempt to decrease severity of inhumane procedures applied to animals, and Replacement speak about substitution for conscious living higher animal or insentient material (Article 2 UNCHAP, 2021)

Dog Regulation

Understanding the wide range of Animal Welfare topic, restriction need to be made for the sake of articles. Thus, the suggestion companion animal regulation, inter alia Dogs, is one that briefly discuss for a moment. It's known for sure that Indonesia government doesn't have any tools to control and regulate Dogs from holistic viewpoint, either as companion, stray, roamer, feral, or community dogs.

Among many regulations about animal welfare, UK standout since it has comprehensive regulation of Dogs. Article 9 number 2 on Animal Welfare Act 2006 states that an animal need shall be taken to include its need for a suitable environment, suitable diet, able to exhibit normal behavior patterns, need to be housed with, or apart from, other animals, and need to be protected from pain, suffering, injury, and disease (Animal Welfare Act, 2006)

Also, the Dogs immune to mutilation of its tail, which called docking (vide article 6 Animal Welfare 2006 UK). Only Dog certified as working dog can have the removal of tail. As for other Dogs welfare, there is specific regulation about breeding Dogs as it stated in Animal Welfare (licensing of Activities Involving Animals) Regulations 2018, which every breeder must have licensed and meet welfare standard or breeding and raise puppies (Animal Welfare (licensing of Activities Involving Animals) Regulations, 2018)

To show identification of owner so the Dogs not mistakenly identified as stray or roamer, there are regulation about Collar and Tag and Microchipping (Control of Dogs Order 1992; The Microchipping of Dogs Regulations, 2015). To Regulate prevention of misuse dog such a dogs' fight, there are Dangerous Dog Act 1991 and Dog Control Order 2006 (Dangerous Dog Act, 1991; Dog Control Order, 2006). Concerning public safety, there are Dog Control Order 2006 and Dogs Act 1871 (Dogs Act, 1871).

For stray dog, there are article 149, 150, 151 Environmental Protection Act 1990 (Environmental Protection act, 1990). For environmental comfort, there are 106 and 107 Anti-Social Behavior, Crime, and Policing Act 2014 (Anti-Social Behavior, Crime, and Policing Act, 2014). For working and assistance dog, there are dog (protection of livestock) Act 1953 and Equality Act 2010 (Dog (protection of livestock) Act 1953; Equality act 2010). Note that all this regulation focusing on Dogs, while there are other Acts concerning other animal like cats, fishes, and others.

Settle Legal Vacuum with Relentless Effort.

After obvious facts that so many legal vacuums happen in animal welfare law structure, the intention to fix all these issues shouldn't be bear only by the government as a authority to create legal norms. Norms itself happen not only because summary of thought of those people in position decide to create it, but also can manifest its existence from society. Law itself, is a reflection of Social Solidarity. Social Solidarity, especially Organic Solidarity, As Durkheim Said, have power to create new norms. This norm that comes from Organic Solidarity, which Durkheim stated:

"The relations governed by co-operative law with restitutive sanctions and the solidarity which they express, result from the division of social labor... in order for a thing to be object of common sentiments, the first condition is that it be common, that is to say, that it be present in all consciences and that all can represent it in one and the same manner." (Durkheim, 1960).

In short, the mechanic of creating a new norm is by make it born in custom level, and growth to the point law realizes the existence of these, new type of law. While it's not quick solution, it gives firm foundation in process of law creation. In fact, because the law comes directly from social consciousness, the legitimacy of norms likely be stronger than law in written from.

And as mention before, Bekasi Dog Lovers with its all activities, consciously or not, already sow seeds and hopes to make a better future in effort to create new norms about animal welfare, especially dogs. Note that this community not stand alone in context of creating social norms, as so many animal lover communities that shared same sentiment and interest in order to protect their love one in different, non-human forms.

Conclusion

In conclusion, a Grassroot community play pivotal role in raising Animal Welfare Awareness. By focusing effort on local communities and give educational understanding about ethical treatment, responsibility, people can dismiss negative stigma about Dogs while raising consciousness about kindness and empathy. The long-term impact of grassroot communities, like Bekasi Dog Lovers, can create positive norms in social spectrum since its strengthen human rights value that affluent of ideal way to live as human, thus creating law and policy development to improve, as law itself can be interpreted as manifestation of human will. Seeing the many gaps in legislation regarding animal welfare, Indonesia actually in-dire needs to adapt comprehensive paradigm about the development of animal welfare, especially in terms of divisions with the aim of holistic protection and regulation of animals. By engineering and creating social incubator such as animal lover communities, establishment of new norms inclined with animal welfare can be achieve. With example, Bekasi Dog Lovers communities' effort.

Conflict of Interest

We certify that there is no conflict of interest with any financial, personal, or other relationships with other people or organization related to the material discussed in the manuscript.

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“Indonesia Quarantine Authority and Animal Welfare : the Importance for Better Environment”

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Abstract

Animal welfare has become a challenging topic of conversation in all parts of the world, including in Indonesia. The Indonesian Quarantine Authority (Barantin) as one of the government institutions in Indonesia must also open their eyes to the importance of answering animal welfare issues. Barantin's action in carrying out its duties and functions by prioritizing animal welfare will make animals have their quality of life, animal products have their best quality, maintain the environmental safety and participate in supporting the implementation of the One Health approach. There are two legal bases that guide Barantin in carrying out his duties and main functions, including talking about Animal Welfare. The negative effect when Barantin does not pay attention to the animal welfare is the disruption of the physical, psychological and behavioral state of the animal. The public can also feel, sense and taste the negative effects of stressed animals such as animal products. As a result, innovations in the form of changing mindsets and executing more wisely in prioritizing vulnerability when carrying out Animal Quarantine Measures can make Barantin even stronger. This must be reflected in the attitude of quarantine officials who are compassionate to animals and remain subject to the basis of the legislation in Indonesia.

Keywords : animal welfare, Barantin, legislation, stress, poultry

Introduction

Animal welfare has become a challenging topic of conversation in all parts of the world, including in Indonesia. Discussions and studies on animal welfare are not only discussed at the level of society but also within the scope of universities, non-governmental organizations, organizations, and the government sector. Various challenges regarding animal welfare that occur in the surrounding environment must be solved immediately so that animals can minimize pain that they should not feel (unnecessary suffering).

Moreover, the link between animal welfare and pain is very closely related (Broom, 2003) and has many negative effects if not implemented. The Indonesian Quarantine Authority (Barantin) as one of the government institutions in Indonesia is obligated to open their eyes to the importance of answering animal welfare issues. Barantin's action in carrying out its duties and functions by prioritizing animal welfare will make animals have their quality of life, animal products have their best quality, maintain the environmental safety and participate in supporting the implementation of the One Health approach.

Barantin carries out his main duties based on rules that bind Non-Ministerial Government Institutions (LPNK) which are directly under the President of the Republic of Indonesia in accordance with Presidential Decree (Keputusan Presiden) 45/2023 concerning the Indonesian Quarantine Agency. In general, Barantin has a legal act (Undang-undang) which is 21/2019 concerning Quarantine of Animals, Fish, and Plants. After that, the legal basis that supports the execution of Law 21/2019 is the Government Regulation (Peraturan Pemerintah) 29/2023 concerning the Regulation of the Implementation of Law 21/2019 concerning Quarantine of Animals, Fish, and Plants. In this regulation, it clearly written that quarantine authority should work based on the principle of Welfare. In addition to Article 18 in PP 20/203 regarding the construction of Animal Quarantine Installations (IKH), Article 118 also pays attention to the application of animal welfare principles to Animal Quarantine Measures with the aim of maintaining public safety on means of transportation. The question that arises now is whether Barantin has touched more deeply on animal welfare when executing quarantine activity in accordance with Law 21/2019?

Material and Method

The purpose of writing the paper is as a basis for creating guidelines for transporting animals based on the principles of Animal Welfare. With the empirical and scientific evidence that has been written, the Deputy for Animal Quarantine can pay attention to Animal Welfare even better. Barantin could save and maintain health values, as well as socio-economic values in Indonesia if they perform their action with an animal welfare approach.

The paper collected all the data needed from the internal system of Badan Karantina Indonesia (Barantin)'s Indonesia Quarantine Full Automation System (IQFAST). The data details are about the type of animals which is chicken/poultry and their destination place. Data from IQFAST Animal, Fish, and Plant Quarantine Authority in Maluku (Maluku Quarantine) from January to June 2024 showed that a total of 144 adult poultry were transported to several areas that have a long distance travel time. The destinations departing from Maluku (Ambon, Tual, Namlea) include Dobo, Banda, Aru, South Halmahera, to West Southeast Maluku, Bitung, Buton, Bau-bau, Makassar, and Jakarta. All of those areas take around 2-4 days travel time from Maluku's Province, especially Namlea harbour. Unfortunately, most of these poultry are caged with varying sizes of packaging or cages which is not followed by regulation in Indonesia (Ma'rif et al. 2022). It is certain that the poultry is stressed so that it will have an effect on the health, welfare, and products produced.

The study collected numerous legislation that can be linked into animal welfare issues but the primary regulation is on Indonesia Quarantine Authority's regulation. The main law is act 21/2019 concerning Animal, Plant, and Fish quarantine. In this regulation, the focus chapter is chapter 23 about quarantine places and chapter 47 about executing the animal. The next one is Government Regulation (Peraturan Pemerintah) 29/2023 concerning the Regulation of the Implementation of Law 21/2019 concerning Quarantine of Animals, Fish, and Plants.

The main chapters in the regulation are chapter 55 and 56 regarding planning before animals arrived, chapter 118 about quarantine action toward animals in vehicles, and chapter 18 which talk about quarantine places. The other regulation that has been used is from the Agriculture Ministry.

Result and Discussion

Referring to act 41/2014 jo act 18/2009 concerning Animal Husbandry and Health, Welfare is about the physical and mental state, and naturalness of the animals that needs to be applied and enforced to protect animals from the inappropriate treatment of everyone towards animals used by humans. As stated in the paragraph, all animals are obliged to receive proper treatment. Moreover, this is supported by the PP 95/2012 concerning Veterinary Public Health and Animal Welfare. In Article 99 of the PP it is written that everyone is prohibited from carrying out activities that result in unnecessary suffering. All the basis of this regulation should be addressed to all animals such as pets, aquatic animals, wild animals, and animals that are raised. Furthermore, Barantin as LPNK must also work based on animal welfare.

The negative effect if Barantin does not pay attention to the animal welfare is the disruption of the physical, psychological and behavioral state of the animal. Nevertheless, in quarantine legislation, all the quarantine officers should ensure that all of their actions are based on the regulation which is UU 21/2019 and PP 29/2023. They must mitigate the stress of the animals by doing examinations not only for the animal but also the cages/crate/enclosure based on chapter 118 in PP 29/2023. The presence of a stress response in animals is included in the signs of psychological disturbance of animals which should be overlooked by quarantine authority. The presence of physical injuries, disruption of metabolic processes and homeostasis processes (Qaid and Al-Garadi, 2021) to death are signs of stress in animals. For example, in poultry, stress is associated with the presence of physical injuries, high mortality rates, and decreased quality of meat produced (FAO, 2001; Tamzil et al, 2016; Tamzil et al, 2018; Tamzil et al, 2019), increased anxiety (Li W et al. 2009), fear (Eugen et al. 2019), and decreased eating and drinking (Ibrahim et al. 2018) which resulted in weight loss.

The public can also feel, sense and taste the negative effects of stressed animals such as animal products. Besides, bad quality of animal products leads to poor quality and economic decrease. When animals are stressed, the meat they produce will become pale, soft, and juicy (Gholamreza and A. Dong, 2019). This is due to a change in pH in meat (Tang et al. 2013). Moreover, the economic value of animals that are not treated in an animal welfare action will be reduced because consumers do not want to purchase products that come from numerous actions that do not pay attention to the animal welfare (Sasidhar et al, 2017).

A concrete example of animal welfare issues within the scope of Barantin is poultry transportation which is most commonly found everyday nationally. Poultry is included in the animals that are farmed in addition to cows, buffaloes, pigs, and other species. The types of poultry are also diverse such as Day Old Chick, Day Old Duck, Day old Quail, adult poultry, geese, ducks, ducks, entok, and others.

The attraction of adult poultry should be taken into account because generally people have many purposes in raising adult poultry such as being raised, traded, and consumed. The demand for sending adult poultry nationally is also very diverse, both in type, quantity, origin, and the final destination of delivery. Hence, before moving into another area, the poultry should be reported to the quarantine authority two days before the departure. This is written in chapter 55 and chapter 56 on PP 29/2023.

Zheng et al (2020) said that transport can be assessed as a source of risk of declining poultry welfare and the quality of its products such as the meat produced. Research conducted by Siddharth et al (2024) then gave advice not to transport for more than four hours because it can interfere with the welfare of poultry such as high levels of stress and fear from observed behavior changes. The length of the trip is also associated with increased stress and increased mortality in poultry (Tamzil et al. 2022). Stress is closely related to animal welfare (Grandin, 2020). Potential stressors can be found in a variety of forms and situations. For animals in general, stressors can be found during transportation or travel, temperature changes, restricted movement, irregular eating and drinking times, density in packaging or cages, and other stressors. All of these stressors can be attributed to the Five Domain principles which can also be used as an assessment of animal welfare. These stressors certainly also have a great impact on the quality of life of animals, including poultry. However, transportation is estimated to be a critical point for animals in getting stress (Siddharth et al. 2024) which will result in behavioral and psychological changes (Zulkifli, 2003) as well as changes in muscles that can reduce the quality of meat produced during slaughter (Utomo et al. 2019) and can increase the risk of microbial contamination when consumed by humans (Mengert and Fehlhaber, 1996).

To conduct further assessments in assessing stress levels, several assessment options are needed. Some of these assessments are objectively such as whether there are physical injuries, increased rectal temperature, changes in body weight, looking at Gait Score (GS), and changes in blood cell examinations such as increased erythrocytes, leukocytes, heterophylls, H/L ratio, and decreased lymphocytes (Tamzil et al, 2016; Tamzil et al, 2018; Tamzil et al, 2019) and an increase in corticosterone concentrations in blood plasma (Jiang et al. 2015) which is always associated with stress response. The participation of the Barantin laboratory can also be used as a reference in assessing stress levels in animals.

However, other factors also affect Barantin in executing quarantine operations based on the animal welfare approach. The lack of more detailed regulations such as guidelines that can be followed by all Quarantine officials is also still not clear nowadays. The lack of public awareness and the diverse perceptions of Indonesian who still see animals as objects and not subjects are also a challenge to tackle. Therefore, collaboration between agencies by providing education on benefits, regulations, and information development will be very useful in realizing a better understanding of animal welfare.

Innovations in the form of changing mindsets and executing more wisely in prioritizing animal welfare when carrying out Animal Quarantine action is possible to make Barantin stronger (KUAT). This must be reflected in the attitude of quarantine officials who are compassionate to animals and remain subject to the basis of the legislation in Indonesia. The reflection will also be transmitted to vertical and horizontal authorities. Additionally, Quarantine officials should be decisive in executing Animal Quarantine actions based on the Animal Welfare approach.

Conclusion

The Indonesian Quarantine Agency (Barantin) on their way to prioritize the issue of Animal Welfare (Kesrawan) in carrying out its main duties and functions even though it has been stated clearly in their legal basis. Negative effects, especially in the issue of transportation or animal traffic, have been widely documented, so Barantin's decisive and strong role in strengthening and prioritizing animal welfare will be very vocal and bring changes in terms of health and socio-economic of the community. Education and collaboration are the ultimate weapons in increasing attention and moving together to be able to improve the understanding of Animal Welfare.

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