

# **Balancing the One Health, One Welfare, One Biology with the Global Needs**

## **Forum 1 Green Development Agenda**

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**Speaker 8**

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### **Abstract**

This presentation examines the challenge of harmonizing the principles of One Health, One Welfare, and One Biology amidst the ever-growing global demand for food and the escalating stress on food production systems due to the impacts of climate change.

The relentless rise in global food demand, driven by population growth and evolving dietary patterns, poses a significant conundrum in maintaining the integrity of these three foundational frameworks. Balancing One Health, which underscores the interconnectedness of human, animal, and environmental health, and One Welfare, which advocates for the ethical treatment of animals across various contexts, becomes increasingly complex when confronting with the global needs for food. In addition, climate change, as a result of human activities, further disrupts agricultural practices, threatens biodiversity, and exacerbates the pressure on food production systems.

Therefore, there is great urgency of incorporating One Welfare standards into the United Nations Sustainable Development Goals (SDGs). Integrating One Welfare principles into the SDGs would provide a change in the paradigm from a strongly anthropocentric to one that bring a better understanding of the interaction between humans and animals.

In addition, including One welfare in the SDGs would ensure a more inclusive roadmap for addressing these complex challenges and fostering a more equitable, and sustainable future that balances the imperatives of human, animal, and environmental well-being, all while addressing the global demand for food in the face of climate change.



Good morning, everybody, I am Dr. Sara Platto, professor of animal behavior and welfare at the college of life sciences, Jiangnan University, Wuhan, CHina.

I would like to thank the organization ARCST for inviting me to participate to the World Green Science Day.

In my presentation I will take about how to Balance the One Health, One Welfare, and One Biology with the Global Needs. I will explain how we can include animal welfare in the 2030 Agenda

We are all aware that from November 2022 we reach the total population number of 8 billion people. This means that we put a lot of pressure on food demand, and therefore on food production, and in particularly on livestock industry which requires to produce more to satisfy the world needs. This cause further development of the industrialized livestock system which if for one side they can satisfy the world food needs, on the other side they are well known for their poor animal welfare conditions.

In addition, all these pressures also impact the environment because we are not efficient in using our resources. We are consuming a lot, and producing a lot of waste, in particular waste that comes from livestock industry that are full of antibiotics which can cause, as it has been defined by WHO, the future threat for humanity: antimicrobial resistance. In order to find a solution for all these problems, we need to be more sustainable, to better our resources and reduce all the pressures mentioned earlier.

We are all familiar with the concept of one biology that underline the interconnections among all living beings on this planet. We share similar genetic material with other animal species. Being all connected also means the health of the humans is connected to the health of the animals, and the health of the environment where we live - the concept of One Welfare -. Similarly, we also share the same concept of welfare, which means that the welfare of humans is connected to the welfare of the animals and the environment - the concept of One Welfare, which is a broader framework that also include One Health, and many other factors such as socio-economical. IN order to support these frameworks and to create a better environment for all of us we need to find solutions.

In 2015 the UN in agreement with many other countries in the world supported the development of the Sustainable Development Goals Agenda, which is a set of goals that address various social, economic and environmental challenges, that the countries should solved by 2030.

Even though this framework is very beautiful, many researchers consider it impracticable. One element that this agenda is missing is the role of domestic and wild animals and their welfare. The fact that animal welfare is missing from the 2030 agenda, and it is an important element that should be included

was supported by UN Global Sustainable Development Report in 2019. This report considers animal welfare an important element that should be included in the 2030 agenda in order to make it more comprehensive.

In addition, there are several global organizations that recognize the importance to address the animal welfare issue in the 2030 Agenda. Specifically, the Global Agenda for Sustainable Livestock identified 9 SDGs that are directly linked to the livestock, underlying further the importance of including animal welfare in the SDGs. Last year, March 2022 we had a further development when the UNEA 5 adopted the resolution to incorporate animal welfare in the next report of UNEA in 2024. In addition, In December 2022, the UNEP approved a resolution, The Animal Welfare-Environment-Sustainable Development Nexus that explicitly referenced the importance of animal welfare.

All of this underlines that the missing link, animal welfare, is actually a very critical issue. For example, if we take into consideration from one side the socio-economical status of the people who share a specific environment with domestic animals they use for food or leisure, and the wild animals, this global picture allows us to better understand how the welfare and health of the humans are interlinked with the ones of the animals.

In addition, from the moment we include animal welfare in the SDG agenda means we substitute the previous paradigm that was based on economic growth with a paradigm that is based on well-being. In fact, the economic growth paradigm is the one that led us in the crisis we are currently. In addition, the current organization of the SDGs is very anthropocentric, which is the reason why it would be important to also include in them the welfare of the animals.

The inclusion of the animal welfare in the SDG is not so straightforward practice. We need first to understand what the strength between animal welfare and each SDG is, and how we can incorporate animal welfare in them in order to support the development of the agenda 2030.

Keeling et al performed two studies: one in 2019 and one in 2022, the latter is “a global study to identify a potential basis for policy options when integrating animal welfare into the UN sustainable development goals. These two studies had from one side the objective to rate the strength of the association between animal welfare and the SDGs, and on the other side to evaluate at which extent achieving the targets in the SDG can favor the development of animal welfare and vice versa.

These two studies have actually underlined further the importance of incorporating the animal welfare in the policy making, and all activities concerning the humans, animals and the environment because by doing this it would benefit the achievements of the SDGs.

This means that by doing so all the organizations that work on animal welfare and the ones that works on achieving the targets of the SDGs cannot work by themselves anymore but they need to start to find common grounds and collaborate, and to support each other in order to achieve positive outcomes for animal welfare as well as for the SDG targets.

The study of Kneeling et al 2019 pointed out that the SDGs could be divided into three groups depending on the impact animal welfare has on them or which impact each of these SDG has on animal welfare. In the top right quadrant we have the mutually reinforcing SDGs. What does that mean? It means that applying animal welfare to these SDGs strongly favor their development, as well as supporting these SDGs can favor positive outcomes for animal welfare.

In the top left of the graph, we have the enabling/reinforcing SDGs. This means that enabling the development of animal welfare might not directly favor the achievement of the SDG, on the contrary Reinforcing/promoting these SDG can actually on a long term favor the development of animal welfare. In this case the animal welfare organizations and the organizations that work on developing the targets of the SDGs still need to find a common ground even though the outcomes might not be strongly positive as in the first group.

In the bottom left of the graph we have the Consistent group of the SDGs. This group of SDGs has the so called mutually symmetrical association with animal welfare. This means that the progress in one area such as animal welfare can contribute to the progress on the target supported by the specific SDG. But the magnitude of the impact can vary which means that if we develop a specific SDG it might not have a stronger impact on the development of animal welfare or vice versa. But still the outcomes are positive.

So the organizations that works on animal welfare and on the SDGs still might find common positive ground and work to reduce the trade-off. Furthermore, in the groups mutually reinforcing and enabling/reinforcing we can find anthropocentric and zoo-centric SDGs, while the consistent group contains more technical SDGs. These latter SDGs even though they focus more on industrial and city development still they have a mutually symmetrical association with animal welfare which means that the development of these SDGs can still lead to positive outcomes for animal welfare.

Kneeling et al 2019 also found an interesting point which is instead to focus in trying to associate animal welfare to all SDGs , it is better to identify those SDGs that have more targets in common with animal welfare and start working on those. For example, the SDG 14 which represents the Life Below Water and the SDG 12 that represents Responsible production and Consumption together they have 21 targets that have a positive association to animal welfare.

It is important to consider that when we want to include animal welfare in the 2030 agenda the relationship between animal welfare and the SDGs is complex and context dependent. Despite that, we should still work out our best collaboration in order to make the 2030 Agenda more zoocentric and well-being oriented.

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