Animal Welfare Economics

Introduction

One of the key activities of the WOAH Global Animal Welfare Strategy (GAWS) is the Animal Welfare Global Forum\(^1\) organised annually for members of the animal welfare research community, the global animal welfare movement, and the global animal-source food sector, who can debate openly on animal welfare related topics.

The first Animal Welfare Global Forum\(^2\) (2018) discussed the main challenges faced by academia, industry, NGOs and governments when implementing the WOAH animal welfare standards. The second Forum\(^3\) (2019) discussed animal welfare issues and joint responsibilities during animal transport. At the third Forum\(^4\) (2021), participants discussed their views on how improvement of animal welfare can contribute to the achievement of the United Nation’s Sustainable Development Goals and how achieving these Goals can help improve Animal Welfare.

This fourth Forum opened the discussion on the concept of an economic analysis in the context of animal welfare.

Background

At previous Animal Welfare Fora, attendees highlighted the importance to incorporate social sciences, particularly economics, to understand better the impact that implementing animal welfare measures could have on production costs and benefits including hidden cost and benefits, particularly for farm animals. It was suggested that these topics be discussed in a future Forum.

The concept is already acknowledged under Article 7.1.2. of the Terrestrial Code, which states:

“...improvements in farm animal welfare can often improve productivity and food safety, and hence lead to economic benefits.”

Furthermore, WOAH, together with a consortium of researchers, is collaborating on a project that is developing a systematic approach for the assessment of the economic burden of diseases and health issues in animals (GBADs\(^5\)). This project aims to provide estimates of net loss of production and expenditure and trade impact, and to identify where the burdens occur, the causes and risk factors and to whom it occurs. Livestock health and productivity are negatively impacted by the presence of endemic and emerging diseases, thereby increasing the resources needed to raise these animals. Similarly poor animal welfare can have an impact on animal health which would have a detrimental effect on livestock productivity. However, there is a cost to animal welfare. Decision-makers need to have further empirical information to be able to assess accurately the impact of their policy decisions targeting animal welfare issues. The GBADs project is working to identify evidence to include animal welfare in the model.

Therefore, the main objective of the fourth Forum ‘Animal Welfare Economics’ is to provide a platform to initiate a discussion on how the costs and benefits of implementing (or not) animal welfare policies can be identified and measured, and to assess how these policies can affect animals and their productivity.

Logistic

This fourth Forum was organised in collaboration with the GBADs project Team. It was held over two 3-hour virtual sessions on 12 and 13 October 2022 using the video communication tool ’Zoom’.

The participants to this Forum included WOAH National Animal Welfare Focal Points, and representatives from International Organisations with which WOAH collaborates on animal welfare topics and the WOAH Collaborating Centres on Animal Welfare. Overall, at least 100 participants joined the plenary sessions and at least 60 took part in the breakout sessions.

On the first day, there were five presentations along with question sessions. On the second day, the two presentations were followed by a breakout session for more in-depth discussion in small groups. The summary of the presentations and breakout discussions is presented in this report and the full programme is available in Annex 1.

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1. Welcome and opening remarks (Monique Eloit)

In her opening remarks, the WOAH Director General, Dr Monique Eloit, highlighted the importance for stakeholders to continue to be involved to deliver successfully the four pillars of the Global Animal Welfare Strategy. She reminded attendees of WOAH’s commitment for activities on animal welfare and thanked GBADs for its contribution and support to deliver this Forum. She highlighted that animal welfare is an important aspect linked to livestock health and productivity. She therefore recognised that the Forum was a timely opportunity to initiate the discussion on the economic impact of animal welfare and on how the income of farmers around the world could increase. She encouraged participants to share their own knowledge and experience so that we can all learn from each other to shape future development in this area.

2. Summary of the presentations and discussion (day 1)

2.1. Building on previous WOAH Global Animal Welfare Forum

Dr Leopoldo Stuardo reminded the participants about the vision of the Animal Welfare Global Strategy and its four Strategic Pillars. He provided a summary of the discussions that took place in the previous three Fora and presented the exciting programme for this Forum. He described the programme which included social sciences, and in particular economics, as an important aspect to discuss in the context of animal welfare.

2.2. Contribution of national laws and private standards’ to the economics of animal welfare

Dr Neila Ben Sassi introduced the GBADs project and its analytical structure. She gave an overview of the legislation on animal welfare around the world and mentioned the fact that some companies report their performance on specific welfare topics through the Business Benchmark on Farm Animal Welfare (BBFAW). She described the confusion created by the large number of labels on the market, the range of auditing schemes available and more importantly, the price of products and how it can influence consumer behaviour. She reported that ‘Organic’ is claimed to be the gold standard in animal welfare, but it’s less clear whether the organic requirements are aligned between countries or even at national level. Finally, Dr Ben Sassi reflected on how animal welfare can be measured, on its relation with the level of compliance to measures applied and on the welfare impact in relation to the presence or absence of diseases.

2.3. The process to revise the EU legislation on animal welfare and assess impacts

Dr Andrea Gavinelli presented the European Union’s commitment towards animal welfare, its current legislation and the revision process of its legislation which started in 2020 and is due to conclude in the third quarter of 2023. He presented the findings of the evaluation of the current legislation and mentioned that the “EU animal welfare legislation has had a limited effect on the competitiveness of EU food business operators (differences in production costs seem mainly driven by productivity, land and labour cost and feed price)”. He presented examples of possible policy options that are under study and they are going through an extensive impact assessment process that will consider the new science available and the social and economic aspects related to the different options. Certain options include, for example, the alignment of transports requirements to latest science; the possibility to phase out water bath for stunning poultry or the phasing out of cages for certain species of animals. All these Commission proposals will be based on the outcomes of the EFSA opinions that are under elaboration or just adopted. The Commission is also considering options to develop an EU and animal welfare label. Dr Gavinelli finished his presentation with a description of the international activities on animal welfare in which the EU is taking part.

2.4. Economic policy tools applicable to animal welfare: a producers perspective

Dr Henk Hogeveen described the economic policy tools on animal welfare from a producer perspective. He mentioned that this concept was important for the producer because, based on data from the Netherlands, monthly margins vary extensively. The return on investments is very volatile. Animal welfare influences this margin positively and negatively. He described the issues of externality, and explained that animal welfare was a mixed commodity (public and private good). With the help of a graph, he explained that by improving animal welfare from its minimum up to a certain level, there can be a beneficial impact in reducing the costs of production. Beyond that, any improvement of animal welfare would result in an increase of costs of production. This leads to the discussion of who pays for this. The costs of productions for conventional systems (in pigs and in poultry) was not much lower than those for systems with higher animal welfare measures (e.g. free range, extensive outdoors). He also explained that labelling is used as a compromise to palliate the lack of legislation which leads to market segmentation and a potential increase in profit for retailers. Overall, animal welfare was not that expensive, regulation is preferable to ensure minimal requirements and animal welfare should be a non-trade concern.

2.5. Economic incentives for implementing animal welfare standards: NGOs perspective

Dr Carolina Maciel introduced her presentation with an extract from the Terrestrial Code which states that the use of animals carries with it an ethical responsibility to ensure the welfare of such animals to the greatest extent practicable. She explained that in addition to this ethical consideration, the implementation of animal welfare standards can lead to economic gains such as cost savings (with production improvement or avoidance of pecuniary fines for regulatory noncompliance) and premium prices on the sale of some products. She also described other types of benefits such as access to investments and access to markets. She explained that many investors now have lending policies that prevent investments from being made in production systems that do not meet certain requirements. She also pointed out that some financial institution offers benefits such as lower interest rates for loan requests that meet higher animal welfare standards. She referred to the FARMS initiative as a tool available to financial institutions to use as a benchmark to assess the responsible minimum standards to raise pigs, laying hens, broilers, beef and dairy cattle. In terms of market access, she explained that private standards emerged worldwide in the 1990s, with several retailers voluntarily committing to source from animal-friendly suppliers, and that now we see governments stepping up and also defining welfare-related requirements as a condition to market access. She concluded that from both an economic and an ethical perspective, the implementation of animal welfare standards must be a priority.

3. Summary of the presentations and discussions (Day 2)

3.1. Animal welfare through the eyes of an investor: the IFC perspective

Mr Ivan Ivanov, International Finance Corporation’s (IFC) Global Lead for Sustainable Protein Advisory Services, introduced IFC, the largest global development institution focused on the private sector in developing countries with an investment portfolio of 66 animal protein clients, a total value of over $1 billion. Mr Ivanov explained how the IFC approaches its due diligence in the animal protein sector, following the IFC Performance Standards and the IFC Practices for Sustainable Investment in Livestock Operations. Mr Ivanov then focused on Practice 4 which states that each investee client must implement an Animal Welfare Management System codified by credible standards, for example, Global GAP Livestock. Mr Ivanov presented two detailed case studies to demonstrate how IFC works with its clients to improve their animal welfare systems, using the example of the transition to group housing for pork producers in China and Ukraine. He provided detailed description of the cost of implementing best practice in animal welfare to private companies that go beyond the requested standard in a country. Mr Ivanov concluded with a call to action. Given that best practice in animal welfare practices very often leads to an increased cost to private operators, governments in developing countries should make best practice a legal requirement, thus providing a level playing field.

3.2. How much do consumers care about pig welfare, and how much will they pay for it?

Dr Peter Sandøe presented the consumer’s perception on the cost of welfare in the pig production and highlighted that the meaning of ‘good welfare’ differs between countries but also between people from the same community or even family. He explored three questions: “how do animal ethics orientations among consumer differ?”, “what is the relative importance of legislation and labelling” and “how much does animal welfare matter compared with other attributes (such as climate change) and how much will they pay?”. To elaborate on the first question, he described four orientations towards animals: ‘anthropocentric’, ‘animal rights’, ‘animal protection’ and ‘lay utilitarian’, associated these orientations with pork purchases habits and found that ethical views do differ and affect consumption pattern. To address the second question, he mentioned that despite legislation and labelling that complement each other, it is difficult to track how much is actually achieved in terms of improved animal welfare and so, there is a need for a benchmark approach. To explore the third question he described a consumer analysis which looked into consumer’s behaviour when buying pork products and when faced with a choice between supporting animal welfare compared with other issues to improve. Animal welfare does matter to consumers but may be reluctant to pay for it (in Europe).

4. Summary of the discussion during the breakout sessions and results from the polls

4.1. Breakout sessions

Q1 Should more effort be made to identify the costs and benefits of implementing animal welfare measures (direct or indirect). Please explain. How can these costs and benefits be calculated/identified/measured? What will be the purpose of having this information (decision taking tool for regulatory, market, political decisions

8 https://www.farms-initiative.com/  
9 https://www.ifc.org/wps/wcm/connect/Industry_EXT_Content/IFC_External_Corporate_Site/Agribusiness/Priorities/Sustainable+Livestock/  
11 https://dyreetik.ku.dk/dokumenter/forskningsprojekter/From_legislation_to_labelling.pdf  
12 https://www.mdpi.com/2076-2615/10/6/955  
13 https://www.mdpi.com/2076-2615/11/2/329
Overall, participants agreed that more should be done to understand the economical implication of animal welfare. There is a need to understand the wider cost to society of not acting (such as threats of zoonosis spreading) and acknowledge that it is a multi-dimensional concept with impact on the environment and on energy needs.

It was mentioned that calculating these cost and benefits can be complex – partly because there are many different views and cultures, but also because when ‘welfare change’ is properly managed, it is hard to detect or calculate any direct or indirect shift in productivity or other externalities over time. The complexity was exacerbated by the fact that data are not fixed (e.g. fluctuating feed price per day or in between countries).

Nevertheless, perhaps a matrix could be developed to look at direct and indirect cost, not only for financial data but also for the wider socio-cultural environmental impact including animal health benefits. We need to look at past data as well to develop trends. It was mentioned that there was already models in place to calculate the environmental footprint of intensive food production which could be used as a starting point to evaluate costs and benefits of animal welfare in these settings.

Having this information would help communicate better the good practices and the required change in behaviours. It would provide evidence-based information to support decision-making, to influence regulatory processes and government decision.

Q2 In your country, how informed are food-animal producers, the civil society or consumer about the impact of implementing higher animal welfare measures on costs and benefits (direct or indirect) of producing goods?

It was felt that some livestock farmers are aware and know about the cost or benefits of implementing welfare measures, whilst others struggle to calculate these costs and benefits. They may be aware of the positive impacts (e.g. better growth and better feed conversion) but often farmers are afraid of the investment and changes required to meet these standards. It was felt that producers were also aware of societal expectations, legislation and retailers’ standards. However, understanding of what consist of high animal welfare differ between countries and often farmers were reluctant to discuss this topic.

With regards to consumers, it was felt that there is a need to educate them on the basic aspect of livestock farming and welfare standards. Consumers may be aware of animal welfare, but are still unwilling to pay for it and they certainly don’t do what they say they do. Raising awareness amongst consumers on the basic needs of animals and on the real costs of producing animal products is needed. Unfortunately, too often, public opinion is fuelled by examples of bad animal welfare rather than positive progress made in improving the way animals are kept and raised. The ethics of good animal welfare should be better communicated. There is also a need to demystify the large number of labels that nobody understands anymore: grass fed, pasture, antibiotic free, no cruelty, humane slaughter, organic.

Overall, participants mentioned that WOAH has a key role in raising awareness amongst farmers and engaging with governments on this topic.

Q3 Can food suppliers comply with higher animal welfare standards while making sure that final product price will still be attractive for the consumer?

At the moment, companies can still make a profit on higher welfare products as long as there is a demand. With a higher price, only a certain portion of the population will be able to purchase these products, this drives the bar down for cheaper products with poorer animal raising conditions when companies want to expand their market share.

It was mentioned that at the moment, it is very much a ‘bottom-up’ approach that is based on what the consumer is willing to pay whereas in fact the responsibilities should start with the producer and government to set the bar.

There are conflicting priorities in countries. It was mentioned that in some countries, food security and availability of cheap food is a priority over considerations to Animal Welfare. and so in that context, there is little incentive for food suppliers to comply with higher or any animal welfare standards.

Q4 Are you aware of any initiative to include AW as a factor or component to approve livestock production projects? If yes, which initiative? And using which criteria?

An example in the wool industry was provided: farmers can receive premium price which helps them comply with the implementation of animal welfare standards.

Participants mentioned a EU funding programme for which animal welfare is a pre-requisite. Livestock farmers can have access to funding to develop their enterprise but are required to comply fully with current animal welfare legislation in the European Union.
The concept of ‘social licence’ was mentioned as an additional requirement with which businesses should comply before being allowed to produce.

4.2. Polls' results

- When your Government (Regulatory Agencies) wants to revise current or create new animal welfare legislation, does it prepare an economic impact assessment to feed into the discussion? Out of 39 responses, 66% (26) said ‘yes’ and 33% (13) answered ‘No’.

- Are private auditing programmes used to improve the welfare of animals in the production Systems in your countries? Out of 35 responses, 66% (23) said ‘yes’ and 33% (12) answered ‘No’.

- Can animal welfare be considered a public good14: a service from which everybody benefits? All 42 respondents agreed that animal welfare can be considered a public good.

- Whose responsibility is it to cover the costs related to animal welfare improvements? A total of 37 participants responded to that question. Participants were allowed to choose more than one options out of the four proposed. Seventy-seven responses were received. Overall, most participants (73%) thought that consumers should pay more for their goods, but also believed that retailers (such as supermarket) (51%) should absorb the increased cost of producing goods in line with animal welfare standards. Many respondents (56%) thought that it was the responsibility of more than one entity to cover the costs.
  - animal producers (are responsible for treating their animals well) – [17 responses],
  - buyers (e.g., supermarkets) should absorb the costs – [19 responses]
  - government (should pay animal producers to ensure AW) – [14 responses]
  - consumers should pay more for goods produced in line with AW standards – [27 responses]

- What topic should the next forum cover? [short answer mode]
  Participants suggested a good range of topics that could be covered in a future Forum. It was proposed to explore the welfare of pets in public places, the link between animal welfare and climate change, the connection between animal welfare and trade, the training required to implement animal welfare standards, how regulation and labelling can support the implementation of science-based animal welfare standards, the animal welfare of aquatic animals, how to implement dog population management, the role of society in animal welfare and a Forum on the One Welfare.

5. Closing remarks

Dr Montserrat Arroyo, Deputy Director General for Science and Standards, closed the 4th Global Animal Welfare Forum, highlighting that the objective of the forum was fulfilled with a fruitful discussion among WOAH members and partners from the industry and civil society around such an important topic like the economics of animal welfare. This is the main goal of the Forum.

After thanking the speakers, she stated that there was a consensus that it was necessary to consider the economic aspect of animal welfare from a holistic perspective. It also highlighted some critical challenges like the lack of reliable data, the low level of implementation of the standards and the difficulties to identify the overall costs and benefits associated with the implementation of animal welfare policies or measures.

Finally, Dr Arroyo mentioned that this was the first step to discussing and including this topic under the WOAH animal welfare work. She indicated that WOAH would continue to explore the implications of such inclusion in the context of the development of policies and measures with the collaboration with WOAH partners and in particular the GBADs project.

14 A product or service that is non-excludable and nondepletable (or "non-rivalrous"). A good is non-excludable if one cannot exclude individuals from enjoying its benefits when the good is provided. A good is nondepletable if one individual’s enjoyment of the good does not diminish the amount of the good available to others. Encyclopedia Britannica
### Annex 1. Programme of the 4th Animal Welfare Global Forum

**WOAH Animal Welfare Global Forum**  
**“Animal Welfare Economics”**  
**12 and 13 October 2022 via Zoom**

#### Day 1: Wednesday, 12 October 2022 (12h00 -14h30 CET, Paris time)

**Chair: Leopoldo Stuardo**

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<td>12h00–12h05</td>
<td>Connection and technical test</td>
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<tr>
<td>12h05-12h15</td>
<td>Welcome and opening remarks</td>
<td><strong>Monique Eloit</strong>, Director General, World Organisation for Animal Health (WOAH)</td>
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<tr>
<td>12h15-12h25</td>
<td>Building on previous WOAH Global Animal Welfare Forum outcomes</td>
<td><strong>Leopoldo Stuardo</strong>, Standards Department, WOAH</td>
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<td>12h25-12h45</td>
<td>Contribution of national laws and private standards’ to the economics of animal welfare</td>
<td><strong>Neila Ben Sassi</strong>, Global Burden of Animal Diseases (GBADs), University of Guelph, Canada</td>
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<td>12h45-13.05</td>
<td>The process to revise the EU legislation on animal welfare and assess impacts</td>
<td><strong>Andrea Gavinielli</strong>, DG SANTE, European Commission</td>
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<td>13h05-13h20</td>
<td>Q&amp;A Session</td>
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<td>13h30-13h50</td>
<td>Economic policy tools applicable to animal welfare: a producer’s perspective</td>
<td><strong>Henk Hogeveen</strong>, Wageningen University, Netherlands and Research and International Dairy Federation</td>
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<td>13h50-14h10</td>
<td>Economic incentives for implementing animal welfare standards: NGOs perspective</td>
<td><strong>Carolina Maciel</strong>, International Coalition for Animal Welfare and World Federation for Animals</td>
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<td>14h10-14h25</td>
<td>Q&amp;A Session</td>
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#### Day 2: Thursday, 13 October 2022 (12h00-15h00 CET, Paris time)

**Chair: Leopoldo Stuardo**

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<td>12h10-12h30</td>
<td>Animal welfare through the eyes of an investor: the IFC perspective</td>
<td><strong>Ivan Ivanov</strong>, International Finance Corporation (IFC), World Bank Group</td>
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<td>12h30-12h50</td>
<td>How much do consumers care about pig welfare, and how much will they pay for it?</td>
<td><strong>Peter Sandøe</strong>, University of Copenhagen, Denmark</td>
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<td>12h50-13h10</td>
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<td>13h10-13h20</td>
<td>Break</td>
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<td>13h20-14h05</td>
<td>Breakout Groups: How to integrate economics into animal welfare decision making?</td>
<td>WOAH in collaboration with GBADs</td>
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<td>Feedback from Breakout Groups</td>
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<td>14h35-14h50</td>
<td>Closing discussions</td>
<td><strong>Montserrat Arroyo</strong>, Deputy Director General International Standards and Science, WOAH</td>
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<td>14h50-15h00</td>
<td>Closure of the meeting</td>
<td><strong>Leopoldo Stuardo</strong>, Standards Department, WOAH</td>
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