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**World Society
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Submission to SBSTA: Recommendations for Animal-Friendly and Sustainable Agriculture

September 2013

In response to the SBSTA call for submissions (FCCC/SBSTA/2013/L.20), The World Society for the Protection of Animals (WSPA), Humane Society International (HSI) and Brighter Green lay out their recommendations for animal-friendly and sustainable agriculture ahead of SBSTA 39.

Our organizations represent millions of animal protection advocates across the globe as well as individuals concerned about the environment, sustainable development, climate change, and food security and work cooperatively with farmers, government agencies and other civil society groups worldwide to promote more humane, healthy, and sustainable food systems.

Summary of Key Messages for UNFCCC Parties:

- The in-session workshop at SBSTA 39 should include a discussion of animal welfare, including an expert speaker. Animal welfare can support livelihoods and food security, and therefore adaptation, and is an important element to evaluate and safeguard when considering climate change solutions in agriculture.
- Provide support to fill research and knowledge gaps, particularly to understand and quantify the impacts of climate change policies in the agricultural sector on animal welfare and other social and environmental goals, as well as possible co-benefits of good animal welfare practices on environmental goals.
- Provide finance for sustainable, animal-welfare-friendly agriculture adaptation—capacity building, research and extension, knowledge and tech transfer.
- Work towards national, regional and local strategies for climate change adaptation and mitigation that ensure equitable, animal-welfare-friendly solutions for farm animal production.
- Ensure that national, regional and local policies manage unsustainable demand for animal products.



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Background

The UNFCCC agriculture meetings this November and beyond are vital for the future of agriculture, and the upcoming in-session workshop presents a key opportunity to pursue an equitable strategy that supports agricultural development and other social goals, including promoting and safeguarding animal welfare. Indeed, improved animal welfare can support rural livelihoods and food security, benefiting both the people and animals.¹

Climate change is already endangering animals and communities around the globe. Diseases are more frequently emerging and spreading to new areas; rising air and sea temperatures are damaging critical habitats and threatening species who rely on these habitats for survival. Farm animals will not be spared from this, and will be affected by climate change-induced rangeland drought and other weather events, which could lead to animal deaths.² For example, as grazing areas dry up in sub-Saharan Africa, pastoralists will be forced to travel farther to find food and many animals will likely starve. In particular, cattle, goats, camels, sheep, and other animals which depend on access to grazing areas for food will suffer from hunger and dehydration.³

At the same time, farm animal production is a significant consumer of natural resources, and a major contributor to global greenhouse gas emissions and should therefore be addressed in climate change adaptation and mitigation solutions.

According to the Food and Agriculture Organization of the United Nations, considering the entire food chain (including deforestation for grazing, forage production, etc.), farm animal production accounts for 14.5% of the world's greenhouse gas emissions.⁴ Even assuming efficient sectoral growth, by 2050 emissions from animal production is predicted to grow 39% over year-2000 levels and to account for 70% of the sustainable level of global GHG emissions.⁵

Recent studies indicate that decreases in animal source food consumption can reduce emissions from the farm animal sector more than supply-side solutions. Such reductions in meat, egg, and milk consumption can simultaneously improve food security and public health, as well as lessen pressure on natural resources.⁶

Unfortunately, climate negotiations thus far have failed to recognize this, and with just a few exceptions, local and international agricultural policies fail to address the importance of reducing the demand for animal products as a means of achieving food security and other development goals.

Adding to the environmental challenges arising from large farm animal populations, rapid industrialization of the farm animal sector is creating multiple social and environmental problems, including in emerging economies, where most of the growth in meat production is projected to take place. Worldwide, industrial systems account for approximately two-thirds of egg and poultry meat production and over half of pork production, with developing countries producing approximately half of the world's industrial pork and poultry.⁷



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Given that we now raise over 70 billion land animals for human consumption each year,⁸ it is essential that agricultural policy explicitly addresses environmental and social problems resulting from the animal agriculture sector—and does so in a way that supports the health and well-being of farm animals.

The research, discussions and policy debates must begin to consider the huge role and impact of farm animal production; and any solutions emerging for mitigation and adaption in this sector must be equitable, enhance food security and promote farm animal welfare.

Better animal welfare contributes to climate adaptation and mitigation

Farm animal welfare involves both the physical and psychological well-being of an animal. How they are raised and treated can have important repercussions, not just for animal welfare, but for environmental sustainability, food security, and the economic well-being of farmers. Improving animal welfare can have positive impacts for sustainability and livelihoods in a variety of systems. And it should be considered along other sustainability issues and social development goals.^{9,10,11}

Industrial, ‘high input – high output’ systems may appear efficient at first glance but are also energy, ‘blue’ water and land hungry. The intensive confinement of these production systems severely impairs animal welfare, as animals are unable to exercise, fully extend their limbs, or engage in many important natural behaviours. As a result of the severe restriction within these barren housing systems, animals can experience significant and prolonged physical and psychological stress. Battery cages for egg-laying hens and crates for pregnant sows and calves, in particular, are not appropriate for housing animals.

While it is clear that animal welfare and other reasons urge against political and financial support for industrial farm animal production, development finance and policies must also favour farmers who give proper care to their animals and practice and promote more humane and environmentally sustainable agriculture. Animal welfare should be improved in all systems, which can have far-reaching results for the environment and livelihoods.

Complex systems and possible unforeseen consequences

Multiple studies suggest that improved animal welfare can yield positive environmental results. However, measuring GHG emissions from animal agriculture is difficult given the complexity and diversity of production systems.

Because the GHG emissions per kg of output are lower when output per animal is higher, some argue that life cycle analysis (LCA) results indicate intensification of animal farming – which can include increasing scales of production, breeding for high yields, permanent housing and concentrate feeding of animals – is the best way to reduce livestock emissions.

This assessment is simplistic. It fails to account for many other environmental and social factors, particularly the animal welfare concerns in industrial scale animal production systems.^{12,13,14} Further, some housing practices typical of industrial systems have now been outlawed on grounds of bad animal welfare or are being voluntarily phased out by egg and meat producers in Europe, North America, and elsewhere. Such considerations should be included in LCA results and policy recommendations.



Additional research needs to be conducted on the potential for improved animal welfare to help adaptation and mitigate emissions from the farm animal sector. However these initial findings are positive:

- A study from the US state of Iowa showed that higher welfare hoop houses for pigs compare favourably, in terms of emissions and non-renewable fuel use, to conventional (lower welfare) confinement housing systems.¹⁵
- Based on a WSPA case study in Kenya, a group of dairy farmers testing more intensive housing systems achieved lower returns than they did under their traditional pasture based system (which provides higher welfare for the cows), and ultimately reverted to the traditional system.¹⁶
- Breeds suited to the environment locally are often more robust and resilient than industrially farmed breeds.¹⁷ Further, animals reared in extensive systems often have longer, productive lifetimes and these systems may have lower reliance on fossil fuel and grain inputs.¹⁸
- Breeding animals for high yield is often directly associated with poor welfare and can contribute to increasing carbon emissions. Breeding cows for higher milk production, or pigs for greater litter and piglet size or frequency of birth can harm animal health and reduce productive lifespan.^{19,20} A 2010 study found that a 9% reduction in emission levels per kilo of milk was found when using lower yielding but longer living cows.²¹
- Feed production is the major environmental burden in poultry and egg production.²² However, there is clearly potential for higher welfare systems to reduce emissions while delivering good animal welfare, which is not considered by basic GHG analyses.²³
- LCA studies of dairy farms are beginning to show that pasture-based farming, more consistent with the natural behaviour of cows, can be equally or more efficient than intensive milk production when the extensive system is well managed. For example, multiple studies show organic dairy production is comparable to conventional production in terms of GHG emissions. Three European^{24,25,26} studies all show similar total GHG emissions from varying production systems, including organic, extensive, and conventional. A 2010 study modeled emissions from organic and conventional farms for four different geographical locations in Austria and found that organic systems emitted, on average, 11% fewer GHGs per kilogram of milk than conventional systems.²⁷
- One study found that, had the carbon storage potential of grassland been taken into account, beef from cattle finished on pasture, as opposed to lower welfare feedlots, had the lowest GHG emissions per kg of beef.²⁸

Clearly, current research supports the potential for higher welfare systems to be equally or more environmentally efficient relative to lower welfare, industrial systems. Future LCA methodologies need to be modified to incorporate animal welfare and other social and development concerns. It is clear that



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industrial farm animal production systems have multiple negative impacts when viewed from a broader perspective.

Recommendations for Animal-Friendly and Sustainable Agriculture

In light of the growing challenges to animal welfare in the farm animal sector, we make the following recommendations for agricultural policies that improve food security and long-term sustainability, while promoting and enhancing animal welfare:

- **The in-session workshop at SBSTA 39 should include a discussion of animal welfare, including an expert speaker.** Animal welfare can support livelihoods and food security, and therefore adaptation, and is an important element to evaluate and safeguard when considering climate change solutions in agriculture.
- **Fill research and knowledge gaps.** More research is required to understand and quantify the impacts of climate change policies in the agricultural sector on animal welfare and other social and environmental goals. Additionally, research should examine possible co-benefits of good animal welfare practices on environmental goals.
- **Provide finance for sustainable, animal-welfare-friendly agriculture adaption—capacity building, research and extension, knowledge and tech transfer.** To enable implementation of animal-welfare-friendly practices that support livelihoods and food security, this finance and related programs should incorporate veterinary care and animal welfare assessments and improvements.
- **Work towards national, regional and local strategies for climate change adaptation and mitigation that ensure equitable, animal-welfare-friendly solutions for farm animal production.** This should be reflected in and inserted into negotiation processes and the outcomes must be context-specific and adaptable to national and local needs.
- **Ensure that national, regional and local policies manage unsustainable demand for animal products.** Governments and civil society must address drivers of agricultural emissions by raising awareness and implementing policies regarding health, climate, and environmental benefits of reducing demand for animal products, particularly in developed nations and amongst higher income urban consumers in mid-income nations.

Conclusion

We look forward to working with parties to develop solutions to climate change emissions and impacts in the farm animal sector in a manner that promotes and enhances food security, animal welfare, and overall environmental sustainability. Our recommendations and supporting data provide a basis for this future work.



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