



**HUMANE SOCIETY
INTERNATIONAL**

Humane Society International Agriculture Submission to the UNFCCC April 2012

In response to the Durban Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) call for submissions,¹ Humane Society International (HSI) briefly lays out its views on the treatment of agriculture within the United Nations Framework Convention on Climate Change (UNFCCC), highlighting the importance of evaluating, enhancing, and safeguarding animal welfare.

Agriculture and the UNFCCC: Next Steps and the Importance of Consideration for Farm Animal Welfare and other Social Goals

Summary of Key Messages

UNFCCC treatment of agriculture is critical, not only for food security and climate change, but also for the welfare of animals raised for food, and a variety of other social and environmental goals, including gender equity and biodiversity. Policy and finance in agriculture must support multiple social and environmental goals and incorporate, respect, prioritize, and further the following principles:

1. **Including and supporting all stakeholders.** Policy and finance in agriculture must include marginalized stakeholders, including women, smallholder farmers, pastoralists, small-scale fishers, and indigenous peoples, as well as civil society groups advocating on behalf of animals.
2. **Addressing climate change adaptation *and* mitigation.**
3. **Ensuring animal welfare, food security, and other social and environmental outcomes.** As the world faces increasing challenges from climate change, it is imperative to seek and implement solutions that fulfill multiple social goals. Given the large numbers of animals raised for food globally, particularly in welfare-depriving systems, the welfare of these animals should be evaluated, enhanced, and safeguarded in agricultural climate solutions.
4. **Ensuring consistency across UNFCCC decisions and mechanisms.** Parties must ensure that any initiatives, arrangements, rules, or mechanisms that might be established by the Conference of the Parties to the UNFCCC or Meeting of the Parties to the Kyoto Protocol, such as and including NAMAs, the CDM and a REDD+ mechanism, are elaborated and implemented in a manner consistent with each other and with the need to advance multiple social goals related to agriculture.

¹ Draft decision [-/CP.17], Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, pars. 75-77, available at http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_lcaoutcome.pdf.

I. Introduction

UNFCCC treatment of agriculture is critical, not only for food security and climate change, but also for the welfare of animals raised for food, and a variety of other social and environmental goals, including gender equity and biodiversity. Thus, the direction of policy and finance in agriculture, now and into the future, is important globally and at every level of governance, and should simultaneously support positive outcomes on multiple social and environmental goals.

The UNFCCC recognizes this principle of multiple-outcome consideration in various ways. For example, Article 2 safeguards food production within the “ultimate objective” of the Convention to “prevent dangerous anthropogenic interference with the climate system.”² All UNFCCC policies, finance, mechanisms, or other decisions should continue to encourage a multi-faceted, cross-disciplinary approach to policy and finance in agriculture. The Durban AWG-LCA decision, by taking a step towards a further decision at COP18,³ offers an important opportunity to do so in a way that includes substantial input and involvement from all stakeholders.

II. The Importance of Supporting Systems with High Levels of Animal Welfare

Animals raised for food affect and are affected by climate change. The Food and Agriculture Organization of the United Nations (FAO) has highlighted animal agriculture “as one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global,” including emitting nearly one-fifth of worldwide anthropogenic greenhouse gases.⁴ Growing farm animal populations not only threaten the climate and the environment, but may also result in greater numbers of animals being confined in non-land-based industrial farm animal production systems that severely compromise the animals’ welfare. Solutions in agriculture should simultaneously improve animal welfare, food security, and sustainability.

A. Animal Agriculture’s Industrial Expansion

Globally, farm animal production is increasing and moving towards industrialized production practices. There are now over 67 billion land animals raised for food each year,^{5,6} and by 2050 meat and milk production is expected to approximately double from 1999–2001 levels.⁷ By the end of the 20th century,

² United Nations Framework Convention on Climate Change. 1992. Articles 2, 3(4), 4(1)(d), and 4(1)(f). <http://unfccc.int/resource/docs/convkp/conveng.pdf>. Accessed March 19, 2012.

³ Draft decision [-/CP.17], Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, pars. 75-77, available at http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_lcaoutcome.pdf. Accessed April 5, 2012.

⁴ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. Livestock’s long shadow: environmental issues and options. Food and Agriculture Organization of the United Nations, pp. xx-xxi. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

⁵ Food and Agriculture Organization of the United Nations. 2010. FAOSTAT. <http://faostat.fao.org>. Accessed May 13, 2010.

⁶ Food and Agriculture Organization of the United Nations. 2011. FAOSTAT. <http://faostat.fao.org>. Accessed June 29, 2011.

⁷ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. Livestock’s long shadow: environmental issues and options. Food and Agriculture Organization of the United Nations, p. xx. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

industrial farm animal production was increasing worldwide six times as fast as grazing systems and twice as fast as traditional mixed farming systems.⁸ Industrialized systems now produce over half of all pork and approximately two-thirds of eggs and poultry meat.⁹

B. Environmental and Food Security Impacts

The environmental impacts of animal agriculture are vast,¹⁰ and those associated with industrial systems can be particularly acute, in part because of the geographic concentration of animals and their waste.¹¹

- **Water use and pollution:** Animal agriculture uses significant amounts of the water supply available to humans globally.¹² In addition, according to the FAO, “[t]he livestock sector...is probably the largest sectoral source of water pollution, contributing to eutrophication, ‘dead’ zones in coastal areas, degradation of coral reefs, human health problems, emergence of antibiotic resistance and many others.”¹³
- **Land Use and Degradation:** Farm animals are inefficient in converting feed to edible protein,¹⁴ and approximately 33% of total arable land is used to produce feed crops,¹⁵ in addition to vast areas of forested land that is clear-cut to graze or grow feed for farmed animals.¹⁶ Globally, more than 60% of corn and barley, and over 97% of soymeal, are fed to farm animals.¹⁷
- **Climate Impacts:** The animal agriculture sector is one of the largest contributors to greenhouse gas (GHG) emissions worldwide, responsible for an estimated 18% of human-induced

⁸ Verge XPC, De Kimpe C, and Desjardins RL. 2007. Agricultural production, greenhouse gas emissions and mitigation potential. *Agricultural and Forest Meteorology* 142:225-69.

⁹ Food and Agriculture Organization of the United Nations. 2009. *The state of food and agriculture: livestock in the balance*, p. 27. <http://www.fao.org/docrep/012/i0680e/i0680e.pdf>. Accessed April 5, 2012.

¹⁰ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. *Livestock’s long shadow: environmental issues and options*. Food and Agriculture Organization of the United Nations. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

¹¹ Pew Commission on Industrial Farm Animal Production. 2008. *Putting meat on the table: industrial farm animal production in America*, pp. 23-29. www.ncifap.org/bin/e/i/PCIFAPFin.pdf. Accessed April 5, 2012.

¹² Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. *Livestock’s long shadow: environmental issues and options*. Food and Agriculture Organization of the United Nations, p. xxii. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

¹³ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. *Livestock’s long shadow: environmental issues and options*. Food and Agriculture Organization of the United Nations, p. xxii. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

¹⁴ Smil V. 2001. *Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production* (Cambridge, MA: The MIT Press, p. 165 Figure 8.4).

¹⁵ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. *Livestock’s long shadow: environmental issues and options*. Food and Agriculture Organization of the United Nations, p. xxi. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

¹⁶ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. *Livestock’s long shadow: environmental issues and options*. Food and Agriculture Organization of the United Nations, p. xxi. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

¹⁷ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. *Livestock’s long shadow: environmental issues and options*. Food and Agriculture Organization of the United Nations, pp. 39, 43. <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

emissions.¹⁸ A 2010 study in the Proceedings of the National Academy of Sciences projected a 39% rise in emissions from animal agriculture by 2050.¹⁹

Furthermore, food security is often incorrectly used as a justification for the inhumane confinement of animals on industrial farm animal production facilities, while in reality the industrialization of animal agriculture jeopardizes food security by degrading the environment, threatening human health, and diminishing income-earning opportunities in rural areas.²⁰

C. Intensive Confinement and Animal Welfare

Around the world, an overwhelming number of egg-laying hens, pregnant sows, and calves raised for veal are reared in battery cages, gestation crates, and veal crates, respectively. The intensive confinement of these production systems severely impairs the animals' welfare, as they are unable to exercise, fully extend their limbs, or engage in many important natural behaviors. As a result of the severe restriction within these barren housing systems, animals can experience significant and prolonged physical and psychological assaults. Indeed, extensive scientific evidence shows that intensively confined farm animals are frustrated, distressed, and suffering. Battery cages for egg-laying hens and crates for pregnant sows and calves are simply not appropriate environments.

For more information on animal agriculture's impacts on climate change, food security, and animal welfare, please refer to our white papers: [*An HSI Report: The Impact of Animal Agriculture on Global Warming and Climate Change*](#); [*An HSI Report: The Impact of Industrial Farm Animal Production on Food Security in the Developing World*](#); and [*An HSI Report: The Welfare of Intensively Confined Animals in Battery Cages, Gestation Crates, and Veal Crates*](#).

D. Sustainable and High-Welfare Solutions

Policies and finance in the agricultural sector, including potential carbon credit schemes and other mechanisms emanating from UNFCCC decisions, will have a tremendous impact on shaping the agricultural landscape of the future, and must therefore be designed with more than just GHG reductions in mind. Financial, programmatic, and policy supports in the agricultural sector must lead us towards a more humane, equitable, and sustainable food system that addresses multiple social goals, including improved animal welfare and reduced GHG emissions. Scientific evidence fails to support assertions that the industrialization of animal agriculture is a necessary or advisable means of reducing GHG emissions, and instead suggests that a reduction in farm animal numbers as well as a shift to extensive pasture-based and mixed farming animal agriculture systems led by small farmers, particularly women, hold the greatest promise to fulfill the multiple goals of environmental sustainability, higher animal welfare, and social and economic equity.

¹⁸ Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, and de Haan C. 2006. Livestock's long shadow: environmental issues and options. Food and Agriculture Organization of the United Nations, p. xxi. <http://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed April 5, 2012.

¹⁹ Pelletier N and Tyedmers P. 2010. Forecasting potential global environmental cost of livestock production 2000-2050. Proceedings of the National Academy of Sciences of the United States of America 107(43):18371-18374.

²⁰ Humane Society International. 2011. An HSI report: the impact of industrial farm animal production on food security in the developing world. http://www.hsi.org/assets/pdfs/hsi-fa-white-papers/the_impact_of_industrial_farm.pdf. Accessed April 6, 2012.

However, larger-scale commercial animal agriculture also holds the potential for significant improvements in animal welfare, and agricultural policy and finance can be used to encourage such improvements by agribusiness entities. Finance and policy supports, emanating from the UNFCCC and directed towards animal agribusiness, must selectively support and encourage facilities that meet higher animal welfare standards, such as those as laid out by the European Union Council Directives relating to farm animal welfare, including Council Directive 1999/74/EC, Council Directive 2008/119/EC, and Council Directive 2008/120/EC. These policies ban battery cages for laying hens, crates for calves raised for veal, and gestation crates used for breeding sows. Several multinational corporations such as Burger King and McDonald's are also moving towards higher welfare housing systems in their supply chains for meat, indicating the consumer demand and financial viability of such shifts towards higher welfare systems.

III. Principles for Agriculture and the UNFCCC: Moving Towards and Beyond COP18

The Durban decision presents a key opportunity for all stakeholders to envision and promote resilient, sustainable, and humane agricultural landscapes that ensure food security²¹ for the 21st century and beyond. Because agriculture now appears decoupled from other sectors in negotiations,²² the opportunity for paradigmatic shift is closer. Whatever path Parties choose, including a possible Subsidiary Body for Scientific and Technological Advice (SBSTA) work program on agriculture, policy and finance in agriculture must support multiple social and environmental goals and incorporate, respect, prioritize, and further the principles outlined herein, including:

1. **Inclusion and support of all stakeholders.** Policy and finance in agriculture must include marginalized stakeholders, including women, smallholder farmers, pastoralists, small-scale fishers, and indigenous peoples, as well as civil society groups advocating on behalf of animals. These groups are all important stakeholders in the agriculture discussion. Their inclusion should be enhanced and valued in policy debates and decisions regarding food security, agriculture, and agriculture-related funding. As an important matter of process, the Durban call for submissions included civil society and other stakeholders.²³ All future UNFCCC decisions on agriculture should further this goal of equitable and inclusive decision making.
2. **Addressing climate change adaptation and mitigation.** Climate change, agriculture, development, and other policies now need to be developed (and existing policies reformed) with an eye to addressing climate change adaptation and mitigation.
3. **Ensuring animal welfare, food security, and other social and environmental outcomes.** As the world faces increasing challenges from climate change, it is imperative to seek and implement solutions that fulfill multiple social goals. Given the large numbers of animals raised for food globally, particularly in welfare-depriving systems, the welfare of these animals should be evaluated, enhanced, and safeguarded in agricultural climate solutions. To address climate

²¹ Food security includes four pillars – availability, access, nutritional quality, and stability (or resilience).

²² Draft decision [-/CP.17], Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, pars. 74-78, available at http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_lcaoutcome.pdf. Accessed April 5, 2012.

²³ Draft decision [-/CP.17], Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, pars. 75-77, available at http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_lcaoutcome.pdf. Accessed April 5, 2012.

change without a view towards other social and environmental problems is to take a small brush to a large canvas—we must implement rapid but comprehensive and intelligent solutions.

4. **Ensuring consistency across UNFCCC decisions and mechanisms.** Parties must ensure that any initiatives, arrangements, rules, or mechanisms that might be established by the Conference of the Parties to the UNFCCC or Meeting of the Parties to the Kyoto Protocol, such as and including NAMAs, the CDM, and a REDD+ mechanism, are elaborated and implemented in a manner consistent with each other and with the need to advance the multiple social goals related to agriculture that are discussed here.

Analyzing co-effects of climate solutions and incorporating the goals outlined above can and should be a part of UNFCCC outcomes this year and beyond, including if Parties pursue a SBSTA work program or similar forum on agriculture. This can be done from a scientific and technical perspective, and analyzing these effects prospectively seems to fit well with UNFCCC Article 9(2)(b): “Under the guidance of the Conference of the Parties, and drawing upon existing competent international bodies, this body shall . . . (b) Prepare scientific assessments on the effects of measures taken in the implementation of the Convention.” For example, if there is a technical proposal to mitigate methane emissions from cows through feed changes, the effects on the animals’ rumen (and overall) health, in addition to climate impacts, can and should be evaluated prior to and, if implemented, during and after implementation so that these effects may be evaluated and reevaluated when making policy recommendations and changes. We already know that feeding ruminants grains rather than forage diets can cause internal abscesses, and policymakers should investigate specific practices or technologies aimed at climate change mitigation and adaptation in agriculture to look for similar effects *before* implementing and funding them.

Whether Parties proceed with a SBSTA work program on agriculture or not, UNFCCC solutions in agriculture must simultaneously protect and promote the multiple social goals outlined in this submission, including animal welfare.

IV. Conclusion

HSI respectfully requests that Parties evaluate, enhance, and safeguard animal welfare in UNFCCC initiatives, arrangements, rules, or mechanisms, particularly within the range of issues to be considered by a COP18 agriculture decision and a potential SBSTA work program. Farm animal welfare should be enhanced through climate solutions, not sacrificed. At minimum, UNFCCC policies and finance in agriculture should analyze proposed measures for their effects not only on the climate, but also on other social and development goals, and, if in relation to the SBSTA, as a way of implementing Article 9(2)(b). This information should be used to make decisions before implementation, as well as reevaluated during and after implementation. Animal welfare is a prime example of a pressing global issue that should be highlighted for consideration. Only with global action and inclusive stakeholder dialogues can we hope to address the challenges of animal welfare, climate change, poverty, food security, and other environmental problems in ways that not only attain development goals, but also re-envision and re-create resilient landscapes worldwide, for both people and animals.

We greatly appreciate the opportunity to submit our views on this critically important subject and look forward to feedback and dialogue on the issues raised.

Sincerely,

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