

Livestock, climate change and disaster management

Submission to the UNFCCC Subsidiary Body for Science and Technological Advice (SBSTA) consultation on livestock and climate change from the World Society for the Protection of Animals

The World Society for the Protection of Animals (WSPA) seeks to create a world where animal welfare matters and animal cruelty ends. WSPA has offices in 16 countries worldwide. Our work on the ground is carried out with local partners for greatest effect, and we are active in more than 50 countries. We campaign effectively to combat the world's most intense and large-scale animal welfare issues, bringing about lasting change by:

- helping people understand the critical importance of good animal welfare
- encouraging nations to commit to animal-friendly practices
- building the scientific case for the better treatment of animals
- encouraging a worldwide movement towards better animal welfare.

WSPA submits two papers to the consultation: livestock production and climate change; and livestock production, climate change and disaster management.

The World Society for the Protection of Animals (WSPA) Disaster Management programme works to promote the vision that animals and the people that depend on them are protected from disasters. We work with smallholder and subsistence livestock farmers, who comprise some of the poorest communities in the world, at all phases of the disaster cycle, in response, recovery, mitigation and preparedness, to reduce the impacts on these marginal livelihoods. Despite our progress in this area we remain concerned at the threat that global warming faces to these livestock-dependent communities. WSPA recommends that:

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| To address the impact of climate change on smallholder and subsistence agriculturalists effectively, it is vital that disaster management, sustainable development and climate change policy are fully integrated and include livestock-based interventions in terms of sustaining the livelihoods and resilience of the poor. |
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Disasters disproportionately affect the world's poorest nations, with the most marginalised communities within these bearing the greatest impact. Climate change has been acknowledged to be an underlying threat in relation to disasters, and can compound existing vulnerability through population movements, environmental degradation, conflict over resources and poverty. Anthropogenic changes in global temperature are already occurring, and global warming observed over the past century is projected to accelerate over coming decades, with predictions of rises in global temperatures of 1.4-5.8 degrees Celsius until 2100. There is mounting evidence that climate change will result in an increased frequency of extreme weather events with resultant floods, landslides, droughts and wildfires. However, other than general trends of extreme weather patterns affecting large areas of the world, localised predictions of extreme weather are set to become increasingly unpredictable. The

climate is becoming increasingly uncertain in terms of weather extremes and so the hazards faced by communities living in affected areas are likely to worsen.

There are few reliable estimates of numbers of smallholder or subsistence farmers, but it is known that around 75% of the world's 1.2 billion poor live and work in rural areas. Smallholders and subsistence agriculturalists are characterised as 'complex, diverse and risk-prone' (Chambers et al 1989) in terms of the variety and combinations of crops and animals kept, and their vulnerability to natural hazards, crop and animal disease and market shocks, amongst other stressors. This vulnerability is worsened by their low socio-economic status which pushes them to seek livelihoods within hazardous locations with poor infrastructure. Poorly considered development can worsen communities' exposure to hazards and in some situations, disasters have been described as 'failed development' (Manizales Declaration, 2004). This vulnerability to extreme weather events and lack of resilience or coping strategies can result in a negative feedback of further environmental degradation as smallholders attempt to make use of limited resources, or conflict can result from competition over these resources.

The Disaster Management team at WSPA is concerned at the impact on livelihoods of these extreme weather events and believes that a combination of mitigation of further greenhouse gas-induced climate change, along with adaptation to improve resilience to the current and ongoing changes in global climate, is vital.

There is currently limited information on the ways that climate change will impact on smallholder and subsistence agriculturalists. A better understanding of these impacts, taking into consideration trends for rural-urban migration and diversification from agricultural livelihoods, is necessary for planning adaptation and resilience strategies towards climate change induced disasters.

In order to tackle these issues effectively, it is vital that disaster management, sustainable development and climate change policy are fully integrated and include livestock-based interventions in terms of sustaining the livelihoods and resilience of the poor. Research is required to better understand the impacts of climate change on subsistence farmers and to investigate adaptation and coping strategies that can be employed by these marginal communities to preserve their livelihoods and reduce the risks of food insecurity, hunger and famine.

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