

**UNFCCC Climate Change Informal Sessions of the Subsidiary Bodies
(31 May – 17 June 2021)**

**Koronivia Joint Work on Agriculture Intersessional Workshop (part 1) - Business and
Industry NGOs statement and presentation**

SESSION 5: TUESDAY, 15TH JUNE 2021, 09.00–10.30 (CEST)

Guiding questions:

- a) *In the view of your constituency/organization, what are the most important synergies and trade-offs when implementing sustainable land and water management, including integrated watershed management strategies, to ensure food security in the context of climate change? What opportunities and challenges does your constituency/organization face in this area?*
- b) *How can an outcome of the Koronivia joint work on agriculture best contribute to implementation, upscaling and measuring of impacts and benefits of sustainable land and water management to ensure food security?*

Distinguished delegates, co-chairs, ladies and gentlemen and colleagues, on behalf of the Business and Industry NGO Constituency (BINGO), I thank you for the opportunity to listen and contribute to today's workshop session regarding sustainable land and water management, including integrated watershed management strategies, to ensure food security.

This discussion, along with other sessions of the Koronivia Joint Work on Agriculture, is important in considering the vulnerabilities of agriculture to climate change and approaches to addressing food security. They are also important in identifying potential areas for future work on agriculture and climate change.

I would like to thank experts and keynote speakers who have presented earlier during this intersessional workshop over the past fortnight and fellow speakers today. My name is Emily Gerrard and I am a Director of Comhar Group, an Australian based legal and policy advisory firm, working in Australia and the Asia-Pacific. I am also a non-executive director of the Australian-based Carbon Market Institute and Chair of the Melbourne Sustainable Society Institute Advisory Board at the University of Melbourne. The following remarks reflect my experience with industry initiatives and projects in the agricultural and land sectors, as well as the wider expertise of the BINGO constituency that comprises various businesses in the food and agricultural sector.

As we have heard from keynote speakers and interventions during these intersessional discussions, and as we know from recent data and science (including that set out in the IPCC Special Report on Climate Change and Land), changes to temperature, rainfall, weather events and the natural environment are tied with changes to availability, access, use and stability of food systems.¹

This has immediate and direct impacts on ecosystems, resilience, subsistence activities and populations, as well as indirect impacts on a broad range of sectors and processes, including private sector value chains. Small increases in global temperatures can have dramatic impacts on food security.²

¹ Intergovernmental Panel on Climate Change (IPCC) Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems - Summary for Policymakers < <https://www.ipcc.ch/srcl/clchapter/summary-for-policymakers/> >

² Ibid.

The way we produce food is increasingly important and becoming more closely scrutinised. Farmers, land managers, livestock keepers and those in the broader agricultural industry face significant challenges and are key stakeholders in developing solutions to ensure sustainable land and water management and food security.

What are the most important synergies and trade-offs when implementing sustainable land and water management, including integrated watershed management strategies, to ensure food security in the context of climate change?

As with most land-sector activities, the trade-offs and synergies in this context arise from balancing environmental, biodiversity, economic, social and cultural considerations. Building experience with sustainable land and water management on farms, including grazing management; changes to cropping cycles; changes to organic soil carbon and water retention in soils; and technological innovation, means that synergies with food production are increasing and trade-offs are decreasing.

However, there are and will be trade-offs in ensuring food security in a changing climate. Changes in the climate of eastern Australia have occurred over the past twenty years (including increasing temperatures and heat waves, and declining rainfall in south eastern Australia), prompting experts to review and evaluate impacts on livestock production systems.³ As we know, these challenges are not unique to Australia.

In practice there are material challenges associated with attempting to eliminate all emissions from agriculture, given the natural system within which the sector operates. In this sense, the sector is similar to other hard to abate sectors; neutrality will come from innovation and farm-based management practices and efficiencies, but also interventions to facilitate carbon sequestration, biodiversity and ecosystem repair. Research and development are needed to continue to identify and improve appropriate interventions.

Key considerations include how to further accelerate synergies across broader value chains and, at the moment, how to ensure recovery from the global pandemic embeds more sustainable use and valuing of the natural environment. Business and industry are key stakeholders in this shift and are driving change through initiatives such as the Taskforce on Climate-related Financial Disclosures and more recently, the Taskforce on Nature-related Financial Disclosures, as well as Net Zero and Race to Zero voluntary commitments and sustainable recovery initiatives. Industry bodies are also assisting with sector targets, ambitious emissions neutrality initiatives and sustainable land and water use, for example Meat and Livestock Australia's Carbon Neutral 2030⁴ target and the Dairy Sustainability Framework,⁵ which requires members to have both soil and effluent management plans to effectively manage water and soil resources in farming operations.

Involvement of broader stakeholders at a catchment or landscape level, particularly when looking at

³ See, for example, Primary Industries Climate Challenges Centre *NEXUS project: exploring profitable, sustainable livestock businesses in an increasingly variable climate* < <https://www.piccc.org.au/research/project/NEXUS.html> >

⁴ This target means that by 2030, Australian beef, lamb and goat production, including lot feeding and meat processing, will make no net release of greenhouse gas (GHG) emissions into the atmosphere. The target is also reducing water required to produce beef < <https://www.mla.com.au/research-and-development/Environment-sustainability/carbon-neutral-2030-rd/cn30/> >

⁵ Dairy Sustainability Framework members (reflecting 30% of global milk production) when prioritising water and soil management, regardless of the 'system' of production, are required to have both soil and effluent management plans to effectively manage these critical resources for their unique farming operations.

integrated watershed management, necessarily involves compromise and cooperation at a regional level. Relationships and frameworks for land use planning at this level can be complicated, however are necessary to embed compatible and sustainable land use and development, as well as support natural resilience and adaptive responses to climate change. In turn, these measures: assist food and human security; support biodiversity and ecosystem conservation, management and repair; and provide greater certainty in guiding business and industry on development and investment.

Intrinsically, a broad range of stakeholders must be involved in sustainable and integrated land and water management responses, including public and private sectors; research institutions; land and water managers, users and custodians (including farmers and Indigenous peoples); and the broader community.

What opportunities and challenges does your constituency/organization face in this area?

As outlined by keynote speakers and other experts during earlier sessions, the challenges associated with poor land and water management in the context of agriculture and food security are various, and can be direct and indirect, including:

- land, water and livelihood viability associated with competing land uses, loss of biodiversity, biosecurity issues and climate change;
- access to information, data, technology and management practices, including affordable access to best practice technologies;
- scaling adaptation measures;
- policy and institutional gaps or an absence of regulatory harmonisation;
- land ownership, access and tenure complexity;
- complex and costly administrative and regulatory processes associated with emerging carbon and environmental market mechanisms;
- finance and investment limitations (for example, private sector institutional change is occurring, but is not complete - in many systems, project and land valuation, and lending, tend to focus on traditional notions of highest and best use concepts without reflecting natural capital considerations and emerging understandings of value); and
- farm-based and small business viability, including local employment and community service impacts.

These challenges involve, and impact, many stakeholders and communities, including business and industry, which is why business and industry have a role in aiding, accelerating and scaling solutions.

The opportunities are also varied and positive. As outlined by previous keynote speakers, applying measures to avoid or repair land degradation on agricultural land leads to maintenance or increase in productivity and the carbon stocks, which directly contributes to sustainable agriculture and food security.⁶

Some brief examples of initiatives that might be expanded or adapted to support opportunities in sustainable land and water management for food security include:

- National and sub-national climate change legislation and sustainable development policies, including a national framework for carbon project development and the generation and transfer of carbon credit units, as well as methodologies appropriate to agricultural practices.

⁶ Sasha Koo-Oshima, Deputy Director FAO Land & Water Division “*Sustainable land management to ensure food security*”

- National and sub-national government incentives to assist farmers, land managers and industry facilitate sustainable land and water management co-benefits associated with greenhouse gas emissions abatement in the agricultural sector, and support food production, for example:
 - Queensland Land Restoration Fund;⁷ and
 - Australian Government Department of Agriculture 'Carbon + biodiversity Pilot'.⁸
- Adaptive land use planning and development frameworks at local and sub-national levels. This includes dynamic policies and regulatory measures to reflect science and risks relating to flood, inundation, run-off, drainage and sea level rise, as well as coordinate catchment and water management. These frameworks facilitate certain and predictable investment and development parameters for Business and industry.
- Emerging environmental market incentives, for example the Reef Credits scheme.⁹ Reef Credits incentivise improvement in water quality in Great Barrier Reef World Heritage Area catchments by allowing farmers and other land managers to receive monetary benefits for activities that improve water quality (for example by reducing flows of sediment, nutrients or pesticides into waterways).¹⁰ This incentive scheme engages broader landscape and watershed benefits (water and soil quality changes - particularly downstream water quality improvements).
- Interdisciplinary research, Indigenous peoples' expertise and business and industry partnerships are an integral part of understanding land and water systems and management - at a catchment or landscape scale. Business and industry are important in supporting and partnering with research institutions, and also in contributing expertise about risk assessment and value chain considerations. The Primary Industries Climate Challenges Centre and work of Professor Richard Eckard and Dr Brendan Cullan at the University of Melbourne, and others, is an example of collaboration between multiple researchers and academic institutions to assist industry to understand challenges and management solutions associated with agriculture in Australia.
- Work of industry member organisations like the Carbon Market Institute, which brings together a diverse range of stakeholders and businesses (multinational and small companies, investors, government bodies, NGOs, farmers, Indigenous groups, banks and carbon project developers) to establish pathways for accelerated climate action, market integrity and growth, and inform climate change policy development. Examples of agricultural initiatives include the *Australian Carbon Farming Industry Roadmap*¹¹ and regular 'carbon farming' forums, which assist Australia's agriculture sector to deliver greenhouse gas mitigation outcomes and environmental, social and cultural co-benefits, along-side food and fibre productivity.
- Broad scale business and industry voluntary action to achieve carbon neutrality targets and deliver certified sustainability benefits. For example, Microsoft's recent purchase of a large number of carbon credits from Wilmot Cattle Co., a farm in Australia.¹² As reported publicly,

⁷ <https://www.qld.gov.au/environment/climate/climate-change/land-restoration-fund/carbon-farming/australia>

⁸ <https://www.agriculture.gov.au/ag-farm-food/natural-resources/landcare/sustaining-future-australian-farming/carbon-biodiversity-pilot>

⁹ <https://www.reefcredit.org> and <https://www.qld.gov.au/environment/coasts-waterways/reef/reef-program/reef-credit-scheme>

¹⁰ Carbon Market Institute *Carbon Farming Industry Roadmap*, 2017 < <https://carbonmarketinstitute.org/wp-content/uploads/2017/11/Carbon-Farming-Industry-Roadmap.pdf> >

¹¹ *ibid*

¹² Farmonline National 29 January 2021: <https://www.farmonline.com.au/story/7105542/microsoft-buys-carbon-credits-from-nsw-cattle-operation/>

carbon credits and land and water management benefits have been achieved at this property through rotational grazing, stocking density changes and decreased paddock size, and these activities have increased ground cover, biomass and water-holding capacity on more than 4000 hectare (and reportedly boosted productivity and profitability).

- Work of sector-specific bodies like the Global Dairy Platform, which in collaboration with the FAO, the Global Research Alliance on Agricultural Greenhouse Gases, and other multi-stakeholder entities, is in the formative stage of raising the global dairy sector's ambition to achieve a net zero outcome via *NET ZERO, Pathways to Low-Carbon Dairy*.¹³

How can an outcome of the Koronivia joint work on agriculture best contribute to implementation, upscaling and measuring of impacts and benefits of sustainable land and water management to ensure food security?

The Koronivia Joint Work on Agriculture is an important vehicle for accessible international collaboration, including to:

- gather expert and stakeholder inputs to assist Parties to the UNFCCC on matters relating to agriculture, and coordinate and link with constituted bodies and the Paris Agreement;
- facilitate knowledge sharing and exchange of data, information, policy, finance and funding examples, technology and other measures to accelerate action and scale-up sustainable land and water use in agriculture; and
- foster international cooperation on critical issues affecting the agricultural sector, such as food security, adaptation, land degradation, robust greenhouse gas mitigation method design and market access, capacity building, and integrated management measures, and to promote continuous improvement and best practice innovation.

Business and industry constituents support the Koronivia Joint Work on Agriculture as platform to assist ambitions responses to climate change in the sector and assist countries with their reviewing, reporting and updating cycles for nationally determined contributions.

As noted by other speakers, measures such as sustainability standards and certification, markets and work under Article 6 of the Paris Agreement and public-private partnerships, are important initiatives supported by international collaboration. The experience of business and industry is relevant to the design and implementation of these initiatives, alongside farm-based innovation and safeguards, data and research to inform sustainable land and water management at a landscape-scale.

It is crucial that governments work effectively with farmers, businesses, research institutions, Indigenous peoples and civil society to address challenges associated with sustainable land and water management in a changing climate, particularly regarding food security.

Business and industry representatives look forward to ongoing engagement in agricultural climate dialogues and I appreciate this opportunity to contribute some perspectives.

¹³ This initiative adopts a collaborative 'leave no one behind' principle in supporting an extremely diverse sector in achieving this goal. See further *NET ZERO, Pathways to Low-Carbon Dairy* (NZP): <https://www.globaldairyplatform.com/media-archives/gdp-bulletin-march-april-2021/>