Second Session of the COAG Sub-Committee on Livestock

Written Correspondence Procedure – inputs from Members

Agenda item 4.1: Advances in applied methods for adaptation and mitigation to climate change

	Comments (all were provided in English)
New Zealand Monday, 1 July 2024, 6:22 PM	New Zealand welcomes this paper and, in general, we support the recommendations. New Zealand supports the Sub Committee on Livestock recommendation that FAO develop guidance on Voluntary Carbon Markets for livestock. Livestock carbon market methodologies are not yet well resolved, especially compared to other forms of mitigation such as trees and energy. We stress however the importance of avoiding duplication. FAO should scan other relevant work before setting the work scope, and coordinate where possible, with others working on Voluntary Carbon Markets for livestock. We are aware that the World Bank has been working on their methodologies for several years.
Switzerland Tuesday, 2 July 2024, 11:29 AM	• Switzerland thanks the Secretariat for the preparation of the document COAG:LI/2024/8. • the Sub-Committee on Livestock should recommend to COAG that FAO supports members in identifying, designing and implementing mitigation and adaptation actions in the livestock sector including in breeding and to integrate this as first point in the suggested actions. • Further, we encourage FAO to support Members in their monitoring advances concerning methods for mitigation and adaptation and to collect data and report on GHG emissions. Important to address here, is the contribution of breeding to adaptation and mitigation measures. • The Livestock Environmental Assessment and Performance Partnership developed several guidelines such as the "Nutrient flows and associated environmental impacts in livestock supply chains", "Greenhouse gas emissions and fossil energy demand from poultry supply chains" or the "Greenhouse gas emissions and fossil energy demand from small ruminant supply chains" that could be helpful for monitoring and reporting. • The IPCC method to measure GHG emissions (GWP100) is used to track progress towards the Paris Agreement goals. UNFCCC negotiation Members agreed to use GWP100 as general metric for their reporting and NDCs. Therefore, this metric should be decisive when making recommendations on the measurement of GHG emissions for policy making. • Finally, in developing guidance for Members to participate in compliant and voluntary carbon markets in the livestock sector, it is important to emphasize that all the requirements of Article 6 of the Paris Agreement must be met. Guidance by FAO should specifically address how to minimize the risk of non-permanence and how to ensure that any reversals of emission reductions or removals are addressed in full.
United States of America Tuesday, 2 July 2024, 3:51 PM	The United States agrees that understanding the sources and impacts of greenhouse gas emissions from livestock systems is critical to identifying and prioritizing mitigation options. Livestock production in the United States continues to reduce its impact on the environment through improved efficiency. New technologies such as genomic editing, new feeding practices and ingredients, improved animal health, byproduct rendering, improved manure management, and other tools continue to contribute greatly. With continued research advances and practical applications, the livestock sector will continue to innovate toward our sustainability goals. Technology, innovative science, and product development continue to expand animal byproduct uses and further reduce the waste and emissions potential in livestock production systems. The United States supports the three items that the Sub-Committee is invited to recommend that the COAG recommend. However, under the third item, we would add the word 'voluntary' before the

	word ‘participation’ so that it reads, “Call on Members to consider the opportunities that voluntary participation in carbon markets may offer for their livestock sectors.” Regarding opportunities for carbon markets in the livestock sector, we believe that participation in these markets should remain voluntary. Each Member should determine what is appropriate for its own policy actions.
Malaysia Wednesday, 3 July 2024, 7:45 AM	Livestock industry in Malaysia, especially ruminants, is relatively small in comparison to other ASEAN countries. In 2022 the population of ruminants is 1.3 million (with cattle, goat, sheep and buffalo combined). Thus the contribution of Malaysia’s livestock industry towards GHG emission is assumed as small and deemed to be negligible. However, as awareness of GHG emission is newly arising, scientists and researchers in agriculture are continuously collecting data to assess the current status of GHG emission. At the moment poultry and pig industry are in the midst of transforming from current traditional and conventional rearing practices to more modernised close house systems with the aim of producing less or zero discharge. Farmers are encouraged to utilise manure-fertiliser conversion technology as another source of income. This helps in making farming more profitable and at the same time reduces environmental effects from farming activities.
Philippines Wednesday, 3 July 2024, 8:45 AM	page 4 item nos. 10: There is a need to identify the specific approaches that have to be used to assess the environmental impacts and performances of livestock products in different countries. After identifying the approaches to be used, there is a need to identify which countries need assistance in coming up with these approaches. They should be provided with training. In doing so, the comparison will be easier, and recommendations for continual improvement will be more accurate. page 7, paragraph 19, bullet #6: ‘In Country’ Tier II for the ruminant coefficient is still not established, PCC MSU is still conducting research page 8, paragraph 28, line 4: PECM can help reduce enteric fermentation by providing a high-protein diet to ruminants. page 8, paragraph 9: The repopulation program of the Department of Agriculture, i.e. Integrated National Swine Production Initiatives for Recovery and Expansion (INSPIRE), included waste management but ensured it would be functional. The ‘Waste to Asset’ program employs manure conversion technologies to fertilizer. Mechanization in rice farming using combined introduce hay to cultivation to improve carbon sequestration. Photovoltaic technology and biomass gasification in irrigation and animal farming offset the use of fossil fuel.
European Union Wednesday, 3 July 2024, 6:34 PM	Mr Chair, 1. I am honoured to write to you on behalf of the European Union and its 27 Member States. 2. Albania, Moldova and Montenegro align themselves with this statement. 3. The EU remains committed to furthering its mitigation efforts to reduce GHG emissions although its livestock GHG emissions decreased by 23 % from 1990 to 2021. Agriculture and food systems have an impact on and are impacted by climate change. Agriculture and food systems are a part of the solution to the climate crisis.

	4. We stress the need for a balanced and holistic approach that takes into account the three dimensions of sustainability of the livestock sector on an equal footing. We emphasise the need to better assess the multi-functionality of the different livestock systems in relation to the local conditions and their contribution to the circular economy, and to develop multi-criteria assessment tools in order to improve and measure the livestock sector's contributions to the SDGs. The focus should be not only on the climate but also on biodiversity, water and soil quality and the ecosystem services provided. Integrated interventions will therefore be needed. 5. We would stress the important role that sustainable livestock should play in achieving the climate related SDG's and the entire Paris Agreement whilst boosting food security, enhancing nutrition and reinforcing long-term resilience. 6. We call on FAO to continue to provide the support Members for developing specific climate mitigation and adaptation plans and policies for the livestock sector and strengthening opportunities for climate finance in the livestock sector. 7. As underlined at the 1st meeting of the Subcommittee on Livestock, an increasing number of livestock stakeholders are acting to tackle climate change and also to achieve the Sustainable Development Goals (SDGs). It is of utmost importance that we recognise and encourage their efforts further, as they are important drivers for change. The implementation of climate-smart livestock practices can lead to enhancing soil carbon sequestration and increasing carbon stock in soils. Innovation including technologies and management practices can contribute to reduce GHG emissions and should be developed further. 8. A sustainable livestock transformation policy should be science and evidence based. Measuring and monitoring the GHG emissions of the livestock sector, and producing accurate and comparable data, is of utmost importance. In that regard, we encourage FAO to enhance a globally agreed measuring protocol within existing resources. The Sub-Committee should serve as a platform to promote these discussions. 9. The EU and its Member States appreciate FAO's support to Members with conducting livestock greenhouse gas assessments and reporting, as a means of supporting the implementation of contributions devised at national level. We also appreciate FAO's support with capacity building for national adaptation plans and national determined contributions in the livestock sector, in line with the FAO Strategy on Climate Change 2022-2031. We encourage FAO to inform Members about what data is needed for assessing and reporting on greenhouse gas emissions. 10. We also acknowledge the Global Livestock Environmental Assessment Model (GLEAM) as a valuable tool for estimating emissions along the production chain. To maximise GLEAMS's relevance, it is important that FAO continues to calibrate the Model by comparing its output with real-life data across different livestock systems. 11. Concerning the metrics, the UE recognize the methodologies developed by IPCC as the primary way of assessing the climate effect of methane, while welcoming complementary other methods such as Global Warming Potential * (GWP*). 12. The EU and its Member States are very interested in the opportunities that participation in carbon markets may offer for the livestock sectors (including to reduce CH4 and N20 emissions), especially as additional source of income for farmers. Provided the application of social and environmental safeguards and giving incentives for systemic approaches, such as agroecology, with synergies between climate and biodiversity. We therefore recommend that FAO develop a guidance document on the opportunities and risks for Members to participate, as appropriate and taking into account

	national contexts, to participate in both compliant and voluntary carbon markets within the livestock sector under the Paris Agreement. Thank you, Mr Chair.
Australia Monday, 8 July 2024, 6:25 PM	Australia thanks FAO for preparing this paper and we reiterate our commitment to addressing climate change challenges through a reduction in emissions by 43% below 2005 levels by 2030. Emissions from Australia's red meat industry has reduced by 65 per cent since 2005, and the Australian red meat industry has set a target to be carbon neutral by 2030. Australia is delivering a number of policies and programs aligning with SDG 13 to support our livestock sector in reducing GHG emissions. A key policy under development is Australia's Agriculture and Land Sector Plan, which will map out a decarbonisation pathway and provide industry, governments and investors with certainty through the transition to a low-emissions future. Other key measures include: establishing a Cooperative Research Centre for Zero Net Emissions from Agriculture to scale up technologies that reduce livestock methane emissions and improve crop production; delivering the Methane Emissions Reduction in Livestock (MERiL) program, trialling the emissions reduction and productivity benefits of livestock feed supplements; and incentivising landholders to reduce emissions, sequester carbon and participate in the carbon credit market through the Australian Carbon Credit Union Scheme and supporting agricultural participation in carbon markets through the Carbon Farming Outreach Program. Australia would be pleased to share further information on these with FAO and interested Members. We welcome FAO's proposal to develop a guidance document on carbon markets within the livestock sector under the Paris Agreement, and look forward to hearing more as this process develops. The Australian livestock industry is also enacting measures to ensure a more sustainable, climate-smart sector. For example, Meat and Livestock Australia has developed initiatives including an Environmental Credentials platform for red meat producers to share information along the supply chain, and a Carbon Calculator to assist producers in estimating their GHG emissions. Critical to Australia's success is our unique model of farmers funding research and development (R&D) through levies, matched by government funding. Government support is dominated by investments through our 15 rural research and development corporations (RDCs) which undertake a diverse range of research, development and extension activities that focus on efficiency, productivity, competitiveness and innovation along the supply chain. We encourage consideration of reforming and repurposing agricultural support into research and development. Australia would be glad to share our experiences and successes with these programmes and our RDC model. Regarding emissions calculations detailed in section 2 of the paper, it is essential that FAO use the most recent scientific advice to keep its information up to date and in line with global best practice. Practitioners should follow key principles: the use of the latest IPCC guidelines, use of the more sophisticated 'higher tier' methods, avoidance of one-size fits all approaches and use of contemporary activity data. The IPCC produces guidance, based on the latest scientific advice for the calculation of emissions. The latest scientific advice is in the 2019 refinement to the 2006 guidelines. Unfortunately, the existing FAOSTAT emissions intensity database is outdated, using the 2006 version of the 2006 guidelines. The document is not clear whether the FAO plans on using the 2006 guidelines or the 2019 refinement to the 2006 guidelines. Paragraph 7 (and discussion in paragraph 8) notes that GHG emissions and removals must be estimated using the 2006 IPCC guidelines for GHG inventories. This is despite (and as acknowledged later in the paragraph) these guidelines having been

	refined in 2019 by the IPCC. The 2019 refinement reflects the current best practice for emissions calculations and should be the default method used for measurement of emissions advocated by FAO. For emissions calculations, existing scientifically reviewed emissions data should be used where possible. This data is submitted by countries annually to the UNFCCC. These emissions data submissions are typically produced using the more sophisticated 'Tier 2' or 'Tier 3' methods, as outlined by the IPCC guidelines. This also helps avoid one-size-fits-all approaches to emissions calculations that ignore characteristics of local environments and production systems. Australia's ABARES (Australian Bureau of Agricultural and Resource Economics and Sciences) has produced transparent open source computer code for the calculation of emissions based on the 2019 refinement, and also incorporating higher tier methods from UNFCCC submissions. Australia welcomes further collaboration with FAO to support high quality, fit-for-purpose data and calculations.