



Submission from the CGIAR System Organization, International Centre for Tropical Agriculture and the World Bank, in response to Decision 4/CP.23.

These are views on

Koronivia road map under the Koronivia joint work on agriculture (decision 4/CP.23) on topic 2(a) - Modalities for implementation of the outcomes of the five in-session workshops on issues related to agriculture and other future topics that may arise from this work.

Key Messages:

- An implementation gap exists between the clear need and urgency for climate action in agriculture and the incentives, tools and mechanisms available for farmers, countries and other stakeholders to do so.
- The discussion on modalities for the implementation of issues related to agriculture presents a singular opportunity to narrow this gap.
- Producers, especially small-holder farmers, should be at the center of any climate change adaptation and mitigation considerations in agriculture.
- KJW should work to issue guidance for putting in place institutional, technical and financial structures in line with the specific characteristics of the agriculture sector – within and outside the Convention.

Key priorities for action for the KJW to consider:

- Prioritise financing for climate action in agriculture and strengthen proven delivery channels to reach smallholder producers and SMEs.
- Ensure adequate policy and incentive frameworks for sustainable agricultural investments.
- Support the digitisation of agriculture by promoting the application of digital tools to enable more effective implementation and measurement of results from climate actions in the sector.
- Prioritize capacity building to enhance capacity for implementation and knowledge transfer in the agricultural sector.
- Expedite research to enable the sector to contribute to global efforts to meet the goal of limiting warming to 1.5°C, including carbon removal and its implications for food security.
- Provide guidance to the Convention body best placed to take the lead on measurement and monitoring of progress of climate actions in agriculture, one possibility could be the transparency framework, to ensure that the development of metrics are aligned with existing agricultural databases and information systems.

The five in-session workshops on issues related to agriculture under the United Nations Framework Convention of Climate Change's (UNFCCC) Subsidiary Body for Scientific and Technological Advice (SBSTA) have addressed a number of key issues for climate action in agriculture, including the state of scientific knowledge and risks and vulnerability at different scales. The workshops also identified priorities for action to support farmers in the context of increasing climate risks and knowledge needs, these include the development of early warning systems, contingency plans, adaptation measures, and agricultural practices and technologies. Now, the 49th session of the Subsidiary Bodies has an opportunity to build on the outcomes of these five sessions to advance implementation, through modalities within the Convention as well as processes outside of it.

In putting in place the modalities for implementation of the outcomes of these in-session workshops as well as those of future topics, there is an urgent need to support producer-focused action. Producers are at the frontline of climate change, the Intergovernmental Panel on Climate Change (IPCC) in its most recent report '*Global warming of 1.5°C*', has highlighted that communities dependent on agricultural or coastal livelihoods face a

disproportionately higher risk of adverse consequences of global warming¹. At the same time, land based actions to limit global warming to 1.5°C can undermine food security, livelihoods, ecosystem functions and services and other aspects of sustainable development. Therefore, while scaling climate action in agriculture, the central role of producers needs to be recognized and supported, to achieve the Sustainable Development Goals, which are only 12 cropping seasons away in many countries. There is no time to lose, and approaches to rapidly scale up actions, building on lessons is needed. In this regard, the Koronivia Joint Work on Agriculture (KJW) can play a crucial role to harness the mechanisms of the Convention to mobilize the necessary finance, technology, capacity and knowledge to advance actions.

The CGIAR System Organization, International Centre for Tropical Agriculture and the World Bank have identified the following priorities for action as the KJW moves forward with the implementation of the outcomes of the five in-session workshops:

1. Ensure adequate incentives and scale up financing for climate action in agriculture

In 2015/2016, the total public climate finance was USD 141 billion, of which only USD 7 billion was for agriculture, forestry, land-use, and natural resource management². As highlighted in the five in-session workshops, current flows of climate finance will be insufficient to meet the challenges faced within the sector. To close the gap, it will be necessary to explore every possible source of finance, innovate and assemble new kinds of partnerships. The obvious starting point to mobilize additional finance through the UNFCCC's finance mechanism, but there are other important sources that need to be considered.

Agriculture already receives in excess of USD 600 billion in public support to producers per year³ that could be harnessed towards positive climate outcomes. These resources often continue to be coupled to production decisions and thereby introduce important market distortions and negative environmental externalities. Effectively redirecting these resources to incentivize climate action in agriculture and the broader food system (supply and demand sides) and in related sectors (transport, energy, manufacturing) is a major opportunity, and could greatly accelerate climate smart investments, including in the enabling environment, infrastructure, scientific knowledge, and advisory services, as well as further leverage private investments in agriculture.

In addition, financing provided by Multilateral Development Banks (MDBs) and other International Financial Institutions (IFIs) including the World Bank for Climate-Smart Agriculture (CSA) could help scale climate action in the sector. There are emerging successful examples of development finance being deployed to generate climate benefits in agriculture. However, public resources are scarce, and it is inevitable to look beyond public sources of funding. Financial mechanisms and structures that encourage private sector engagement and de-risk private investment (both domestic and international) are crucial in terms of unlocking private sector investment for climate action in agriculture.

While additional sources of financing are key, so are accessible delivery channels for implementation. Specifically, mechanisms that can channel financing directly to producers and small and medium-sized enterprises (SMEs) along value chains, to incentivize transformational change is crucial. These include for example, commercial banks operating in the agriculture sector. Given how often productivity, resilience and mitigation benefits come hand-in hand, there are important opportunities to bring together funding for these outcomes and to reward producers delivering action on the ground.

¹ [Intergovernmental Panel on Climate Change. 2018. *Global Warming of 1.5 °C*.](#)

² [Buchner BK, Oliver P, Wang X, Carswell C, Meattle C, Mazza F. 2017. *Global Landscape of Climate Finance 2017*. Climate Policy Initiative.](#)

³ [Organisation for Economic Co-operation and Development. 2018. *OECD Agriculture Policy Monitoring and Evaluation*.](#)

KJW can instruct the Convention's finance mechanism to:

- Prioritise financing for climate action in agriculture and strengthen proven delivery channels to reach smallholder producers and SMEs.
- Ensure adequate policy and incentive frameworks for sustainable agricultural investments.

2. Support the digitisation of agriculture

Agriculture has lagged behind other sectors in the development and implementation of digital tools as well as the adoption of other technologies. This even includes developed countries like the United States⁴. In low and middle-income countries, digital tools have an even smaller foothold. However, in order to deliver benefits for productivity, resilience and mitigation, more efficient production systems driven by real time information and digital tools will be key as they have the potential to leapfrog past agricultural development pathways. The five in-session workshops have identified a number of actions required in the sector, including early warning systems, contingency plans, adaptation measures, and agricultural practices and technologies. The effectiveness and scale of these actions can be enhanced through the application of digital tools, including for real-time farmer decision support systems, geospatial applications, more effective and accurate measurement of results, end-to-end input, marketing and distribution platforms to foster scale economies, block-chain applications for climate-informed certification arrangements etc.

KJW can instruct the Convention' technology mechanism to support the digitisation of agriculture by promoting the application of digital tools to enable more effective implementation and measurement of results from climate actions in the sector.

3. Invest in capacity building for effective implementation

Our experience in identifying priority CSA investments via CSA Profiles and Investment Plans and our global agriculture portfolio have taught us that, besides ensuring adequate incentives, capacity gaps are among the most important bottlenecks to scaling up climate action in agriculture. There is an urgent need to develop capacity for implementation across the board, including among producers and entrepreneurs, service providers and extension workers, policy makers, research and academia. While many ongoing initiatives are in place to enhance capacity in the sector, these are often fragmented and of insufficient scale. There is a need for capacity building efforts which take cognizance of structures and processes which exist, avoid duplication and take a producer-centered approach, while addressing the transdisciplinary and cross-sectoral nature of resilience issues. Major needs include the identification and tailoring of technology and practices at producer level; the design and implementation of MRV systems; the capacity to embed climate change issues into national development programmes and policies; and the design of climate sensitive financial products. Capacity building efforts should also promote collaboration and coordination among ministries to ensure that adequate enabling environments and policy frameworks are in place.

KJW can instruct the Paris Committee on Capacity Building to undertake actions to enhance capacity for implementation and knowledge transfer in the agricultural sector.

4. Expedite research on climate action in agriculture to meet the 1.5°C goal

The IPCC's '*Global warming of 1.5°C*' report highlights the importance of carbon removal in all scenarios to meet the 1.5° C goal. Contributions from the agricultural sector will be inevitable to achieve this. Meanwhile, researchers have estimated that the agricultural sector must reduce non-CO2 emissions by 1 gigatonne CO2e per year in 2030 in order to meet the 2°C goal, while current technologies and practices are only set to deliver

⁴ [McKinsey. 2015. *Digital America: A tale of the haves and have-mores.*](#)

21-40% of the reductions needed⁵. Therefore, urgent action research is needed to better understand possible options, synergies, as well as trade-offs between carbon removal and food security.

KJW can instruct the SBSTA, to expedite research to enable the sector to contribute to global efforts to meet the goal of limiting warming to 1.5°C.

5. Promote consistent methods and approaches for assessing adaptation, adaptation co-benefits and resilience

Effective implementation of issues in agriculture require a sound approach to measuring progress. While processes for measuring and monitoring mitigation co-benefits of adaptation are relatively well-defined under the UNFCCC national communications, national inventories, and biennial update reports. Adaptation Monitoring and Evaluation (M&E) systems developed to date focus on a diverse range of specific purposes (audiences/reporting requirements) and types of indicators. The nature of climate adaptation (e.g. long timescales for impacts and outcomes), the multi-dimensional (economic, financial, social) nature of resilience, the difficulty to identify, combine and interpret the types and relevant indicators, as well as lack of country capacity and resource constraints, are key challenges to developing agricultural adaptation M&E systems at the national level. There is therefore a need for simple and cost effective metrics, which reduce burden on national systems and farmers. Developing synergies with existing agricultural databases and information systems, as well as ongoing efforts under the transparency framework and efforts outside the Convention (e.g. MDBs and private sector) is a priority.

KJW should provide guidance to the Convention body best placed to take the lead on this important issue, one possibility could be the transparency framework to ensure that the development of metrics are aligned with existing agricultural databases and information systems.

⁵ [Wollenberg E. et al. 2016. Reducing emissions from agriculture to meet the 2°C target. *Global Change Biology*.](#)