Submission to the United Nations Framework Convention on Climate Change (UNFCCC) on soil health related aspects in the Sharm El-Sheikh Joint Work on Implementation of Climate Action on Agriculture and Food Security

Title of our submission

Enabling small farmers to play the game of agricultural transition as leaders

Elements of

- Recommendations for the Sharm El-Sheikh Joint Work on Implementation of Climate Action on Agriculture and Food Security
- Views on topics for the Workshops to be organized at the 58th session of the subsidiary bodies in June 2023

Preamble

Signatories

- CIRAD, the French Agricultural Research Centre for International Development
- IDDRI, Institut du Développement Durable et Relations Internationales
- INRAE, the French National Research Institute for Agriculture, Food and the Environment
- IRD, the French Institute of Research for Development

Contacts

- Johannes Svensson, johannes.svensson@iddri.org
- Jean-Luc Chotte, jean-luc.chotte@ird.fr

Past commitments to Koronivia Joint Work on Agriculture

As a group of research and higher education institutions and thinktanks - hereinafter designated by 'the Group'-, observers to the UNFCCC, we welcome the draft decision titled "Joint work on implementation of climate action on agriculture and food security", the establishment of this joint work that allows the continuation of the discussions on agriculture in relation to climate change, and extend it to food security.

The Group, expanded to more than 20 international observers and non-observers to the UNFCCC, made submissions to decision FCCC/SB/2018/L1 on the Koronivia Joint Work on Agriculture (KJWA). The submissions addressed topics 2(a) to (f) and highlighted the following points:

- Vulnerable countries in the global South are the first victims of climate change
- Public policies, including coercive policies, are vital to tackle climate change
- A territorial approach is preferable to develop strategies and policies tailored to the environmental and food security issues
- Soils have a vast carbon storage potential which contributes to soil health and fertility
- Farming practices to enhance soil carbon storage should be co-designed with farmers
- Improving interactions between livestock, crops and trees foster soil carbon storage, nutrient recycling within farming systems
- Climate change is having major repercussions for livestock systems, particularly in the most vulnerable regions
- The livestock sector has a substantial mitigation potential
- Ensuring diverse, complementary livestock systems multiplies the opportunities for adaptation
- Food systems should be rethought, including rural-urban interactions

Moreover, a scientific review¹ aiming at synthesizing the scientific knowledge related to past KJWA topics as regards the 17 SDGs was undertaken to strengthen the credibility of the Koronivia process to target food security, climate change, and most of the 17 SDGs and (2) to provide science-based evidence to plan the topics for the next round of workshops and expert meetings framing SSJW agenda

Sharm El-Sheikh Joint Work on Implementation of Climate Action on Agriculture and Food Security

The Group welcomes the opportunity to submit its views in relation to the joint work referred to in paragraphs 14 and 15 for the Implementation to establish the four-year Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security. Our submission is aligned with **joint work listed in the paragraph 14 of the Decision FCCC/CP/2022/L.4, and particularly on**

- (a) How to promote a holistic approach to addressing issues related to agriculture and food security,
- (d) How to improve provision of support and technical advice to Parties,
- (e) How to enhance research and development on issues related to agriculture and food security

Recommendations

Agriculture: the nexus approach

Because of its multiple dimensions, agriculture is part of the global food systems, where climate, land, soil, and biodiversity converge. Indeed, sustainable agriculture could be considered as one of the most efficient ways of achieving a "just and safe space," i.e., a space that considers both the planet's limits and socioeconomic concerns. However, only few scientific-evidences have documented the synergies and trade-offs of agriculture at the crossroad of several sustainable development goals (SDGs). Exploring and documenting these interactions between SDGs could help to achieve the agenda 2030. The nexus method integrates multiple sectorial elements, energy, climate (resilience, adaptation and mitigation), soil and water, food, feed and fibre production and biodiversity conservation within an overarching governance approach. The nexus approach needs: (i) to consider all selected approaches—technical, socioeconomic, and political—with the same weight; (ii) to support farmers' in achieving the multiple objectives central to the approach (listed above), including: food security, income, and climate; and (iii) to reduce farmers' exposure to shocks and to strengthen their resilience by enhancing their individual and collective capabilities and by addressing these interconnected difficulties

Assess the multi-dimensional impacts of agriculture

In order to propose "no-regrets" actions taking into account trade-offs and synergies within these nexus, different points of view and perspectives from diverse stakeholders, from different geographies, professional fields (farmers, policymakers, researchers, etc) and academic disciplines, are needed in order to identify actions and policies that strike an appropriate balance between the different objectives given local circumstances. Assessing the conditions and performance of agricultural transitions in different contexts is key to building evidence and supporting these transitions. Several initiatives have developed tools² to assess performance measurements for agriculture. There is a need for more holistic assessment frameworks, focusing on the dynamics of change in agricultural transitions, and flexibility to adapt to the diversity of global and local challenges, and to document the multi benefit of agriculture in a nexus approach.

• Incentivize smallholders

Farmers, including smallholder farmers, require both improved knowledge regarding the farming practices that support multiple socio-economic and environmental objectives and ensure productive

¹ Nandrianina Ramifehiarivo et al., « Framing the Future of the Koronivia Joint Work on Agriculture from Science-Based Evidence. A Review », *Agronomy for Sustainable Development* 42, n° 5 (octobre 2022): 102, https://doi.org/10.1007/s13593-022-00835-y.

² https://www.fao.org/agroecology/tools-tape/en/, https://avaclim.org/en/generating-knowledge/, https://gret.org/publication/memento-pour-levaluation-de-lagroecologie/

landscapes in the future, and improved access to finance to support the necessary transformations of their practices. Yet, finance to smallholder farmers constitute a small share of all finance going to activities in the land use sector, and the lack of it is a barrier for the transition of smallholder farmers toward farming practices that better meet environmental and socio-economic objectives³. Research exists on the financial needs of smallholder farmers, including on quantifications of the finance needed, and on the qualities of finance (raising questions around the type of finance required⁴ of finance, and on the barriers of finance to smallholders⁵ (e.g., here).

It is fundamental to better understand how national and international financial institutions can ensure that smallholder farmers have better access to the quantities and types of finance that they need, and what public policies are necessary to complement efforts from financial institutions such as development banks.

• No-one size fits all solutions

Paragraph 14 of the draft decision of the "Joint work on implementation of climate action on agriculture and food security" recognizes that solutions are context-specific and should take into account national circumstances, a statement that is supported by the IPCC Our Group, in its submissions to the KJWA, reminded that contexts matter and that co-designing adapted solutions requires taking into account regional specificities. To reach the objectives of the paragraph 14, we recommend the organisation of regional discussions with Parties, observers and non-observers to the UNFCCC prior to intersessional works and SBSTA/SBI meetings. Regions (7) defined in the IPCC reports should at least be selected, and if possible sub-regions should be preferred. This is particularly relevant for certain topics, including discussions on the nexus approach and on the financing of smallholder farmers (discussed above), but also more broadly for a wide range of agriculture-related topics.

Topics for workshops

Under the "chapeau" of our submission "Enabling small farmers to play the game of agricultural transition as leaders", we view several workshops meant to unravel and tackle intertwined issues

Workshop 1: A multi-objective evaluation framework of agricultural practices

The nexus approach needs: (i) to consider all selected approaches—technical, socioeconomic, and political—with the same weight; (ii) to support farmers with all aspects: food security, income, and climate; and (iii) to reduce farmers' exposure to shocks and to strengthen their resilience by enhancing their individual and collective capabilities and by addressing these interconnected difficulties

We propose to organise a workshop to take stock of current methodologies to help design a tool box for end-users and policy makers to make the agricultural transition a game changer in the climate and SDGs agenda.

Workshop 2: Accompanying smallholder farmers in the transition to improved practices by facilitating their access to finance

It is fundamental to better understand how national governments and national and international financial institutions can ensure that smallholder farmers have better access to the quantities and types of finance that they need in order to locally appropriate farming practices that will meet multiple objectives, including food security, increased incomes to farmers and improved resilience and adaptation to climate change, as well as mitigation of GHGs.

⁵ Odhong et. al. (2019). "Financing large scale mitigation by smallholder farmers: what role for public and climate finance?", Frontiers of Sustainable Food Systems, vol. 3.

³ International Financial Corporation (2014): <u>Access to finance for smallholder farmers: learning from the</u> experiences of microfinance institutions in Latin America

⁴ e.g. Yi, Wang and Cheng (2021). "Financing and agricultural supply chain with a capital constrained smallholder farmer in developing economies", *Production and Operations Management*, 30(7)

We therefore recommend that a workshop is organised on questions around improved access to finance for smallholder farmers, including on i) the types of finance that smallholders need, et ii) the barriers to providing this finance faced by governments, and national and international financial institutions.

Two cross-cuttings questions will guide the discussion within these two workshops:

- How to best identify, evaluate and finance sustainable land management (SLM) practices and approaches implemented on the ground by smallholders;
- How to ensure that SLM practices and approaches are co-designed with local actors to fit the national context and to adequately take into account local socio-economic and environmental constraints.