



**Climate Action Network
Submission:
Elements to be included in
Koronivia Joint Work on Agriculture (KJWA)
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*Climate Action Network (CAN) is the world's largest network of civil society organizations working together to promote government action to address the climate crisis, with more than 1300 members in over 120 countries.
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INTRODUCTION

At COP23, Decision –CP/23 invited parties and observers to submit their views on the joint SBSTA-SBI work known as the “Koronivia Joint Work on Agriculture” (KJWA), to inform workshops to be held at SB50 on the topics of: 2(b) Methods and approaches for assessing adaptation, adaptation co-benefits and resilience) and 2(c) Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management.

Part One of this submission outlines recommendations for “Modalities and Procedures” with the purpose of shaping the KJWA mode of working to be effective, rigorous and relevant; Part Two responds specifically to 2b) and 2c) under the heading “Technical Content” with the purpose of sharing CAN members’ knowledge and expertise on technical issues related to agriculture and climate change.

PART ONE: Modalities & Procedures

1.1 Objectives of the workshops and discussions

To effectively focus the work and activities under the KJWA, CAN recommends that:

- i) A number of key objectives are identified to guide the work;
- ii) Presentations and discussions under the KJWA contribute to these objectives.
- iii) That the following five objectives form the basis of this work: a) Food security; b) Adaptation; c) Absolute & equitable emission reductions; d) Ecosystem integrity; and e) Gender-responsiveness.

a) Food Security

COP23 decision UNFCCC/SBSTA/2017/L.24/Add.1 “requests the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation to jointly address issues related to agriculture, including through workshops and expert meetings, working with

constituted bodies under the Convention *and taking into consideration the vulnerabilities of agriculture to climate change and approaches to addressing food security;*” [emphasis added]. The mandate is thus explicit about the need to consider food security.

CAN therefore recommends that the secretariat set parameters according to an agreed understanding of food security. This will guide the discussions so as to ensure quality and relevance of technical input to the COP23 decision, and to meet the KJWA mandate and objectives.

The KJWA should acknowledge the internationally-recognised definition of food security adopted at the FAO World Food Summit in 1996, and this should provide the basis of UNFCCC understanding of this term. “Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”

In recognition that food security is not only about food production, but also about people’s secure access to that food, the KJWA work should be guided by the Four Pillars of Food security as defined by the FAO:

- 1) Physical availability of food;
- 2) Economic and physical access to food;
- 3) Sanitary and nutritional quality of food;
- 4) Stability of the above three dimensions of food security;

Each policy, project or approach discussed under the KJWA framework should be evaluated *ex ante* through a food security lens formed by these Four Pillars, taking into account the vulnerabilities of agriculture to climate change, to determine whether the approach is effectively contributing to the KJWA’s food security goals. The following must therefore be respected when developing agricultural strategies:

- Food security must be a key objective of adaptation strategies in relation to agriculture;
- Mitigation strategies need to ensure that food security is not threatened; and
- Production levels should not prevent Parties from engaging in equitable and ambitious strategies in line with historical per capita emissions.

The KJWA should recommend that COP “request the Executive Secretary to appoint a senior food security focal point, who is an expert in this subject matter, to ensure that presentations and outcomes of the KJWA are aligned with the fundamental priority of safeguarding food security.”

b) Adaptation

Recalling COP23’s mandate to “take into consideration the vulnerabilities of agriculture to climate change” the issue of Adaptation in agriculture must also be a clear priority for the work of the KJWA. The Paris Agreement calls for adaptation action to be gender-responsive, participatory and fully transparent, taking into consideration vulnerable groups, communities

and ecosystems. Parties have an opportunity to learn from experience of adaptation in the agriculture sector, especially agroecology, and to leverage the experience of adaptation to inform good practice along these principles, for all action in the agriculture sector.

c) Absolute and equitable emission reductions

Recalling the Goal stated under Article 2 of the Paris Agreement to limit global average temperature increase to 1.5°C or well below 2°C reflecting the principle of equity; and the long-term Goal stated under Article 4, to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and that it must be done on the basis of equity and in the context of sustainable development and efforts to eradicate poverty, the issue of GHG emission reductions must be addressed with care and integrity.

To ensure the effectiveness of the KJWA, the Paris Agreement and the UNFCCC, Parties must be guided by the objective of equitable absolute (total) emission reductions. This means that reduced “intensity” or increased “efficiency” per kilo of food is not an acceptable objective by itself, as this can often create perverse incentives to increase production, and increase total emissions. Thus work under the KJWA must pursue efforts to equitably reduce absolute emissions, with countries with the highest historical per capita emissions taking the lead. Countries with low historical per capita emissions in agriculture should not bear the burden of leading these reduction efforts.

d) Ecosystem integrity

Discussions on Agriculture under the UNFCCC can and must do a better job of taking into account the impacts of climate action in the agriculture sector on biodiversity, ecosystems and planetary boundaries such as land and water. KJWA presentations and discussions should be encouraged to reflect on and direct work towards holistic efforts that ensure the long-term viability of agricultural systems within the natural world that they depend. The KJWA should aim to enhance collaboration with the United Nations Convention on Biological Diversity (CBD) with the goal of better integrating climate change adaptation with biodiversity conservation and sustainable land use.

e) Gender-responsiveness

Policies and programmes must be gender-responsive, actively seeking to overcome the multiple challenges that women farmers face in engaging with government and agriculture processes. One of the most common challenges women farmers face is a lack of access to critical resources for agriculture in the face of change climate, such as land, extension services, climate information, and decision-making power and processes. The KJWA must make a particular effort to mainstream awareness of and strategies for gender-responsiveness, throughout all elements of the work.

To develop synergies with existing processes within the UNFCCC, the KJWA should ask the COP to “request the secretariat to organize in-session workshops, within the Gender Action Plan, on gender-responsive climate policy and action.” No climate action in agriculture should reinforce gender inequality. Climate change adaptation policies and actions in agriculture give a particular opportunity to address widespread gender inequalities in the agricultural sector.

1.2 Outputs of the KJWA

For the joint SBSTA-SBI work to be effective in guiding implementation of NDCs under the Paris Agreement, parties should consider outputs that the Koronivia Joint Work on Agriculture (KJWA) can develop. These could include: i) A set of social and environmental guidelines for climate action in the land sector, to ensure that the food security, livelihoods and ecosystems so integral to the food sector are not compromised, and that rights are respected and promoted; ii) Criteria & objectives for climate action in agriculture; iii) Recommended guidance & safeguards for the GCF in funding actions in agriculture; iv) Guidance & safeguards for bilateral funding of climate action in agriculture.

CAN recommends that Parties discuss and agree at least some desired outcomes of the KJWA to help direct the discussions, before contributing inputs on the technical substance.

1.3 Participation

KJWA workshops must have a balanced representation of expertise and knowledge. This should include the active participation and presentations by observers in particular ENGOs, the Indigenous Peoples' Caucus and the Gender Constituency, who have significant and relevant expertise to share with the process. Several ENGOs, for example, have extensive experience of implementing international programmes on agriculture, adaptation and mitigation in multiple countries. Members of CAN's Agriculture Working Group can provide valuable contributions to these discussions and should be active participants in the process.

1.4 Avoiding conflicts of interest

The KJWA should be mindful of and draw on the current SBI process to develop criteria for avoidance of "Conflicts of Interest," particularly when inviting presenters and views for the workshops. This will help to prevent the undermining the integrity, legitimacy and effectiveness of the KJWA and UNFCCC.

PART TWO: Technical Content

2.1 Adaptation and measuring resilience - Workshop topic 2(b)

CAN believes that diversified small-scale/ peasant agriculture plays a key role in moving towards climate-resilient agriculture and food systems. In contrast with industrial farming, small-scale and family farms deliver a variety of benefits that help to achieve Sustainable Development Goals in times of climate change: They are linking food production with livelihoods; they are farming successfully under difficult and even marginal environmental conditions; they are able to maintain biodiversity; and they can achieve a higher productivity per unit of land and energy. Today, 500 million small-scale peasant farms around the world are using less than 25 per cent of the world's agricultural land – and very little fossil fuels or chemicals – to feed most of humanity in a climate- friendly way. Strengthening their adaptive capacities of small-scale farms should, thus, merit particular attention under the KJWA.

As development and environmental organisations in Climate Action Network (CAN) we have extensive experience of Adaptation programming. CAN members are in agreement that the

concept of Agroecology should serve as the foundation for the design of climate-resilient farming systems.

Agroecological agriculture techniques which reduce/ avoid the use of synthetic chemical fertilisers and pesticides and enhance agro-biodiversity, are an extremely effective technique for adaptation (as well as mitigation) that is also highly appropriate and accessible, particularly for poor and climate-vulnerable farmers. A key reason for this is that agroecological techniques improve soils through the use of composting and manure, which increases the water-carrying capacity of soils, thus leading to greater resilience in the face of both droughts and floods. Agroecological approaches also empower food producers to access decision-making, and prioritize local knowledge and resources over reliance on external inputs. Agroecology thus increases resilience and productivity in the face of climate change and addresses equity and inequality issues often missing in other agriculture paradigms. As agroecology involves mixed cropping, it also delivers a higher land-efficiency ratio, and thus greater nutritional impact per area of farmland than conventional monocropping. CAN invites Parties to carefully consider the proceedings and outcomes of the 2nd FAO Agroecology Symposium (3-5 April 2018). (We note that there are similar issues in the livestock sector, where less industrialised approaches can support people, the land and animals. See CAN's submission to SBSTA on Agriculture, 2013.)

Several studies looking at agricultural performance after extreme weather events (droughts and hurricanes) in Central America have shown that resilience to climate disasters is closely identified with farms with diverse locally-adapted cropping systems in combination with soils rich in organic matter, water conservation techniques and increased levels of biodiversity.¹ Following the deadly Hurricane Mitch in Central America in 1998, a survey showed that farmers using diversification practices such as cover crops, intercropping and agroforestry suffered less damage than their conventional monoculture neighbors. Similarly, researchers found that 40 days after Hurricane Ike hit Cuba in 2008, diversified farmers experienced losses of 50%, compared to 90 or 100% in neighboring monocultures, and that agroecologically-managed farmers showed a faster productive recovery after the hurricane.²

We note that adaptation efforts will almost always be specific to locations, and that the unique context and combination of geology, ecosystems, weather patterns, local livelihood opportunities, crop patterns, culture, economy, power dynamics and gender relations can all shape a community's specific adaptation needs and opportunities. A key principle for adaptation must therefore be to ensure active and gender-balanced community participation in the design, development, implementation, and monitoring and evaluation (M&E) of appropriate adaptation strategies.

Women make up more than half of farmers and yet are all too often left out of processes for reasons of culture, empowerment, literacy and childcare responsibilities. Programs must therefore make specific and extra efforts to ensure gender-responsiveness and the inclusion of

¹ <http://www.fao.org/agroecology/database/detail/en/c/452669/>

² <https://foodfirst.org/wp-content/uploads/2016/02/Farming-Matters-28-2-Agroecological-approaches-to-enhance-resilience.pdf>

women and marginalized communities in adaptation planning and delivery processes, if they wish to address the real – and often unspoken – challenges that communities face as a result of climate change.

When it comes to measuring adaptation and resilience, and the impact that interventions have on communities, CAN members are able to draw on our experience in adaptation and resilience programming. Firstly, we note that measuring the impacts of adaptation can be more challenging than measuring the impact of conventional development efforts, due to the particular likelihood of climate change effects compromising outcomes against a baseline. These challenges, however, are not insurmountable, and innovative approaches to monitoring and evaluation can be highly beneficial, particularly if they serve to incentivize the right approaches to adaptation.

The key focus of measuring adaptation should be on strengthening adaptive capacity, and identifying proxy indicators that can lead to this. Until now, there has been much focus on the “hardware” of adaptation (i.e. infrastructure including embankments, water resources etc.)

while leaving behind investment in the “software” required for adaptation (communities’ understanding of the issues, knowledge of what to do, and the capacity of institutions to deliver strategies locally).

Thus indicators should include elements that reflect communities’ ability to understand and act on climate impacts, including: i) Agroecological interventions; ii) Community participation in capacity building, design and implementation of strategies; iii) Women’s participation in capacity building, design and delivery of strategies; iv) Building of adaptive capacity, including knowledge, at all levels, from communities, to local, sub-national and national institutions.

2.2 Soil carbon, soil health, soil fertility, grasslands, croplands and water management – Workshop topic 2(c)

Soil carbon, soil health, soil fertility and water management should be treated together, in order to avoid side effects or perverse incentives. (e.g. “No-till” monocultures of genetically modified crops that use high inputs of glyphosate herbicide and pesticides which negatively affect soil health, biodiversity and water.) When combining the objectives of soil carbon, soil health, soil fertility and water management, Parties can identify adaptation measures that may also provide mitigation co-benefits.

Priority should be given to the preservation of soil carbon under grassland and cropland as well as integrated systems, particularly in consideration of the fact that global warming may increase CO₂ losses.³ Agroecological practices such as applications of manure, compost, mulches and cover crops, are the most effective techniques for building up soil carbon and soil health, and bring multiple adaptation co-benefits.

However Parties should also recognize that an over-reliance on soil carbon sequestration as a

³ Crowther T. et al. 2016; FAO 201

mitigation strategy must be avoided due to the risk of reversals and the extreme challenges of monitoring, reporting and verification (MRV) of soil carbon. It is impossible to guarantee the permanence and irreversibility of carbon stored in soils. Temporarily sequestering carbon in agricultural soils will never be as effective for mitigation purposes as permanently reducing or avoiding non-CO₂ emissions. More attention should therefore focus on avoiding or reducing the release of emissions from agriculture, than attempting to temporarily sequester them back from the atmosphere through soil carbon sequestration.

Recent studies further suggest that increases in soil carbon sequestration may unfortunately be counteracted by concurrent increases in nitrous oxide emissions, so unless soil carbon sequestration strategies are guaranteed to avoid nitrous oxide emissions, they should not be assumed to be a foolproof mitigation approach. To date, there is no standardized approach for measuring soil carbon concentrations, and the MRV of soil carbon can be complex, expensive and ineffective.

A set of fundamental principles and criteria could be developed to avoid perverse incentives with regard to good practice in soils, and to ensure that decision-making is led by farmers with regard to soil-improvement practices. These principles could feed into the KJWA safeguards/criteria/guidelines on action in the land sector.