



Submission to the Subsidiary Body for Scientific and Technological Advice (SBSTA)

Issues related to agriculture

May 2016

The forty-fourth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) invites Parties and admitted observer organizations to submit to the secretariat their views on:

- *Identification of adaptation measures, taking into account the diversity of the agricultural systems, indigenous knowledge systems and the differences in scale as well as possible co-benefits and sharing experiences in research and development and on the ground activities, including socioeconomic, environmental and gender aspects;*
- *Identification and assessment of agricultural practices and technologies to enhance productivity in a sustainable manner, food security and resilience, considering the differences in agro-ecological zones and farming systems, such as different grassland and cropland practices and systems.*

The present submission¹ aims to respond to the second issue while also bearing in mind the first one in order to feed into the workshops at SBSTA 44.

Agriculture is facing a double challenge: while 795 million of people currently suffer from chronic hunger and 600 million more could be under nourished by 2080 due to climate change, agriculture is also one of the main sectors responsible for climate change². Parties are well aware of this reality since more than 90% of their INDCs are targeting agriculture in

¹ This submission is proposed by CCFD-Terre Solidaire and is supported by Action contre la Faim – France, Agronomes et Vétérinaires Sans Frontières, Asia Pacific Forum on Women Law and Development, Corporate Europe Observatory (CEO), CIDSE, Drynet, Environmental Monitoring Group (EMG), Global Forest Coalition, Institute for Agriculture and Trade Policy (IATP), TEMA

² 10 to 12% of the GHGs emissions and up to 24% for the AFOLU sector

https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_chapter11.pdf

their commitments and 60% are linking climate change to food security needs. Identification and assessment of agricultural practices are essential to implement effective policies but above this, Parties can no longer proceed without questioning the agricultural models. Indeed, not all of them contribute equally to climate change: industrial agriculture contributes heavily to the problem, whereas local family farms contribute far less and are more resilient when it comes to the impacts of climate change. In its preamble, the Paris Agreement duly records *“the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change”*. To respect those objectives, more than 350 civil society organizations have called for *“a radical transformation of our food systems away from an industrial model and its false solutions and toward food sovereignty, local food systems and integral agrarian reform”*³, which inherently means not pursuing the approaches supported by the Climate Smart Agriculture and its Alliance.

- **The exclusion of Climate-Smart Agriculture and its Alliance**

The second SBSTA workshop is willing to identify and assess agricultural practices and technologies to enhance **productivity** in a **sustainable** manner, **food security** and **resilience**. Those three pillars equally designate the Climate Smart Agriculture defined by the FAO as a way to promote *“production systems that **sustainably** increase **productivity**, **resilience** (adaptation), **reduces/removes GHGs** (mitigation), and **enhance achievement of national food security and development goals.**”*⁴ Although the workshop title does not mention the mitigation aspect of identified practices and technologies, it will probably be addressed by Parties, knowing that in the past year several studies and initiatives have been promoting the potential of soil carbon sequestration through changes to cropland management and restoration of degraded lands.

We must recall that Climate-Smart Agriculture is not an approach that can contribute to the identification of agricultural practices and technologies in climate actions in any meaningful way, since this discourse is used to promote models and practices inherited from the past and which pose serious threats to long-term ecological and economical resilience⁵. Climate-Smart Agriculture fails in addressing the contribution of specific models regarding GHGs emissions. The civil society organizations denounce an absence of clear definition and criteria attached to this broad concept which tends to be misleading, offering leeway for socially and environmentally detrimental practices. Many of the practices known for and identified as being part of the problem regarding climate change and agriculture are not excluded from Climate-Smart Agriculture. As recently noted, *“the lack of parameters prompts the fear that any model and scale of agriculture can fall under the rubric of either paradigm, including*

³ *Don't be fooled! Civil society says NO to “Climate Smart Agriculture” and urges decision-makers to support agroecology*, International statement, September 2015

<http://www.climatesmartagconcerns.info/cop21-statement.html>

⁴ <http://www.fao.org/climate-smart-agriculture/72610/en/>

⁵ *‘Climate-Smart Agriculture’ : the Emperor’s new clothes ?*, CIDSE, October 2014

unsustainable, industrial, large-scale, and chemical- or energy intensive models”⁶. Indeed, genetically modified seeds and organisms, herbicide-tolerant crops, large-scale industrial agriculture, biochar, no-till industrialized agriculture can fit under this umbrella although they not only pose risks for consumers as well as for soil health and biodiversity, but also create dependencies on corporations, at the expense of small scale farmers with an increase of their vulnerability. With such approach, Climate-Smart Agriculture tends to focus on the first pillar – productivity – instead of being truly sustainable and resilient. The four pillars of food security are availability, access, utilization and stability, meaning that an increase per unit of production does not imply automatically an improvement of peoples’ food security and nutrition. **As there is no clear definition of what Climate-Smart Agriculture is or what is not, this concept must be left out of the SBSTA process.** And so must the Global Alliance for Climate-Smart Agriculture (GACSA) which *“has the objective of up scaling the climate smart agriculture approach.”*⁷ GACSA is currently working as a platform for exchange but has no monitoring and accountability tools, an overrepresentation of private interests of specific sectors, an underrepresentation of developing countries (only 10 members) and farmers’ organisations (only three) as well as a lack of social and environmental safeguards⁸. Such an alliance and its inadequate methodology should not be retained for identifying and assessing agricultural practices and technologies.

- **A rights-based approach with a central focus on adaptation of small-scale farmers and their traditional knowledge over compensation objectives**

The SBSTA 44 workshops on agriculture are dividing the program between:

- adaptation measures taking into account traditional knowledge but also social, environmental and gender aspects;
- and
- practices and technologies to enhance productivity in a sustainable manner, food security and resilience.

This division creates two risks. The first one is to focus on small scale farmers and traditional practices only through the first workshop whilst the second workshop may be purely technology oriented. **This type of separation should not be accepted.** Traditional knowledge and small scale farmers must be central to any approach as they produce 70% of the world’s food and as such have a key role to play.

The second risk is to limit social, environmental and gender considerations to adaptation measures. As mentioned above, the lack of social and environmental safeguards is a fundamental criticism addressed to Climate-Smart Agriculture and its Alliance. The identification and assessment of agricultural practices and, very especially, technologies have to be done with a rights-based approach. **Social, environmental and gender aspects must be taken into account in the second workshop given that some of the practices and technologies in the agricultural sector may target mitigation objectives.** Enhancing

⁶ *Cultivating Equality: Delivering Just and Sustainable Food Systems in a Changing Climate*, Food Tank, CARE International, CGIAR, CCAFS, October 2015, p.13

⁷ <http://www.fao.org/gacsa/about/en/>

⁸ See *“Climate smart revolution... or new era of green washing?”*, CIDSE briefing, May 2015

productivity, food security and resilience in a sustainable way must go hand in hand with strong safeguards.

Furthermore, adaptation measures need to be prioritized over land-based mitigation activities. The general objective of the Paris Agreement that aims « *to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases* » (art. 4.1) creates a major tension on the land sector. “*The Intergovernmental Panel on Climate Change (IPCC) outlines scenarios requiring between 500 million and 6 billion hectares of land in order to implement this dangerous offsetting approach.*”⁹ It has been incorrectly suggested that a combination of carbon sequestration and intensification of agricultural production can be a viable response to the threat of climate change under Article 2.1 (b)¹⁰ of the Paris Agreement. However, this combination amounts to a ‘business as usual’ approach which fails to address the main pillars of food security. In reality, a compensation approach is an illusion delaying real climate actions¹¹, especially in the agricultural sector. Agriculture contributes to global warming mainly through emissions of methane (CH₄), nitrous oxide (also known as dinitrogen monoxide, N₂O)¹² and carbon dioxide not emitted by the soil (production of fertilizers, livestock, farm implements, transport). Encouraging carbon sequestration in soils as is the case with the initiative “4 per mil” promoted in the Lima-Paris Action Agenda does not offer a long-term substantive solution to the challenge faced by our current model of agriculture. The “4 per mil” initiative, likewise most of the negative emissions technologies¹³, involve risks not only for land rights. A zero-net emissions approach can undermine people’s rights as has been noted in the experience of biofuel production¹⁴. Carbon sequestration, through agricultural practices on large-scale landholdings in particular in developing countries, is very likely to threaten many vulnerable communities.

Supporting land-based approaches has high risks if it is primarily considered through its capacity to store carbon with simple co-benefits for food production. Rather the principle objective should be to “*end hunger, achieve food security and improved nutrition and promote sustainable agriculture*”¹⁵ as advocated in the Sustainable Development Goals. Adaptation and mitigation objectives in the agricultural sector cannot be understood without an effort to examine, revise and preclude inappropriate models of agriculture.

⁹ *Caught in the Net : How « net-zero emissions » will delay real climate action and drive land grabs*, Action Aid, June 2015, p.2

¹⁰ “*This Agreement [...] aims to strengthen the global response to the threat of climate change [...], including by: (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production.*”

¹¹ See non-permanency and reversibility of carbon sequestration:

http://www.fibl.org/fileadmin/documents/de/news/2012/calas/4_CaLas2011_Smith.pdf

¹² Methane (which will generate 25 times more heat than carbon dioxide in the next 100 years, and 72 times more in the next 20 years) and nitrogen protoxide (298 times more heat than carbon dioxide) will contribute respectively around 30 to 50% of greenhouse gas emissions imputable to agriculture over the next 100 years.

¹³ “*Biophysical and economic limits to negative CO₂ emissions*”, P. Smith and al., *Nature Climate change*, Vol.6, January 2016, pp 42-50

¹⁴ *Caught in the Net : How « net-zero emissions » will delay real climate action and drive land grabs*, Action Aid, June 2015

¹⁵ Zero hunger, goal 2