



TOWARDS A WORK PROGRAMME ON AGRICULTURE

A SUBMISSION TO THE AWG-LCA BY THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

1. Background

If the direct cause of climate change is to be addressed, the mean average temperature increase kept below 2 degrees, possible catastrophic change avoided, and ever-increasing adaptation costs contained, then the contributions of all relevant sectors including agriculture will be required in reducing and removing global greenhouse gases (GHGs) emitted into the atmosphere. However, agriculture will also be challenged to ensure the food security of an increasing number of people during this century (an additional 3 billion people by 2050). It will have to do this under changing climatic conditions that are expected to exacerbate this already onerous task, especially in the most vulnerable parts of the developing world. In these areas in particular, adaptation of the agriculture sector will not be an option but an imperative for survival.

Taking into account common but differentiated responsibilities and respective capabilities, and Article 3.1 of the Convention, which states that “*developed country Parties should take the lead in combating climate change and the adverse effects thereof*”, there is a growing perception that it will be important for developed countries to set an example through higher ambition levels on emission reduction/removals than is currently the case and to disburse quickly against financial commitments made in Copenhagen. Some developed countries have already taken steps in this direction.

Responding to climate change in developing countries, will need to be pursued in ways that do not jeopardize, or better still enhance, nationally-owned development processes that prioritize food security and poverty reduction, wherein agriculture plays a key role. Agriculture offers options that can provide multiple benefits for mitigation, adaptation, development and food security or that allow, in some instances, the management of trade-offs across these requirements. Incentives, policy approaches and institutional mechanisms, including adequate financing, technology and capacity-building support to enable the adoption of these options, could make agriculture a significant part of the solution to the interdependent challenges of climate change and food security in the context of continuing economic development.

This submission examines agriculture in the context of the climate change negotiations. It also underlines the importance of early discussion on the scientific, technological, and methodological aspects of agricultural mitigation within the Subsidiary Body on Scientific and Technological Advice (SBSTA) to the more policy-focused work on agriculture under the AWG-LCA and to readiness action at country level, funded through fast start resources. This submission aims to support UNFCCC Parties in their consideration of possible future work on agricultural mitigation through possible elements of a future work programme, should Parties wish to pursue this. It should be read in conjunction with other work undertaken by FAO on agriculture and climate change.¹ It should also be seen in light of the process followed for

¹ For further information, see:

FAO 2010. Agriculture, Food Security and Climate Change in post-Copenhagen processes.

http://foris.fao.org/static/data/nrc/InfoNote_PostCOP15_FAO.pdf

FAO 2009. Harvesting agriculture's multiple benefits: Mitigation, Adaptation, Development and Food Security. <ftp://ftp.fao.org/docrep/FAO/012/ak914e/ak914e00.pdf>

FAO 2009. Food security and agricultural mitigation in developing countries: Options for Capturing Synergies. <ftp://ftp.fao.org/docrep/fao/012/ak596e/ak596e00.pdf>

FAO 2009. Anchoring Agriculture within a Copenhagen Agreement. <ftp://ftp.fao.org/docrep/fao/012/k6315e/k6315e00.pdf>

FAO 2009. Enabling Agriculture to contribute to climate change mitigation.

<http://unfccc.int/resource/docs/2008/smsn/igo/036.pdf>

REDD, wherein discussion is ongoing under the AWG-LCA and SBSTA, complemented by national readiness programmes.

2. Agriculture and the climate change negotiations

Article 2 of the UNFCCC Convention states that the ultimate objective of the Convention is the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system and within a timeframe that allows ecosystems to adapt naturally to climate change, ensures that food production is not threatened and enables economic development to proceed in a sustainable manner. **Article 4. 1(c)** of the Convention states that all Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, *shall promote and cooperate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases in all relevant sectors, including agriculture.* **Preambular paragraph 4 of the Convention** mentions the role and importance of sinks and reservoirs of GHGs in terrestrial ecosystems.

In paragraph 1 (b) (iv) of the Bali Action Plan, mention is made of “*cooperative sectoral approaches and sector-specific actions, in order to enhance implementation of Article 4, paragraph 1(c), of the Convention*” (see above).

Within the **Kyoto Protocol** the inclusion of emissions by sources and reductions by agricultural sinks is optional under **Article 3.4** of the Protocol and only a few countries have elected to do so. Currently within the **AWG-KP**, aspects of land use, land use change and forestry accounting are under consideration, as is the possibility of expanding the scope of the **CDM** to include, inter alia, cropland management, grazing land management, wetland management, and soil carbon management in agriculture.

The **SBSTA** in 2008, at its twenty-eighth session, considered the item Scientific, technical and socio-economic aspects of mitigation of climate change. SBSTA took note of the views of Parties on possible future work on this issue, including some submissions which mentioned agriculture (FCCC/SBSTA/2008/MISC.6 and Add.1) and agreed to consider this issue again at its thirty-second session in June 2010.

In 2008, at the request of Parties, the UNFCCC Secretariat prepared a **technical paper** on the challenges and opportunities for mitigation in the agricultural sector for the **AWG-LCA**. At its fifth session in April 2009, the AWG-LCA held an **in-session workshop** on agriculture to present the technical paper and to invite parties to express their views. Eventually, a **dedicated drafting group for agriculture** was established in relation to *Cooperative sectoral approaches and sector specific actions*, under “Enhanced national/international action on mitigation of climate change”. Within the **draft negotiating text**, prepared by this drafting group, features the proposal to establish a SBSTA work programme on agriculture (FCCC/AWGLCA/2009/L.7/Add.9), which received general support throughout the negotiation process.

In **Copenhagen** the main outcome of COP15 was to note the Copenhagen Accord which, inter alia, calls for scaled up, new and additional, predictable and adequate funding, as well as improved access [that] shall be provided to developing countries in accordance with relevant provisions of the Convention, to enable and support enhanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation (REDD-plus), adaptation, technology development and transfer and capacity-building for enhanced implementation of the Convention”. The Accord, however, mentions neither agriculture nor food security explicitly.

Post-Copenhagen, a number of countries responded to the call in the Copenhagen Accord to inform the UNFCCC Secretariat of their quantified economy-wide emissions targets for 2020 (Annex I countries) and mitigation actions (Non-Annex I countries). As of 12 April 2010, 14 Annex I Parties, plus the 27 member countries of the EU and 35 Non-Annex I countries had replied. Among the 35 submissions received from

developing countries, 8 were not sector-specific and 15 explicitly stated that they plan to adopt mitigation actions in the agricultural sector, indicating specific sub-sectoral areas. While many Non-Annex I Parties did not respond, the proportion of those that indicated agricultural mitigation actions among their replies (more than 55%) is significant and may be an indicator that agriculture is likely to become an important component of NAMAs in developing countries. The AWGs will resume their work in June. The AWG-LCA will have before it a draft negotiating text prepared by its Chair, drawing on the report of the AWG-LCA presented to the COP at its fifteenth session (wherein agriculture figures), as well as work undertaken by the COP on the basis of that report.

3. Why might SBSTA work on agriculture be useful?

As can be seen above, the space of agriculture within UNFCCC processes has steadily increased and a number of countries have indicated their interest in pursuing mitigation action in agriculture. SBSTA work on agricultural mitigation, including mitigation options that also benefit adaptation, food security and development, could help to clarify their viability and potential benefits, as well as ways of overcoming barriers to implementation. This may be of help to countries, which would like to develop, on a voluntary basis, readiness programmes and NAMAs, using fast-start resources. More generally, it could potentially facilitate better understanding and use of scientific/technological methodologies and related enabling mechanisms that are needed to underpin action and international support for agricultural mitigation and adaptation.

A SBSTA work stream on agricultural mitigation could feed into and inform the negotiating process with regard to agriculture specifically and other land uses more generally. The case of REDD has demonstrated the effectiveness of the constellation of a dedicated work programme under SBSTA, policy discussion in the AWG-LCA and pilot actions on the ground in building consensus and confidence.

4. Procedural considerations

At its forthcoming 32nd session, under agenda item 9 “*Scientific, technical and socio-economic aspects of mitigation of climate change*” action indicated in the annotated provisional agenda states “*The SBSTA may wish to consider possible future work on scientific, technical and socio-economic aspects of mitigation of climate change to be carried out under the SBSTA, taking into account the linkage with ongoing discussions on mitigation and related aspects under other subsidiary bodies*”. Should they so wish, Parties could (i) indicate under this agenda item their interest in an agricultural mitigation work stream, (ii) formulate a decision calling for such a work stream and (iii) invite submissions from Parties for August/September 2010 on the scope and content of such a work. In this way, a work stream on agricultural mitigation could be decided in June 2010, with **work starting at its 33rd session in December 2010**, which could shape the scope and content of a work programme on agriculture through **an eventual recommendation to the COP in this regard**.

As there is limited SBSTA meeting time (four weeks a year), a series of intersessional technical meetings could be considered. Such meetings could be organized by the UNFCCC Secretariat, in collaboration with the IPCC and other partners.

5. Possible elements for a work programme on agricultural mitigation, including options with adaptation co-benefits

The elements referred to below are preliminary and indicative. They are provided in order to stimulate reflection and consideration by and among Parties, including in the context of any eventual submissions and decisions that they might wish to make in this regard.

GUIDING PRINCIPLES

- In accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities.
- Developing country Parties have the right to and should promote sustainable development (Article 3.4 of the Convention).
- Real, measurable and long-term benefits for the climate related to the reduction of emissions and increasing removal by sinks from the agriculture sector.
- State sovereignty.
- Cost effectiveness.

SAFEGUARDS

- Food security is not adversely affected (Article 2 of the Convention).
- Environmental integrity is protected.
- Full and effective involvement of stakeholders, including indigenous peoples, smallholders and local communities, and use of their traditional knowledge, in the design and implementation of activities.

LINKAGES BETWEEN MITIGATION AND ADAPTATION

The adoption of some improved agricultural practices can potentially simultaneously increase productivity, the adaptive capacity of agricultural production systems and act as an effective mitigation action (the two main categories of terrestrial mitigation highlighted in the 4th IPCC assessment report - improved cropland and grassland management – have this potential).

- Guidelines for identifying where potential synergies and trade-offs exist across mitigation, adaptation and development objectives, including food security and poverty reduction, and incorporation of this potential into prioritization of mitigation actions.
- Guidelines and methodologies to value and reward the adoption of agricultural practices, which have these synergies or co-benefits, including:
 - ways through which financing for agricultural adaptation and mitigation might be combined and methods for quantifying and accounting for these dual benefits
 - integrated MRV methodologies that might be needed for this.

MEASUREMENT, REPORTING AND VERIFICATION (MRV)

Generally, advice on guidelines, approaches, methodologies and mechanisms for MRV of emission reductions and removals from, and related international support (financing, capacity building and technology) for, the agriculture sector, including:

- identification of means and technical potentials of reduction/removals, taking into account the differences between agricultural systems;
- measurement, including sampling, use of modeling, proxies (and combinations of these);
- accounting methods (efficiency, land-based), including associated measurement and reporting issues;
- estimation of GHG emissions from agriculture, including life-cycle analysis (to assess emission intensities of agricultural commodities and assess the emission contributions of production processes along the food chain, inside/outside the farm gate), taking into account the differences between agricultural systems (including smallholder and industrial systems)
- non-permanence and leakage risks in agriculture and modalities/procedures for dealing with them (national/sectoral/sub-sectoral approaches, conservative approaches, buffers, insurance);
- reporting of emissions, removals and international support in a transparent, consistent, comparable and accurate way, as well as verification procedures and methodologies.

REFERENCE LEVELS

Guidelines, expanded methodologies and procedures for the establishment of individual country reference levels, taking into account national factors, such as:

- variation in agricultural production systems in use;
- any historical data on emissions and removals from agriculture;
- expected future emission and removal trends;
- capacity for emissions reductions and removals;
- other country specific conditions and circumstances;
- MRV requirements related to the development of reference levels (taking into consideration the expected increase in emissions to ensure food security and economic development) and different types of crediting mechanisms for nationally appropriate mitigation action.

COSTING, INCENTIVES AND FINANCING

- Incentive-driven and phased approaches associated with different actions, capacities and MRV requirements;
- Methodologies for calculating the costs and benefits of adoption of mitigation technology options: upfront costs (initial investments, including the cost of labour) and short-term/long-term operating and opportunity costs, as well as transaction costs associated with different MRV options;
- Methodologies for calculating incentives required to promote adoption of mitigation technologies and practices;
- Costs and viability of MRV for varying agricultural mitigation practices under different MRV systems, national capacities and mitigation/adaptation financing options;
- In light of the above, an analysis of the implications for appropriate financing sources (public, private, public-private, any eventual financing mechanisms decided by the COP), mechanisms (direct/facilitating finance, financing relating to upfront costs, operations and risk coverage) and modalities (NAPAs, NAMAs, possibly linkage to any future REDD+ mechanism and potential links to agricultural financing mechanisms).

In developing these methodologies and analyses, consideration could be given to the experiences of REDD, as both the forestry and agriculture sectors are land-based, face challenges of non-permanence/leakage and involve the livelihoods of many smallholders in developing countries.

6. FAO perspective

Agriculture can potentially be part of the solution to climate change in ways that respect and support the development and food security requirements of developing countries. However to realize this potential, systematic and dedicated discussion and decisions within the AWG-LCA and SBSTA are needed to clarify options for action and related support. At the forthcoming climate change meetings during June 2010 in Bonn, Parties could, if they so wish, accelerate action on the proposal for a SBSTA work programme on agriculture, which seems to have enjoyed broad support throughout the negotiations on agriculture. It is the prerogative of Parties to define the scope and content of this programme of work, which could provide scientific and technical underpinning to discussions and confidence-building around contentious methodological issues within the negotiations under its two-track process. It could also assist countries that have and will elect to embark on nationally appropriate mitigation and adaptation action on agriculture, funded from fast start financing provided by developed countries. For these reasons, early action by the SBSTA in this regard could be most beneficial.

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