



# AGRICULTURE, FOOD SECURITY AND CLIMATE CHANGE IN POST-COPENHAGEN PROCESSES

## FAO Information Note



## 1. Background

### 1.1 Agriculture in the negotiating text of the ad hoc Working Group on Long-term Cooperative Action (AWG-LCA)

A dedicated drafting group was established to negotiate text on “Cooperative sectoral approaches and sector-specific actions in agriculture”, under a broader chapter on mitigation. This text still contained a considerable number of brackets when the work of the AWG-LCA finished on 15 December. A group of negotiators continued informally to meet and negotiate on the text during the high level segment of the Conference. Brackets were nearly eliminated and consensus on the establishment of a SBSTA work programme on agriculture was achieved. However, no formal action was taken on this text in Copenhagen and the official text on the table is the earlier text, annexed to the report of the AWG-LCA on its eighth session (document FCCC/AWGLCA/2009/17).

### 1.2 Copenhagen Accord

The Copenhagen Accord<sup>1</sup>, drafted by a group of countries, was *noted* but not approved by the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP), at its fifteenth session (COP 15).

In this Accord, it is stated, *inter alia*, that “Annex I Parties to the Convention commit to implement individually or jointly the quantified economy-wide emissions targets for 2020, to be submitted in the format given in Appendix I by Annex I Parties to the secretariat by 31 January 2010 for compilation in an INF document.”

“Non-Annex I Parties to the Convention “will implement mitigation actions, including those to be submitted to the secretariat by non-Annex I Parties in the format given in Appendix II by 31 January 2010, for compilation in an INF document, consistent with Article 4.1 and Article 4.7 and in the context of sustainable development. Least Developed

<sup>1</sup> [http://unfccc.int/files/meetings/cop\\_15/application/pdf/cop15\\_eph\\_auv.pdf](http://unfccc.int/files/meetings/cop_15/application/pdf/cop15_eph_auv.pdf)

*Countries and Small Island Developing States may undertake actions voluntarily and on the basis of support.”*

A number of countries have responded<sup>2</sup> and provided information to the UNFCCC Secretariat on their proposed targets and actions. Analyses have been carried out, particularly of the Annex I targets and their implications for remaining below a 2 degree C temperature increase (also called for in the Copenhagen Accord), as well as the comparability of these targets<sup>3</sup>. Most of these analyses concur that the targets indicated so far, even if developing country pledges are included, would provide only about half of what is required to ensure that the temperature increases remain below 2 degrees C. Both base years selected and the inclusion/exclusion of LULUCF have implications for comparability.

REDD-plus is the only sector recognized as a central issue in the Accord. The agriculture sector and food security are not mentioned. However, a number of the submissions from developing countries on their mitigation actions specifically included agriculture (see below analysis of these submissions).

### 1.3 The Ad Hoc Working Groups on Long Term Cooperative Action (AWG-LCA) and on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP)

The COP 15 and the fifth session of the COP serving as the meeting of the Parties to the Kyoto Protocol (CMP), in their decisions on the outcome of the work of the Ad Hoc Working Groups decided to extend the mandate of the Ad Hoc Working Groups to enable them to continue their work with a view to presenting the outcome to the Conference of the Parties for adoption at its sixteenth session.

The Chairs of the ad hoc Working Groups are currently consulting Parties on the need for additional meeting time for the AWG-LCA and AWG-KP, as well as on the possible number, duration and timing of such meeting(s).

## **2 Agriculture and the UNFCCC Process in 2010**

### 2.1 Agriculture in Party submissions responding to the Copenhagen Accord

Among developed countries, only two countries clarified that pledged emission reductions are based on the assumption that an effective set of LULUCF rules are approved.

Among the 27 submissions received from developing countries, 7 are not sector specific and 11 stated that they plan to adopt mitigation actions in the agricultural sector (see Annex 1 for overview and Annex 2 for detailed agricultural mitigation actions submitted). While

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<sup>2</sup> As of 10 February 2010, 13 Annex I Parties, plus the 27 member countries of the EU and 27 Non Annex I countries had replied. Additional information was provided by 29 other Parties. See <http://unfccc.int/home/items/5262.php>

<sup>3</sup> Ecofys; World Resources Institute (WRI); Climate Analytics; Price, Waterhouse, Coopers and others

many Non-Annex I Parties have not responded, this is a significant portion of the submissions received so far.

The submissions inclusive of agriculture reflect differing national capacities, circumstances and perspectives. Two developing countries provided specific agricultural mitigation targets, both noted that these are voluntary domestic reductions considering also the use of the Clean Development Mechanism. In total, four countries submitted quantitative agricultural reduction targets. One of them will aim to improve crop residue management, while another specified an area where cropland-related mitigation practices will be adopted. Another country underlined the scarce analysis of global greenhouse gas (GHG) reduction in the agricultural sector and accordingly in their action plan highlighted the goal and specified actions to build capacity and conduct research to identify and develop good agricultural practices for reducing GHG emissions at the farm level. Yet another mentioned that they plan to develop carbon projects in forestry and agriculture. One country indicated that they will engage in a number of agricultural mitigation activities such as restoration of grasslands, fodder crop production, introduction of combined irrigation and fertilization techniques to increase the efficiency of fertilizer application and methane capture in livestock and chicken farms.

## 2.2 Agriculture in the ad hoc Working Groups

As mentioned above, the reconvening of the ad hoc Working Groups would mean that the draft text on “Cooperative sectoral approaches and sector-specific actions in agriculture would again be “on the table” under mitigation within the AWG-LCA. As this will be the case with the entire AWG-LCA and AWG-KP texts, negotiators may also wish to consider carefully how special attention might be given to agriculture within an eventual adaptation framework, in view of its crucial role in hunger and poverty reduction in many developing countries and vis-à-vis global food security. Appropriate financing and technology development/transfer for agricultural mitigation and adaptation may also be considered, in addition to linkages between agriculture and REDD. As agriculture is a main driver of deforestation in many developing countries, food security-climate change and REDD-agriculture linkages can be key considerations in addressing both food security and climate change successfully. Some of these aspects might be considered by SBSTA (see below).

## 2.3 SBSTA

In view of the informal consensus for a SBSTA work programme on agriculture obtained at the end of COP 15, Parties could decide to establish such a programme, through one of the following options:

(a) at the next session of the SBSTA (Bonn, June, 2010) and possibly requesting inputs from Parties on the scope and content of such programme by August/September 2010. **Work within in the SBSTA could start in December 2010. This could alter how agriculture might figure in an eventual AWG-LCA outcome.**

(b) Parties could submit their views on the proposed agriculture work programme under their own initiative, based on the mandate given by the Bali Action Plan, which could then inform SBSTA in its consideration of the establishment of a work programme in June. **Work within the SBSTA could start in December 2010. This could also alter how agriculture might figure in an eventual AWG-LCA outcome.**

(c) If Parties prefer to have a COP decision developed under the AWG-LCA, then a decision would have to be taken at COP 16 in Mexico (December, 2010), with **work starting within the SBSTA in the summer of 2011.** AWG- LCA negotiations this year could focus on the scope and content of the work programme. Submissions could be called for at the next meeting of the AWG-LCA or using the mandate provided in the Bali Action Plan.

Complementary work in other intergovernmental bodies, including AWG-LCA, AWG-KP and the FAO Committee on World Food Security, will also be important.

FAO has already made some very preliminary suggestions on possible issues that such a work programme might address<sup>4</sup> and some countries have asked FAO to expand this work further. A separate paper will be prepared in this regard.

### **3. Conclusion**

While only a limited number of Non-Annex I Parties have made submissions in response to the Copenhagen Accord, the proportion of these that included agriculture may be an indicator that agriculture is likely to become an important component of Nationally Appropriate Mitigation Actions (NAMAs) in developing countries. It is not too early for countries wishing to offer and those wishing to receive international support for agricultural mitigation, to move towards the coordinated development of pilots, which could build confidence and readiness for nationally appropriate mitigation action in agriculture, accompanied by technical support tailored to country circumstances.

At the same time, the enabling conditions for such agricultural mitigation action would need to be built into any eventual international instrument(s) that will hopefully be agreed in Mexico in December 2010. This includes appropriate text on financing, technology development/transfer, mitigation and adaptation (in view of the potential synergies inherent in a number of agricultural land management practices, which FAO has highlighted<sup>4</sup>).

A SBSTA programme of work on agriculture could potentially contribute to a better understanding and eventual agreement on the scientific and technological methodologies and modalities that would need to underpin action and support for agricultural mitigation. The case of REDD has demonstrated the effectiveness of a dedicated work programme under SBSTA and pilot actions on the ground in reaching consensus on difficult methodological issues.

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<sup>4</sup> Food Security and Agricultural Mitigation in Developing Countries: Options for Capturing Synergies, FAO, 2009.

FAO stands ready to facilitate and technically support action outlined in this note, in close cooperation with its member countries and partners (in particular IFAD, CGIAR and World Bank).

## ANNEX 1: SUMMARY OF NAMAS BY SECTORS

In the table below the sector specific pledges of the submitted NAMAs from developing countries are presented.

Country	NAMAs by sector							Emission reduction target by 2020 (% of baseline emissions)	Baseline year
	Agriculture	Forestry	Transport	Energy efficiency	Waste mgmt	Replacement of oil and coal by gas	Renewable energy		
Armenia		x					x		
Benin		x	x				x		
Bhutan	no sectoral activities specified							indicated already C-neutral	
Botswana		x	x	x				x	
Brazil	x	x						x	36.1-38.9
China		x						x	40-45
Rep of Congo	x	x	x	x	x			x	
Costa Rica		x	x	x	x				
Ethiopia	x	x	x		x			x	
Georgia								x	
India	no sector specified but Agriculture explicitly excluded from national efficiency target							20-25	2005
Indonesia	x	x	x	x	x			x	26
Israel				x				x	20
Jordan	x	x	x	x	x			x	
Madagascar	x	x		x	x			x	
Maldives	no sectoral activities specified							C-neutral	
Marshall Islands	no sectoral activities specified							40	2009
Mexico	no sectoral activities specified							30	n.s.
Mongolia	x	x	x	x				x	
Morocco	x	x	x	x	x	x		x	
Papua New Guinea	x	x	x				x		50% before 2030, carbon neutral before 2050
Rep of S. Korea								30	n.s.

Rep of Moldova	no sectoral activities specified						25	1990
Sierra Leone	x	x	x	x	x	x		
Singapore	no sectoral activities specified						16	n.s.
South Africa	no sectoral activities specified						34	n.s.
Rep Macedonia	x	x	x	x	x	x		

Source: <http://unfccc.int/home/items/5265.php>

## 1 ANNEX 2: SUMMARY OF AGRICULTURAL NAMAS.

In the table below agriculture specific NAMAs are presented and related emission reduction targets.

Country	Pastoral land mgmt	Livestock mgmt		Crop land management								Waste mgmt	Peat land mgmt
	Restoration & conservation	Improved livestock mgmt	Introduction/ of fodder crops	Con-servation farming	No-tillage farming	Agro-forestry	Soil C-sequestration	N-fixing species	Efficient fertilizer application	Crop improve-ment	Irri-gation	Crop residues and animal waste	Improved management
Brazil	83-104 Mt CO2	18-22 Mt CO2			16-20 Mt CO2			16-20 Mt CO2					
Rep. of Congo				x				x			x		
Ethiopia						on 261,840 km2	on 80,000 km2						
Indonesia													x
Jordan	x								x				
Rep Macedonia											x	x	
Madagascar		x	x						x	x			
Mongolia		x				x							
Morocco							2 Mt CO2/yr						
Papua New Guinea	Decrease agricultural GHG emissions by 15-27 MtCO2/year (activities are not specified)												
Sierra Leone				x		x							

Source: <http://unfccc.int/home/items/5265.php>