FCCC/AWGLCA/2009/CRP.2

7 April 2009

ENGLISH ONLY

AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION UNDER THE CONVENTION
Fifth session
Bonn, 29 March to 8 April 2009

Agenda item 3 (a–e)
Enabling the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012, by addressing, inter alia:
A shared vision for long-term cooperative action
Enhanced national/international action on mitigation of climate change
Enhanced action on adaptation
Enhanced action on technology development and transfer to support action on mitigation and adaptation
Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation

Report on the workshop on opportunities and challenges for mitigation in the agricultural sector

Summary by the chair of the workshop

I. Introduction

1. The Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), at its third session, requested the secretariat to organize a workshop at its fifth session on opportunities and challenges for mitigation in the agricultural sector.[1]

2. The approach of the workshop, as well as its structure, has been outlined in the scenario note and in the provisional agenda and annotations for the fifth session of the AWG-LCA.[2]

3. The workshop was held in Bonn, Germany, on 4 April 2009 and was chaired by the Rapporteur of the AWG-LCA, Ms. Lilian Portillo. This note by the chair summarizes the presentations, exchange of views and discussions by Parties at the workshop.

4. An introductory presentation was made by the secretariat on a technical paper on challenges and opportunities for mitigation in the agricultural sector,[3] prepared in response to a request by the AWG-LCA at its second session.[4] The paper addresses the global mitigation potential of the sector, mitigation practices in different agricultural sub-sectors, related policies and measures and possible issues for further consideration.

5. Presentations were made by the following nine Parties: Bangladesh, the Czech Republic on behalf of the European Community and its member States, Japan, Mexico, New Zealand, Samoa,

[1] FCCC/AWGLCA/2008/12, paragraph 35.
[2] FCCC/AWGLCA/2009/2, paragraphs 9 and 10, and FCCC/AWGLCA/2009/1, annex I.
[3] FCCC/TP/2008/8.
[4] FCCC/AWGLCA/2008/8, paragraph 28 (a).

Senegal, the United States of America and Uruguay. The Intergovernmental Panel on Climate Change (IPCC) and the Food and Agriculture Organization of the United Nations also made presentations. The workshop was open to all Parties and observers.

6. An exchange of views took place after the presentations. Statements and comments were made by Argentina, Australia, Bangladesh, Benin, Brazil, Chile, the Czech Republic on behalf of the European Community and its member States, Guatemala, Indonesia, Nicaragua, Philippines, Saudi Arabia, Thailand and Uganda. At the end of the workshop, the chair invited observer organizations to make statements. Four short interventions were made by the United Nations Convention to Combat Desertification, the International Federation of Agricultural Producers from the constituency of business and industry non-governmental organizations, Tebtebba (Indigenous Peoples' International Centre for Policy Research and Education) on behalf of indigenous peoples organizations and the Third World Network from the constituency of environmental non-governmental organizations.

II. Summary of discussions

7. The discussions focused on enhancing understanding opportunities and challenges for mitigation in the agricultural sector and on cooperative actions in this sector. Issues addressed included: global mitigation potential and costs; policies and measures and other mitigation practices aimed at reducing emissions from livestock; manure management and crops and soils; and related development and transfer of technologies and innovative financing.

8. Parties noted that agriculture is responsible for about 14 per cent of total global anthropogenic greenhouse gas (GHG) emissions and is expected to have high emission growth rates, driven mainly by population and income increase, diet and technological changes. Agriculture also has considerable technical mitigation potential (depending on national and regional circumstances), mostly in sequestration of carbon in agricultural soils, followed by methane and nitrous oxide reductions resulting mainly from livestock and rice cultivation. The main drivers mentioned for decreases in GHG emissions were increased land and livestock productivity, conservation tillage and some non-climate policies influencing the agricultural sector. In particular, the increase in agriculture productivity and efficiency was mentioned by several Parties as key to limiting GHG emissions in this sector.

9. About **70 per cent of the economic potential for mitigation is in developing countries**, where the agricultural sector is often a significant source of GHG emissions but also a primary source of employment. Therefore, nationally appropriate mitigation actions (NAMAs) could be implemented in this sector in the context of national mitigation strategies and sustainable development. Several developing country Parties highlighted activities and plans they are already undertaking. The extent to which they would be able to scale up these activities depends on **technology, financing and capacity-building support received** for implementing NAMAs.

10. Significant mitigation potential also exists in developed countries. The agricultural sector is already being considered in Parties' emission reduction strategies; some have commenced work to include agriculture in carbon trading schemes. One Party mentioned that, as a result of mitigation measures, GHG emissions from the sector decreased while production increased. Other Parties mentioned energy-saving technologies for agricultural machinery, reduction of fertilizer use, prolonged mid-season drainage for rice paddies, providing incentives and rewarding financing schemes for applying good practices.

11. Some Parties noted the **challenges** in implementing practices and programmes for mitigation in agriculture, which include technical, social, economic and environmental aspects. One of the challenges highlighted relates to the need for increases in food production to correspond to the growing global population. However, Parties also noted that mitigation in agriculture presents many opportunities, co-benefits and trade-offs which ought to be taken into account.

12. Another challenge relates to the high level of uncertainty in emission estimates, the limited information available for establishing baselines, and the high costs of measurement and monitoring of emission reductions. Risk of loss of carbon stored because of changes in soil carbon management was also mentioned. Some Parties noted their lack of capacity and tools to enable accurate and direct GHG measurement methods and the need for international cooperation on sustainable agricultural systems.

13. One Party noted that there is a lack of scientific and technical knowledge to design, implement and sustain adaptation actions in the agricultural sector and stressed the need for enhanced investment in research and development, including joint development of technologies.

14. It was noted that traditional wisdom, practices and culture, including the impact on indigenous and local communities, have to be taken into account when considering mitigation practices for the agricultural sector.

15. Although the economic mitigation potential is significant in the agricultural sector, there are **barriers** to this potential being realized. Examples include a low level of understanding of the complex systems that emit and sequester GHGs, high cost and low availability of technologies, market failures, distorting competitiveness, the need to estimate and verify emission reductions, and the need to change consumer preferences. Options identified for removing barriers include: developing and providing access to cost-effective, robust technologies; innovative financing; developing appropriate methods for measurement, verification and reporting of the emissions; and increasing capacity-building and sharing scientific information and best practices.

16. On the subject of **opportunities**, it was mentioned that many of the mitigation options can be realized at low or even negative cost, resulting in win-win situations. For example, co-benefits may include increasing food security and productivity or enhancing climate change resilience. Presentations highlighted several such opportunities: the production of syngas from solid waste coconut biomass; the use of biochar to fertilize soil; and agronomic practices to reduce water and energy use.

17. Several Parties stressed the **synergy** between mitigation in agriculture, adaptation, sustainable development, food security, poverty alleviation, sustainable development and energy security. Examples of this include the positive correlation between mitigation in agriculture and: water storage capacity in soils; reduced soil degradation and erosion; and reduced vulnerability to climate change. In many cases **mitigation and adaptation** are intertwined and **must be addressed simultaneously**.

18. A combination of existing and new sources of **financing**, including carbon market instruments and investments, technology transfer and deployment, and capacity-building, are also needed for enhancing mitigation of GHG emissions in the agricultural sector and to help farmers at the local level engage in mitigation practices. In particular, key requirements include greater aggregation capacity among a large number of farmers; flexible and innovative payment schemes or institutions that address risks, investments and cash-flow needs; supportive policies and institutions and consideration of the needs of indigenous and local communities; and simplified rules and transaction costs.

19. Parties expressed a need to enhance **North–South as well as South–South cooperation** in order to realize the potential of the opportunities for mitigation in agriculture. South–South cooperation, including the sharing of information on mitigation practices, was said to be particularly important for developing countries with similar circumstances. In this regard, Parties also need to develop **national mitigation strategies** for their agricultural sectors, taking into account national circumstances and links with regional and global actions in agriculture.

20. One Party proposed that a virtual world research centre on mitigation strategies in agriculture be established to increase the **scale of global research investment**, to coordinate existing research initiatives, and to speed up development and diffusion of new technologies. Several Parties noted that

agricultural mitigation activities carried out in particular regions should qualify as collaborative sectoral approaches and sector-specific actions.

21. Some Parties stated that **eliminating subsidies** and significantly reducing tariffs are necessary for sustainable production and reducing emissions from agriculture. Trade barriers and protectionist policies should be reduced in order to allow those countries that could produce agricultural products with low levels of GHG emissions to benefit from competitive advantages derived from local circumstances.

22. Some Parties mentioned the link between mitigation in agriculture and reduced emissions from deforestation and forest degradation in developing countries (REDD). One Party noted that a successful REDD mechanism would require an increase in agricultural productivity to achieve more production from the same area of land and thus ensure food security. Another Party proposed that any future mechanism on REDD be extended to include agriculture and thus ensure a **comprehensive approach for terrestrial carbon** and avoid perverse incentives.

23. It was noted that more information and disaggregated data on the regional and national level are still needed in order to improve the assessments of the agricultural sector and the development of reliable national baselines; nevertheless, although these methodologies may be complex, there is enough information to act.

24. In general, robust systems must be developed for measuring, reporting and verifying actions in this sector, where uncertainties are relatively high. Methodologies need to be developed to measure, report and verify the impact of mitigation and adaptation policies and measures in the agricultural sector. Some Parties stressed that financial support is needed for capacity-building in this sector, including for the development of such a system.

25. It was noted that methodologies exist for **measuring, reporting and verifying** the sources and sinks in this sector. On the estimation of GHG emissions from agriculture, it was mentioned that **IPCC guidelines** provide the best information available. However, there is a need to develop **country-specific emission factors** and to improve capacity for measuring emissions and removals in line with the IPCC guidelines.

26. One Party expressed support for a **phased approach** to conducting a set of coordinated national-level pilot activities to validate methodologies for agricultural mitigation and data collection in parallel with capacity-building, technology development and innovative financing. **Pilot activities** were seen as important steps to reduce costs and risks by, for example, testing ways to address **permanence** of sinks and **leakage** risks.

27. Several Parties stressed the importance of including agriculture in the mitigation actions to be enhanced by an agreed outcome in Copenhagen. This should be done mainly through NAMAs in developing countries and other mitigation actions by developed countries. Several views were expressed regarding the necessity for international cooperative action to enhance mitigation of GHG emissions from agriculture, including the consideration of some of the measures identified in this report.

- - - - -