A BRIEF HISTORY OF RECENT AGRICULTURE AND RURAL DEVELOPMENT EVENTS

Agriculture and Rural Development Day 2009 convened at the University of Copenhagen, in Copenhagen, Denmark, on 12 December 2009. The event took place in parallel with the UN Copenhagen Climate Change Conference, which met in Denmark from 7-18 December 2009. Over 350 participants, including representatives from governments, UN and international agencies, business, NGOs, academia and farmers attended the event. The key objectives of the meeting were to build consensus on ways to fully incorporate agriculture into the post-Copenhagen climate agenda and to discuss strategies and actions needed to address climate change adaptation and mitigation in the agriculture sector. The results of Agriculture and Rural Development Day 2009 were...
presented at a Copenhagen Climate Change Conference side event, along with the results from Forest Day 3 and the UN Food and Agriculture Organization (FAO) Climate Change and Food Security event, titled: “Beyond Copenhagen: Agriculture and Forestry are Part of the Solution. How can forestry and agriculture help to mitigate climate change and feed 9 billion people by 2050?”

The Global Conference on Agriculture, Food Security and Climate Change, which convened from 31 October-5 November 2010 in The Hague, the Netherlands, was organized by the Dutch Ministry of Economic Affairs, Agriculture and Innovation in close cooperation with Ethiopia, Viet Nam, Mexico, New Zealand, Norway, the World Bank and the FAO. This event was organized to follow up on to the Shared Vision Statement agreed at the 17th Session of the Commission on Sustainable Development (CSD 17), in May 2009, and to further develop the agriculture, food security and climate change agenda. The outcome of the Conference was a Chair’s Summary, containing a Roadmap for Action that is intended as a stepping stone to further initiate and broaden partnerships and activities with engagement by all stakeholders.

**REPORT OF AGRICULTURE AND RURAL DEVELOPMENT DAY 2010**

Agriculture and Rural Development Day 2010 (ARDD) was opened by Facilitator Samantha Wade, who welcomed participants and said the day’s objectives were to identify: policies and practical agricultural solutions to climate change that increase food security, reduce emissions and improve livelihoods; and knowledge gaps that need to be filled to implement and scale up these solutions. She highlighted that the day’s discussions would be integrated into a plenary statement and fed into the UN Framework Convention on Climate Change (UNFCCC) negotiations.

In his opening remarks, Ignacio Rivera Rodríguez, Mexico’s Vice-Minister for Rural Development, Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food, highlighted participants’ “common belief that agriculture is not only part of the problem but also part of the solution” to climate change. While acknowledging its adverse effects, Rivera Rodríguez said addressing climate change presents “an opportunity to change the way we produce, consume and develop, without compromising economic growth.” He said governments would welcome examples of successful approaches, including local knowledge.

Inger Andersen, CGIAR Fund Council Chair and Vice President of Sustainable Development, World Bank, presented on “Agricultural Development, Food Security and Climate Change: Intersecting at a Global Crossroads.” She highlighted the “triple win” components of agriculture’s role as part of the climate change solution, through its role in capturing carbon, leading to increased production as well as increased resilience of production systems. She noted the need to better understand how much carbon can be sequestered and with what techniques in order to make recommendations to farmers and gain access to carbon finance. Andersen emphasized the need for research programmes that engage and empower farmers, and called attention to the CGIAR Research Programme to be launched at the conclusion of ARDD 2010, titled “Climate Change, Agriculture and Food Security (CCAFS).” She highlighted the importance of financing and sustained partnerships to support country-led strategies, and said the roadmap for action coming out of the Global Conference on Agriculture, Food Security and Climate Change is impressive. She highlighted a number of other partnerships, including the sub-national partnerships emerging from the third Governors’ Global Climate Summit.

**AGRICULTURE AND FOOD SECURITY UNDER A CHANGING CLIMATE: REGIONAL PERSPECTIVES**

The session on regional perspectives was chaired by Walter Kennes, European Commission. He invited four panellists to address three topics: What are the effects of climate change in the regions? What are the solutions? And what are the gaps in knowledge?

Josué Dioné, UN Economic Commission for Africa (UNECA), said the global food crisis could have been a blessing for Africa, if things had been done properly, and emphasized that agriculture is undercapitalized in Africa. He noted: the nexus of mitigation and adaptation responses; the role of regional cooperation or integration to maximize regional economies of scale; looking beyond a technological viewpoint on agricultural issues; and developing more cost-benefit analyses on proposed solutions.

Xu Yinlong, Chinese Academy of Agricultural Science (CAAS), said Asia is particularly vulnerable to climate change, having the highest population and highest occurrence of disasters, combined with diverse terrain, rich biodiversity and fragile infrastructure. He emphasized adaptation as the “number one priority, over mitigation” to enable agriculture to tackle climate change, and said it is hard to imagine the region reducing emissions while populations are hungry and in need of greater crop productivity. He said adaptation steps within agriculture could include adjusting crop sowing dates, ratooning rice, saving water and harvesting rain, especially given Asia’s lack of available water and inefficient irrigation systems.

Senator Alberto Cárdenas Jiménez, Chair of Mexico’s Senate Agriculture Committee, contrasted Latin America’s overall growth in food production with the variation between countries. He identified the main factors in determining a country’s or region’s vulnerability as uneven economic recovery across Latin America, international price volatility for raw materials and natural disasters. Cárdenas Jiménez said 90% of the focus on climate change is on mitigation, with only 10% on adaptation, including agriculture. He said greater focus is needed on agriculture’s opportunities for climate change.
Don McCabe, Soil Conservation Council of Canada, Canadian Federation of Agriculture, presented a Canadian farmer’s perspective and emphasized that all farmers focus on profitability. He said the agricultural and forestry sectors should be addressed holistically and more long-term research should be conducted on crop and animal production. He defined a farmer as a “manager of carbon and nitrogen cycles with the water cycle, to produce the starch, oil, protein, fuel, fiber and energy for the world” and noted that farmers “live the cycles and impacts of policy.” He said policy action must be independent of scale because all farmers count and indicated that farm organizations can be a vehicle to deliver programmes and pilot projects. He added “show me the money, and I will step up to play.”

Kennes summarized the session, noting speakers’ emphasis on: “keeping it simple;” the importance of access to resources; the close links with the issues to be discussed during Forest Day 4 on 5 December 2010; and synergies with biodiversity issues.

Participants then convened in five parallel roundtables to discuss experiences and options for building development synergies between the agriculture and rural development and climate change agendas. Key messages developed by each roundtable were reported back to the plenary, and are summarized below.

**HOW CAN INTENSIFICATION OF AGRICULTURE CONTRIBUTE TO CLIMATE CHANGE MITIGATION AND GREATER FOOD SECURITY, AS WELL AS BE SUSTAINABLE?** Gerard Wynn, Reuters News, moderated this session, which heard an opening statement from David Kaimowitz, Ford Foundation. Panelists were: Fahmuddin Agus, Indonesian Soil Research Institute; Pauline Nantongo Kalunda, Executive Director of Ecotrust Uganda; and Yemi Katerere, Head of the UN-REDD Programme Secretariat. Peter Minang, World Agroforestry Centre (ICRAF), served as Rapporteur.

Policy messages developed by participants in this discussion included: agricultural intensification alone is not enough, but should be part of a more holistic policy package; agricultural intensification needs to focus on existing agriculture and cleared lands; the range of agricultural and forest land uses should not be ignored; tenure rights, increased agricultural productivity and improved livelihoods reduce pressure on remaining “natural” forests; and REDD+ has to recognize the links between agriculture and forestry. Knowledge gaps identified by this group included the need to: better understand the relationship between intensification and what it means for whole landscapes; and strengthen the understanding of practical approaches to capture carbon including in soils and trees.

**FROM SCIENCE TO PRACTICE: HOW TO IMPLEMENT AGRICULTURAL MITIGATION AND CARBON SEQUESTRATION PRACTICES ON THE FARM?** Richie Ahuja, Environmental Defense Fund, India, moderated this roundtable, which heard an opening statement from Alexandre Meybeck, Office of the Assistant Director-General, FAO. Panelists were: Ferdousi Begum, Executive Director of Development of Biotechnology & Environmental Conservation Centre (DEBTEC), Bangladesh; Gonzalo Becoña, Plan Agropecuario, Uruguay; and Dyborn Chibonga, Chief Executive Officer of the National Smallholder Farmers’ Association (NASFAM) of Malawi. Anette Engelund Friis, Danish Agriculture and Food Council, served as the Rapporteur.

Recommended policy actions included: having the policy framework ensure multiple benefits to improve farmer income while also improving mitigation potential; making research and information available to farmers, including through extension services; and developing at all levels a broad base of institutions, policies and incentives to assist in implementing mitigation and carbon sequestration measures and financing. Knowledge gaps included: the need to identify a defined set of agricultural practices, adapted to different agricultural systems, that include traditional and farmer knowledge; at farm level,
ensuring emission reductions are real, additional and have permanency and that monitoring, reporting and verification (MRV) is practical; a lack of understanding of the policies, institutions and incentives needed to support implementation; and the need for improved evaluation of financing mechanisms to identify the most efficient sources of capital to support implementation.

MOVING BEYOND PILOTS: HOW CAN WE SCALE-UP PRO-POOR RURAL ADAPTATION INTERVENTIONS TO ENSURE FOOD SECURITY AND DEVELOPMENT UNDER CLIMATE CHANGE? The lead speaker and Moderator for this roundtable was Rodney Cooke, IFAD. Panelists included: Robin Mearns, World Bank; Diana Liverman, Chair of Earth System Science Partnerships joint project on Global Environmental Change and Food Systems; and Celine Herweijer, PricewaterhouseCoopers. The Rapporteur was Deborah Hines, World Food Programme.

Policy actions identified by this roundtable included the need to: create an enabling policy environment linking policy domains and promoting resilient agriculture and food security by bringing together different sectors; enable farmers to diversify to build resilience under institutional and climate uncertainty; and have adaptation policies that address equity and distributional issues and build on local knowledge and emerging research and technologies. Knowledge gaps identified by this group included gaps on: local-level climate risk information/data; effects of climate change on food systems, food security and nutrition; and the interaction of climate and non-climate related drivers of vulnerability and their differentiated impacts on different groups, such as women and men, indigenous peoples, corporate and small-scale farmers.

HOW CAN CARBON FINANCE HARNESS SYNERGIES BETWEEN CLIMATE CHANGE AND SUSTAINABLE LAND MANAGEMENT TO ENHANCE AGRICULTURAL DEVELOPMENT? This roundtable was moderated by Matthew Wyatt, DFID. He suggested that the discussion should address climate finance, and not just carbon finance. Charlotte Streck, Climate Focus, was the lead speaker and highlighted that the agricultural sector is not as ready as other sectors to quickly identify proposals and benefit from fast-start finance. She noted the need to start with demonstration projects, to see where change can happen, and to test MRV systems. She reviewed the range of financing options, from project-based funding, such as that available from the Clean Development Mechanism (CDM), to sectoral mechanisms, such as REDD (reduce emissions from deforestation and forest degradation), to Nationally Appropriate Mitigation Actions (NAMAs).

Panelist Goodspeed Kopolo, President of Zambia Biochar Trust and Biochar Europe, discussed the benefits of biochar. Seth Shames, EcoAgriculture Partners, said climate finance should be catalytic in the movement toward sustainable land management. Axel Michaelowa, Perspectives GmbH, emphasized the need to get incentives to farmers, without whom nothing will work. Rapporteur Katherine Sierra, The Brookings Institution, noted that speakers suggested broadening the debate in several ways, including from carbon finance to climate finance, from project-based to broader approaches, and from a separate to a joint focus on mitigation and adaptation. Policy messages developed by this group included suggestions to: ensure that policy makers do not neglect agricultural emissions or the potential for carbon sequestration through agriculture; lay the groundwork to develop a framework to build confidence and attract resources; embed climate change in national and regional agricultural strategies; use a range of instruments to create incentives for farmers; and integrate adaptation and mitigation funding. Knowledge gaps identified by this group included: the need to develop programmatic approaches to reach small-holder farmers but operate at a larger scale; the need for robust tools on MRV to build funder confidence; and research on how to move from projects to programmes to sector-wide approaches.

WHAT SCIENTIFIC, TECHNOLOGICAL, AND METHODOLOGICAL ASPECTS NEED TO BE CONSIDERED TO ADVANCE AGRICULTURE’S CONTRIBUTION TO MITIGATION AND ADAPTATION? Moderator Oliver Morton, The Economist, described the session as a “wish list” for research to support adaptation and mitigation. Henry Neufeldt, ICRAF, served as Rapporteur. Lead speaker Louis Verchot, Center for International Forestry Research (CIFOR), said agriculture causes 60% of non-CO2 greenhouse gas emissions, but it also provides opportunities for sinks and other benefits. He suggested research on: lower-cost mitigation technologies to enhance sinks; real-time MRV tools allowing project managers to change course more quickly; and effective and meaningful participation of indigenous and local communities at the national level. He said “a warmer world is a wetter world,” which would improve water availability in certain areas.

Leopold Some, Environment and Agricultural Research Institute (INERA), Burkina Faso, called for research on adapting to seasonal cycles and on modernized tools. Wendy Mann, the Global Crop Diversity Trust, said interdisciplinary research is needed on: “climate-smart agriculture,” including on farmers’ household decision making; sequestration data by region and practice; innovative combining of financing sources including payment for environmental services; and institutional alternatives to “siloed” ministries and instruments. Steven De Gryze, Terra Global Capital LLC, prioritized research on contacting farmers in cost-effective ways, and on the uncertainty around scientific results, for reflection back to the market.

Policy actions identified by this roundtable included the need to: address the potential for synergies between adaptation and mitigation in a way that current frameworks fail to do; safeguard, expand and fund extension services to address the adaptation of livelihoods to climate change; and recognize that both adaption and mitigation to climate change will require funding for interdisciplinary research that seeks to understand farmers as well as farming. In relation to knowledge gaps, this group noted that: current scientific and indigenous knowledge is not properly accessible or extended to farmers and policy makers at all levels; and information on low-cost emission mitigation approaches is lacking. Participants also noted that local knowledge about the response to climatic variability is an underused resource for the development of adaption strategies particularly with respect to extreme weather events.

IDEAS MARKETPLACE

Following lunch, an Ideas Marketplace took place along three themes, with approximately 20 organizations presenting their activities, policies and experiences in small-group formats. The first theme – achieving co-benefits
through sustainable agriculture – highlighted projects and programmes that have achieved adaptation, mitigation and rural development benefits. The second theme – policies and technologies – looked at the best policy and technology options to meet the challenges of climate change and rural development. The third theme – integrated approaches to agriculture and forestry – asked how an integrated approach to forestry and agriculture could help tackle the climate change challenge and deliver benefits to poor and more vulnerable communities.

## Towards a Joint Statement

ARDD 2010 participants then engaged in a final discussion, focusing on what needs to be done now to help the world adapt to climate change, mitigate greenhouse gas emissions and contribute to food security.

Representatives from the Bangladesh Institute for Development Studies (BIDS) and the Common Market for Eastern and Southern Africa (COMESA) offered perspectives of developing country governments. The BIDS representative said people are “playing a complex game with nature” and that many elements of our society may change in the future due to climate change. He said changing food consumption behavior is difficult and should not be relied upon for ensuring food availability. The COMESA representative discussed its activities, including the development of a carbon fund and support to negotiators, civil society representatives, scientists and other stakeholders in the UNFCCC negotiations. He noted the need to bring youths’ needs into the debate.

Tim Groser, Minister Responsible for International Climate Change Negotiations (New Zealand) offered perspectives of a developed country government. He said agriculture has had a low profile in climate change negotiations until recently and developing countries must not be asked to sacrifice food security for mitigation and adaptation in agriculture. He called attention to the Global Research Alliance on Agriculture and Emissions established by New Zealand’s Ministry of Agriculture, and urged the adoption of a draft decision on a program of work on agriculture at the 16th session of the Conference of the Parties of the UNFCCC.

Dyborn Chibonga, emphasized the need to share science, and said civil society can serve as a bridge between research and implementation, but must be given the science so they can take it where it needs to be applied. Presenting the private sector’s perspective, Peter Erik Ywema, Sustainable Agriculture Initiative (SAI) Platform, highlighted Unilever’s sustainability strategy, through which it will seek to halve the environmental impact of its products by 2020. He said we know about 90% of what we need to know, and now we need to act.

## Delivery of ARDD 2010 Statement

Lindiwe Majele Sibanda, CEO Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN), read the ARDD 2010 statement to participants and indicated that, based on comments, it would be refined and presented at a Cancún Climate Change Conference side event on 6 December.

According to the statement, participants accept that agriculture is part of the climate change problem, but they assert it is also part of the solution. They highlight that climate-smart agriculture offers practical solutions for a “triple win” – in resilience (adaptation), emissions reduction (mitigation), and food security. Participants prioritized: agricultural intensification and forestry; solutions on the farm for agricultural mitigation; scaling up pro-poor rural adaptation interventions to ensure food security and development; using climate finance on mitigation to support land management and agricultural development; and filling the knowledge gaps on agricultural mitigation and adaptation, including by safeguarding extension services.

In messages to the UNFCCC, participants called for: using fast-track financing to support agricultural adaptation and mitigation activities, including action on food security and hunger in any post-2012 agreement, especially in the Long-term Cooperative Action (LCA) text; taking a decision to set up an agricultural work programme under the UNFCCC Subsidiary Body for Scientific and Technological Advice; REDD+ (reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable use of forests and enhancement of carbon stocks) to promote sustainable agriculture intensification as a means to halt deforestation; recognizing the synergies and opportunities for adaptation and mitigation co-benefits; and ensuring that a new or revised CDM includes agriculture and other land-use changes.

Florin Vladu, UNFCCC Adaptation, Technology and Science programme, on behalf of UNFCCC Executive Secretary Christiana Figueres, welcomed the Day’s deliberations and noted synergies between the discussions at ARDD 2010 and the UNFCCC negotiations.

Lindiwe Majele Sibanda suggested that another ARDD should convene in 2011. The meeting was closed at 6:10 pm.

## Launch of the CGIAR Consortium Research Programme 7: Climate Change, Agriculture and Food Security (CCAFS)

At the conclusion of ARDD 2010, ARDD 2010 participants attended a networking reception, during which CGIAR and the Earth System Science Partnership (ESSP) launched a strategic partnership titled “Climate Change, Agriculture and Food Security (CCAFS).” Lloyd le Page, CGIAR Consortium CEO, Inger Andersen, Diana Liverman and Bruce Campbell, CGIAR, introduced the newly approved, ten-year, US$250 million partnership.