

## GLOBAL CONFERENCE ON AGRICULTURE, FOOD SECURITY AND CLIMATE CHANGE HIGHLIGHTS: TUESDAY, 2 NOVEMBER 2010

On Tuesday, in the morning plenary session, participants heard reports from Monday's working groups and a report from the investment fair. Four keynote presentations introduced the issues to be addressed during the day. Participants then convened in two parallel working groups to discuss policy measures for agriculture innovation, and successes and challenges in adaptation and mitigation. In the afternoon working group sessions, participants discussed tools and methodologies to support climate change mitigation and adaptation measures.



A view of the venue

## PLENARY SESSIONS

Co-Chairs Jamshed Merchant, Canada, and Alejandro Silva, Argentina, reported on Working Group 1 outcomes, quoting a participant who said "we need to take complex ideas and turn them into straightforward solutions."

They highlighted the importance of, *inter alia*: creating the right institutions, including for finance and markets; applying context specific and affordable technologies; and increasing productivity and optimization of resource use. Co-Chairs Yemi Akinbami, African Union Commission, and Knut Øistad, Norway, reported on Working Group 2 outcomes, including successful country examples, the need to rethink approaches and strategies, and the importance of political support and community involvement.

Michael Jenkins, CEO, Forest Trends, reported that during the investment fair on



L-R: Working Group 1 Co-Chairs Alejandro Silva, Argentina, and Jamshed Merchant, Canada



Working Group 2 Co-Chair Yemi Akinbami, African Union Commission

Monday US\$1.5 million was committed by the Rockefeller Foundation for three new projects addressing climate change and agriculture in Africa.

Participants then heard four keynote presentations.

Dennis Garrity, Director General, World Agroforestry Centre, showcased an example of climate-smart agriculture via farming under a full canopy of trees, providing solutions to food scarcity by intensifying agriculture systems and increasing drought resilience. He explained how certain trees, such as the African Acacia, support existing production by providing fertilizer and fodder, while sequestering carbon from the atmosphere.

Martin Kropff, Wageningen University and Research Centre, the Netherlands, emphasized the need for more productive and eco-efficient agriculture systems and for a green agriculture revolution in Africa. He described challenges for agriculture as a solution to climate change, including: developing land-specific production systems; reducing methane emissions from rice while saving water; fixing carbon with grassland;



Michael Jenkins, Forest Trends



Dennis Garrity, Director General, World Agroforestry Centre



Ben Tax, CEO, Rijk Zwaan, the Netherlands

and building low-emission animal production systems. In addressing adaptation issues, he noted that solutions such as drought-resistant plants already exist, and underlined the important role of the breeding industry.

Ralph Ashton, Terrestrial Carbon Group, noted the need to optimize land use to meet multiple demands on land, such as for food and biofuels production, and introduced the Land 2050 Initiative, which he said is being developed to deliver solutions. He outlined actions to help manage land to meet these demands, such as: creating a political space to address the issue of multiple demands on land; working together to create an evidence base to synthesize existing knowledge and fill knowledge gaps; identifying countries to pilot initiatives; and including a Land 2050 Initiative in the roadmap for action.



Ralph Ashton, Terrestrial Carbon Group

Ben Tax, CEO, Rijk Zwaan, the Netherlands, emphasized the role of the plant breeding industry for global food security, through the creation of high yielding and environmentally adapted food crop varieties. He also noted the risks posed by the patenting of genetic material to the capacity of the plant breeding industry to continue to innovate and competitively develop new varieties.

## WORKING GROUPS

After the plenary session participants convened in two working groups to discuss four issues: policies and strategies for climate-smart agriculture; tools and technologies for implementing these policies and strategies; methods for scaling up replicable models; and financing for transformational change.

### WORKING GROUPS MORNING SESSION

#### WORKING GROUP 1

Reinaldo Ruiz, University of Talca, Chile, presented his country's Integrated Water Management Strategy, saying it improves efficiency through increased knowledge of water use, coordination among institutions, and financial savings through economies of scale; and achieves higher support of communities and less conflict by engaging all



Reinaldo Ruiz, University of Talca, Chile



Erica Maganga, Ministry of Agriculture and Food Security, Malawi

stakeholders. He said the Strategy's objectives are to: build an institutional framework; reduce pressure on water resources from production sectors; strengthen the role of users; include environmental considerations; and improve information exchange.

Erica Maganga, Ministry of Agriculture and Food Security, Malawi, presented practices for climate-smart agriculture to increase productivity, including: development of short-maturing and drought-tolerant maize and rice crops; post-harvest management to reduce crop losses; integrated soil fertility management; water harvesting and integrated watershed management; risk management through macro and micro insurance; and extension to smallholders through "lead farmers."

In the ensuing discussion, participants suggested several considerations to be reflected in the roadmap, including: strengthening training efforts for information sharing between agriculture, environmental and climate change sectors; monitoring agricultural landscapes; giving consideration to community and farmers' rights; developing mechanisms for environmental screening of best practices to support national strategies to address climate change; and mobilizing funds for upscaling successful experiences in developing countries.

#### WORKING GROUP 2

Purushottam Mainali, Ministry of Agriculture and Co-operatives, Nepal, described the policies and programmes adopted in Nepal to engage local and international stakeholders to help promote food security, reverse environmental degradation and eliminate poverty. He outlined programmes on community-managed small irrigation, seed and vegetable production, community-based dairy production, leasehold forestry and community forestry, and underlined that these show progress toward climate-smart agriculture.



Purushottam Mainali, Ministry of Agriculture &amp; Co-operatives, Nepal





**Amadou Souley**, National Council on the Environment for Sustainable Development, Niger

Amadou Souley, National Council on the Environment for Sustainable Development, Niger, presented on integrated food security and climate resilience through the Pilot Programme on Climate Resilience (PPCR). He outlined his country's legal framework for responding to food insecurity and climate change, such as strategies for rural development and poverty reduction, and an action plan for climate variability, as well as the institutional framework, which includes various ministries and national technical commissions. He explained that the PPCR uses a participatory approach and applies a strategy of using knowledge to overcome obstacles. He underlined that Niger has the relevant know-how, particularly at community level, and appealed to partners to help reinforce Niger's PPCR to make the country a "living laboratory" in assessing how to face the food security challenge.

In the subsequent discussion, participants focused on identifying specific actions that can be included in the roadmap for action. The Netherlands suggested that livestock raising operations play a key role in climate change mitigation and achieving food security. Burundi cautioned that biodiversity issues must be considered when measuring the success of community-managed seed projects. France underscored the importance of animal husbandry and pastoralism for temperate areas and highlighted the need for: a favorable institutional framework for agriculture development, such as a market policy to restrain price volatility; measures to ensure wide dissemination of innovations; mechanisms to mobilize local stakeholders; and efforts to integrate climate change into country programmes and policies.

## **WORKING GROUPS AFTERNOON SESSION**

### **WORKING GROUP 1**

Arsen Proko, Ministry of Environment, Forestry and Water Administration, Albania, presented on his country's national forest reform, which transfers 60% of national forests to local



**Arsen Proko**, Ministry of Environment, Forestry and Water Administration, Albania



**Chang-Gil Kim**, Korea Rural Economic Institute

governments to promote sustainable community forestry and reduce illegal logging and deforestation. He introduced the Albania Forestry Policy and the Natural Resources Development Project, which: create an institutional and legal framework, protected areas, a forest inventory, and communal carbon sequestration projects; strengthen communal forest and natural resource management; and improve watershed governance. He also identified future challenges, including: decentralizing forest administration; enhancing extension services; and organizing natural resources management on at the watershed level.

Chang-Gil Kim, Korea Rural Economic Institute, Republic of Korea, presented his country's green growth strategy, that aims to complement environmental conservation and economic growth, and includes a shift to sustainable and low-carbon agriculture that considers the "3Rs": reduce, recycle and reuse. He said important elements of the strategy are: switching from maximum to optimum agricultural production; integrating agricultural and environmental policies; paying for low-carbon agriculture; introducing resource circulation; supporting organic agriculture and food production; disseminating green technologies; developing carbon footprint systems; and introducing green finance, such as preferential interest rates and financial support for clean technologies.

Paramjit Singh Minhas, Indian Council of Agricultural Research, highlighted climate change impacts on Indian agriculture and fisheries, and outlined national initiatives on climate-resilient agriculture focusing on strategic research, technology demonstration and capacity building.

In the subsequent discussion on concrete ideas for tools and technologies to be considered for the roadmap, Thailand stressed the need to clarify whether the roadmap will address the global, national or household level of food security, and



**Paramjit Singh Minhas**, Indian Council of Agricultural Research



suggested taking a broad approach that encompasses access to food, food quality and stability. Iran emphasized participatory watershed management and participatory plant breeding. Spain stressed the integration of policies. The Secretariat of the UN Convention to Combat Desertification noted similarities between the roadmap and ongoing collaborative work by UN agencies on land issues. Egypt suggested including consideration of vulnerability with a focus on the most vulnerable groups, and requested including fish production. Azerbaijan urged to consider adaptation, investment and rational use of resources. Rwanda suggested making policies understandable to farmers and review institutions, as these often do not drive existing solutions to farmers. Samoa noted the importance of production of energy tree crops, and Nigeria appealed for more funds for climate change specific research. Monsanto encouraged considering comprehensive lifecycle assessments that cover water use and biodiversity aspects in addition to greenhouse gases. Bioversity International underscored the importance of interspecific and intraspecific genetic diversity.

On the status of the roadmap, France said that “principles” for the roadmap should be agreed on, and suggested the principles of integrated approach to food security and recognition of diversity of agriculture. Indonesia said the roadmap should include long-term commitments from governments. Responding to a question from Egypt, the Conference secretariat explained that the draft version of the roadmap for action will be based on the interventions in the working groups and presented on Thursday. Egypt lamented that this is too late for in-depth discussion and a participatory process.

## WORKING GROUP 2

Riad Balaghi, National Institute for Agricultural Research, Morocco, shared experiences on adapting agriculture to climate change and identified technologies for agriculture and water management. He described the Green Morocco Plan launched by the Government to improve sustainable agricultural production, not just for the poorest but to improve lifestyles in the entire country. Balaghi underlined that technology, backed by research and development, is key to the success of the Plan, and that it has two pillars: addressing high value exports; and addressing rural poverty in low productivity areas.

Julie Collins, Ministry of Agriculture and Forestry, New Zealand, presented on policy responses to livestock systems and climate change and described the OVERSEER tool as an example of an interactive programme for farmers. She explained that this programme was developed to: promote understanding of the links between farm-based management and key environmental concerns and support farm managers to understand these links; and promote improved productivity and reduced emissions.



Julie Collins, Ministry of Agriculture and Forestry, New Zealand

Coillard Hamusimbi, National Farmers' Union, Zambia, presented on conservation agriculture in Zambia as a practical example of climate-smart agriculture. He explained that the first step is usually conservation farming with graduation to conservation agriculture and said it involves, *inter alia*, minimum tillage and timely agronomic practices. Hamusimbi gave the example of the introduction of Apple-ring acacia trees on farms, highlighting that this: improves maize production and productivity; enables farmers to reduce organic fertilizer use; and contributes to climate change mitigation through environmental conservation.

FAO clarified that the introduction of trees in agriculture lands should complement the use of fertilizers rather than replace it. Responding to a question about the cost of the OVERSEER tool, Collins said the model is not too costly, but emphasized that a good database and ongoing research are key to its effectiveness. The World Agroforestry Centre highlighted the significant role of trees in livestock raising, noting that this will be key to poverty alleviation. Burundi and Morocco highlighted the need to discuss mechanisms for transferring and replicating best practice examples.

Participants then discussed the remaining issues set for the working groups. Regarding policies and strategies, participants identified: promoting sustainable and climate-resilient agriculture that enables food and nutrition security; supporting producers' organizations to disseminate good practices to farmers; ensuring security of land holdings; addressing the economics of agriculture, such as improved income and productivity; providing social protection schemes, such as insurance, to give a safety net to the most vulnerable groups; considering ecosystems and biodiversity; and developing tools for effective management of resources and waste reduction.

On tools and technologies for implementing climate-smart agriculture, participants identified: technologies that help meet the immediate needs of farmers, while addressing climate change effects; insurance schemes; public-private partnerships; a global index facility to promote agriculture risk mitigation; good practice guidelines for climate change adaptation, linking best practices with technologies; education; biodiversity-intensive agriculture systems; the Comprehensive Africa Agriculture Development Programme; tools that provide farmer incentives; improved post-harvest storage mechanisms and increased financing; and tools to make the entire agriculture system climate-resilient.

## IN THE CORRIDORS

As participants gathered for lunch on the second day of The Hague Global Conference, many said they were happy with the great variety of topics discussed during the working group sessions, and felt that, as one participant put it, “it is good to discuss the challenges from an agriculture perspective instead of always focusing just on climate change.” One participant cautioned that considering too many different issues may make it difficult to achieve a coherent and straightforward outcome, while another welcomed the diversity of participants, suggesting this demonstrates how important the topics are to a broad range of people. When urged to assess progress, she said “so far, so good!” but added, “I hope our discussions make it into the roadmap, as there will be little time for changes before the ministerial roundtables on Thursday.”