



DRAFT

Breakout Sessions P2.3. **Climate Change** - Briefing Paper

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Context – the problems being addressed

The Commission on Sustainable Agriculture lays out the context and the challenge.¹ On a planet with sufficient food for all, a billion people go hungry even as another billion over-consume, increasing risks from chronic diseases. As the global population grows, to around nine billion by 2050, the food system faces additional pressure and as diets shift towards higher consumption of calories, fats and animal products. Food insecurity afflicts communities throughout the world wherever poverty prevents assured access to food supplies. As well as causing widespread human suffering, food insecurity contributes to degradation and depletion of natural resources, migration to urban areas and across borders and political and economic instability. Our climate is changing and given the levels of greenhouse gases already in our atmosphere, will continue to do so.

Extreme weather events, such as high temperatures, droughts and floods, are already more frequent and severe and have dire social, economic and ecological consequences. Ever-higher average global temperatures are likely without dramatic changes in greenhouse gas emissions across a wide range of human activities. In the coming decades, global climate change will have an adverse overall effect on agricultural production and will bring us toward - and perhaps over - critical thresholds in many regions. Areas currently suffering from food insecurity are expected to experience disproportionately negative effects.

To reduce the effect of climate change on food supplies, livelihoods and economies, we must greatly increase adaptive capacity in agriculture – both to long-term climatic trends and to increasing variability – as an urgent priority. Food systems must shift to better meet human needs and, in the long term, balance with planetary resources. This will demand major interventions, from local to global scales to transform current patterns of food production, distribution and consumption. The Commission concludes that business as usual in our globally interconnected food system will not bring us food security and environmental sustainability.

One area relates to partnerships and collective action. We need to establish common interlinked platforms at global, regional and national levels for coherent dialogue and policy action, supported by research related to climate change, agriculture, forestry, crisis response and food security. This Session explores the nexus between climate change, agriculture and new needs in partnership. It draws on two CGIAR programs: “Climate Change, Agriculture and Food Security” and “Forests, Trees and Agro-forestry.”

¹ Beddington J, Asaduzzaman M, Fernandez A, Clark M, Guillou M, Jahn M, Erda L, Mamo T, Van Bo N, Nobre CA, Scholes R, Sharma R, Wakhungu J. 2011. Achieving food security in the face of climate change: Summary for policy makers from the Commission on Sustainable Agriculture and Climate Change. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available online at: www.ccafs.cgiar.org/commission.

Current activities presented and discussed in the Session

Chair (Dr. Federica Rossi): The chair will open the session by setting the context, summarising the Commission's recommendations and establishing the need for new models of partnerships and collective action. The Chair will give a few examples of the types of partnerships that are needed.

Shaping Global and Regional Partnerships:

Dr James Kinyangi will present global climate scenarios and what they mean for selected regions of the CGIAR Program on Climate Change, Agriculture and Food Security (CCAFS). He will discuss different types of emerging regional partnerships, also showing links between local and global levels, and emerging initiatives for cross-region learning. **Dr Hayden Montgomery** will trace the development of the Global Research Alliance for Agricultural Greenhouse Gases and how, through working groups involving multiple countries, new research alliances are developing. **Dr Michel Bouvet** will discuss the new initiative focussed on fighting desertification, involving institutions from France, Africa and Brazil. A tripartite call for proposals has been launched focussing on the African arid and semi-arid regions, especially the areas covered by the Great Green Wall (GGW). The program goals include building scientific capacities in Africa and strengthening linkages between science and society.

Regional Approaches Towards Climate-Smart Agriculture:

Dr Omar Kefawin will focus on dryland food systems in West Asia and North Africa, and describe the establishment of the Network for Adaptation to Climate Change and Food Security in West Asia and North Africa (NACCAFS-WANA). This will facilitate more sharing of the region's expertise, information, and technology. He will draw lessons related to the development of regional partnerships. **Dr Assetou Yaye** will present the decentralized structure and *modus operandi* of the African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE) that allows universities and other agricultural training institutions to work with the various agricultural stakeholders as a platform. Capacity gaps and needs of the actors, particularly for implementing regional and global strategies such as those relating to CAADP or REDD+ will be discussed.

Addressing national and local needs through AR4D processes:

Dr Walter Baethgen will discuss the new National Agricultural Information System-NAIS that will start in Uruguay in collaboration with the Ministry of Agriculture. He will show the importance of coordinating the efforts of CCAFS (and all CRPs) with national institutions to ensure that the CCAFS outputs are effectively used in the developing countries. **Dr Almeida Siteo** will present joint work with the CGIAR Research Program on Forests, Trees and Agroforestry which was initiated through national level stakeholder processes in Mozambique. This work focuses on the forest-agriculture interface and involves a CGIAR Center, national institutions, academia and civil society. The role of actors at all levels is examined, in relation to emerging policy options, particularly REDD+. **Dr Jesse Naab** will examine the climate change challenges in Ghana, and how research initiatives and partnerships are developing to tackle the challenges. The work includes a strong focus on gender. Partnerships are wide, involving the private sector, researchers, farmers and the media.

Panel: Panel members will discuss possible partnership models that can be developed and/or strengthened in the coming years.

Intended outcomes
<ul style="list-style-type: none"> ▪ Greater understanding on the partnerships needed, from local to global levels, in order to tackle climate change adaptation and mitigation; ▪ Commitment by key actors to strengthened global partnership that appropriately incorporates local, national and regional actors.
Commitments to collective actions in 2012-2014 (national, regional or international)
i. With existing resources
<ul style="list-style-type: none"> ▪ Regional learning and action platforms in six target regions: South Asia, South East Asia, West Africa, East Africa, West Asia and North Africa, Latin America; ▪ Strengthened global partnership on climate-smart agriculture, with active website, frequent co-produced outputs and events; ▪ Linked-up agriculture and forestry platform for interacting with the UNFCCC – including a linked “Forest Day” and “Agriculture, Landscapes and Livelihoods Day”; ▪ Major south-south and north-south partnership developed around desertification; ▪ Better linkages between the CGIAR, Future Earth, GRA and other major global initiatives.
ii. With additional support
<ul style="list-style-type: none"> ▪ Regional learning and action platforms in additional regions (CCAFS + GRA-GHG + regional stakeholders); ▪ Regular opportunities for national and regional actors to participate in regional and global processes and in the global partnership (CCAFS + WMO+ Regional Fora + Climate Smart Partnership).
iii. With specific large scale programme investment
<ul style="list-style-type: none"> ▪ Formalised Global Alliance on climate change and sustainable agriculture and natural resources management. This would include having good links to the full spectrum of actors (e.g. civil society organisations, private sector, farmers’ organisations, meteorological organisations etc.) and formal mechanisms for giving voice to regional

and national actors. The goal of the global alliance would be to inform policy and practice from local to global levels. Regional organisations and platforms would be key - linking the local and national actors to the global actors.