WBI Global Dialogue on Adaptation and Food Security

Summary of main issues

Introduction

The World Bank Institute hosted a global dialogue on Climate Adaptation and Food Security on June 29th, 2011, using video-conferencing, online chat and live web-streaming technologies to bring together international experts and practitioners from developing countries in Africa. The speakers included:

- Dr. Hans Herren – recipient of the 1995 World Food Prize and the 2002 Brandenberger Preis for improving living standards of Africa's rural poor through agricultural methods in harmony with the environment.
- Mr. Alain Chihyoka – the Democratic Republic of the Congo's Secretary to the Minister of Agriculture.
- Mr. Carlo Scaramella - Coordinator, Climate Change and Disaster Risk Reduction UN World Food Programme.
- Dr. Sylvester Mpandeli - Specialist Advisor on Climate change Adaptation, Department of Environmental Affairs.
- Ann Sirengo - Climate Change Unit, Ministry of Agriculture, Kenya and Richard Mwendandu, Director, Ministry of Environment, Kenya,

The purpose of the dialogue was to explore the impact of climate change on food security in Africa, as well as approaches to support and scale up climate resilient agricultural systems. The event provided an opportunity for practitioners and technical experts to reflect on their experiences and knowledge in order to catalyse actions for a food secure Africa. The following were some of the main issues discussed.

Climate change will substantially worsen the global food security crisis

There are a billion people going hungry in the world today even though there is currently enough food to feed 14 billion people, well over the current world population of 6.9 billion, and even above the projected population of 9 billion in 2050. This imbalance in the distribution and availability of food will be aggravated severely by climate change. Already, increased global warming is shifting cultivation zones around the world polewards, interfering with plant growth and production due to changes in rainfall patterns, as well as increasing desertification and soil erosion, all of which negatively affect soil productivity, crop yields and efforts to reduce rural poverty.[i]

Climate change will have a devastating impact on food security in Africa

Africa has contributed the least to global greenhouse emissions[ii], yet faces the greatest threat to human livelihoods in terms of food security due to climate change. In Africa yields may drop by up to 30% between 2080-2100[iii] with a serious famine risk throughout Sub-Saharan Africa[iv].

Many African countries are witnessing the impacts of climate change right now. In Kenya for example, the vulnerable such as women, children and pastoralists are bearing the brunt of this through reduced food production and increasingly limited forage and water for their livestock.

Safety nets must be part of risk management architecture

Many vulnerable communities existing in conditions of poverty depend heavily on the natural resource base for their livelihoods. As the ecosystems upon which they depend are increasingly stressed due to climate change, some will be simply unable to deal with the impact of multiple shocks. It is therefore important that global climate action takes account of their vulnerability and seeks ways to provide them with safety nets, thereby creating a "risk management architecture."

Paradigm shift in agriculture needed

Conventional industrial, input intensive agriculture has a range of negative environmental, social and economic externalities which increasingly render it an unsustainable model. Climate triggered changes are in many instances irreversible, which means that we need to delink ourselves from business as usual and develop a new agricultural paradigm. Key to this shift is recognizing the multi-functionality of agriculture as a provider not only of food but also a range of other environmental, societal and economic goods. We need agricultural systems that are more resilient to climate shocks, trigger a rebound in genetic diversity, conserve ecosystems, create jobs, rebuild soil fertility, and deliver a range of other benefits. This requires "climate smart agriculture" that lowers agricultural emissions, is more resilient to climate change and boosts agricultural yields, underpinned by "triple win" technologies.
Global adoption of sustainable agriculture methods could sequester from 40% - 65% of greenhouse gases emitted in the agricultural sector[v].

Food governance to move from feeding to nourishing people

Global action to address the impact of climate change on food security must be multi-dimensional, and foster a shift in focus from "feeding" to "nourishing" people. "Food governance" must balance community empowerment and national sovereignty with market access and global obligations. It must address, amongst others, the inequitable distribution of food, food price volatility, under-pricing and food wastage in developed economies, and post harvest losses in poor countries.

Access to markets for small scale farmers is crucial, who also require access to finance, technology, seeds and other agricultural inputs. Other barriers to the adoption of a multi-functional agricultural paradigm need to be addressed. For example, the return on investment in multifunctional agriculture has not yet been properly documented. As a result, it has not always easy to persuade farmers to change. In addition there are socio-economic barriers that continued to favour produce from input intensive industrial agriculture that need to be overcome. For instance, input markets for climate resilient crops such as Cassava are not very well established.

Augment global and national resources with private investment

Africa's food crisis, in which the majority of the population relies on agriculture for their livelihoods, needs urgent responses. These responses should target the most vulnerable, address profound food governance challenges, implement already existing best practice examples, and support a systemic transition to multifunctional agriculture. Investment in agricultural research is paramount to ensure the emergence of the new paradigm of "multifunctional agriculture".

Financing will be a crucial part in enabling this transition. It has been suggested that at least an additional USD 7 billion a year would be needed to help in climate change adaptation especially in poor countries[vi]. More resources could be found by redirecting existing agricultural subsidies towards supporting more sustainable agriculture and green growth. Global development finance for agriculture can be combined with climate finance, national public finance commitments and private sector investment, facilitated by risk management instruments. There are a number of UN agency and World Bank programmes that are providing support in these areas, including the G20 initiated Global Agriculture and Food Security Programme.

The road to Durban

Agriculture is a key contributor to climate change, with about 14 per cent of all global greenhouse gas emissions being produced in the agriculture sector[vii]. However it also has the potential to act as a carbon sink and manage the impacts of climate change at the same time as nourishing the world. On the road to the 17th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP17), it is important that the global community recognizes the unfolding food security crisis exacerbated by climate change. It is hoped that the hosting of the COP on African soil will provide an opportunity for communities, stakeholders and countries across Africa to place these issues more firmly on the COP agenda.

References

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