

### **Africa Food Security Conference Bulletin**

A Briefing Note of the First Africa Food Security Conference – "Harnessing Ecosystem based Approaches for Food Security and Adaptation to Climate Change in Africa"

Published by the International Institute for Sustainable Development (IISD)

SUNDAY, 25 AUGUST 2013 - ONLINE AT HTTP://WWW.IISD.CA/FOOD/AFSC1/



### BRIEFING NOTE ON THE 1<sup>ST</sup> AFRICA FOOD SECURITY AND ADAPTATION CONFERENCE: 20-21 AUGUST 2013

The First Africa Food Security & Adaptation Conference: Harnessing Ecosystem-based Approaches for Food Security and Adaptation to Climate Change in Africa was held from 20-21 August 2013 at the UN headquarters in Nairobi, Kenya. Convened by the UN Environment Programme (UNEP), in collaboration with the UN Food and Agriculture Organization (FAO), other UN agencies, governments and other stakeholders, the conference explored ecosystem-based approaches to enhance food security, ecosystem productivity and climate change adaptation in Africa.

Over 700 participants from 54 countries attended the conference, including representatives of governments, civil society and intergovernmental organizations.

The two-day event was divided into plenary and discussion sessions. Participants convened in plenary sessions on Tuesday morning and late afternoon and throughout the day on Wednesday. On Tuesday afternoon, four parallel discussion sessions were held to give participants the opportunity to reflect on key questions regarding how to mainstream ecosystembased approaches to get Africa out of food insecurity in a changing climate.

The main outcome of the conference was a "Conference Declaration on Ecosystem-based Approaches for Food Security and Climate Change Adaptation," which among other things recognizes ecosystem-based adaptation approaches as the first step towards building resilient food systems and adapting to climate change in Africa.

This briefing note summarizes the presentations made and the discussions held during the conference.

### **OPENING SESSION**

On Tuesday morning, 20 August, in plenary, Richard Munang, Africa Regional Climate Change Coordinator, UNEP Regional Office for Africa (ROA), welcomed participants to the conference. Emphasizing Africa's vulnerability to climate change, Munang stressed the need for ecosystem-based approaches to provide cross-cutting solutions to food security and climate change adaptation. He highlighted as key goals for the conference: sharing information on targeted ecological solutions to climate change and food insecurity in Africa; identification of key challenges hindering the scaling up of ecosystem-based adaptation practices and how to overcome them; and aggregation of lessons learned into common solutions to help support policy processes and broader actions by countries.

Mounkaila Goumandakoye, Regional Director, UNEP ROA, said that Africa needs new food production models that provide cross-cutting benefits such as climate change mitigation and adaptation, support for farmers, and ecosystem preservation. He also stressed the need to bring to scale isolated success stories and best practices such as agroforestry, on-site water conservation and use of native species, noting the conference had an opportunity to drive changes on the ground.

Modibo Traore, FAO Representative to the African Union and to the UN Economic Commission for Africa, highlighted the interaction between agriculture and climate change and the work of the Committee of World Food Security (CFS) on that



Africa Food Security Conference Group picture (photo courtesy of UNEP)

issue. Noting that agriculture supported 67% of jobs in Africa, he highlighted the sector's vulnerability to climate change and its dependence on climate-sensitive ecosystem services such as pollination, whose value was estimated at US\$214 billion per year.

Participants then heard an opening presentation on food security and climate change in Africa by Tony Simons, Director General, World Agroforestry Centre (ICRAF). Simons highlighted, *inter alia*: the human security aspect of food security; the relationship between land degradation and child mortality; and the need for major investments and innovation to make farming systems more resilient. Noting that Africa had a great opportunity to produce cereal, he urged participants to discuss ways to promote investments in this area. He also outlined the opportunity to incentivize Africa's young people to stay in rural areas and to build on the continent's existing political will to revitalize the agricultural sector, as reflected in the African Union's 2003 Maputo Declaration on Agriculture and Food Security in Africa.

### SHARING LESSONS ON ECOSYSTEM-BASED APPROACHES FOR FOOD SECURITY AND CLIMATE ADAPTATION

On Tuesday in plenary, participants heard presentations of eight case studies from successful ecosystem-based country projects that had improved food security, climate change adaptation and ecosystem productivity in different ecosystems. Dennis Garrity, Senior Fellow, ICRAF, moderated the discussion that followed.

Patrick Muzinduki, Kabarole Research and Resource Centre, presented a case of maize demonstrations, banana management and vegetable irrigation in Uganda. He said climate adaption was about looking at how local farmers could adapt to climatic changes while ensuring food production, and outlined how the projects had improved farmer purchasing power.

Cheatum Molly, Kusamala, presented on a permaculture and agroecology project in Malawi. He highlighted as key challenges the difficulty of measuring complex systems involved in integrated management and time constraints.

The Africa Food Security Conference Bulletin is a publication of the International Institute for Sustainable Development (IISD) <info@iisd.ca>, publishers of the Earth Negotiations Bulletin © <enb@iisd.org>. This issue was written and edited by Paula Barrios. The Editor is Liz Willetts liz@iisd.org>. The Director of IISD Reporting Services is Langston James "Kimo" Goree VI <kimo@iisd.org>. Funding for coverage of this meeting has been provided by the UN Environment Programme (UNEP). IISD can be contacted at 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba R3B 0Y4, Canada; tel: +1-204-958-7700; fax: +1-204-958-7710. The opinions expressed in the Bulletin are those of the authors and do not necessarily reflect the views of IISD. Excerpts from the Bulletin may be used in other publications with appropriate academic citation. Electronic versions of the Bulletin are sent to e-mail distribution lists (in HTML and PDF format) and can be found on the Linkages WWW-server at <htps://www.iisd.ca/>. For information on the Bulletin, including requests to provide reporting services, contact the Director of IISD Reporting Services at <kimo@iisd.org>, +1-646-536-7556 or 300 East 56th St., 11D, New York, New York 10022, USA.





Manuel Menomussanga, Environment Ministry of Mozambique, presented on a fish and crab farming and mangrove reforestation project in Mozambique that he said had introduced a new mindset about climate change adaptation among community members and had the potential to be replicated and up-scaled.

Welton Phalira, LEAD Southern and Eastern Africa, presented a conservation agriculture project in Malawi that he said included a livestock component to enhance protein availability and enable adaptation when crops failed. He said the project was being scaled up and had great replication potential, while noting that engaging in continuous testing and learning in the face of limited time and resources was a big

challenge.

Leslie Mhara, Care International, presented a project involving agroforestry, conservation farming and sustainable harvesting of non-timber forestry products in Southern Zimbabwe, which he said had targeted the most vulnerable communities, including HIV positive communities. Noting that the project had great up-scaling potential, he stressed the need to identify key communities and stakeholders and engage in training on, *inter alia*, conservation techniques, marketing issues, local conflict resolution, and climate vulnerabilities and adaptation.

Annet Kandole, Care International, presented a project that promoted good governance in the forest sector in Uganda. She said a good governance approach could enhance food security and climate change adaption, highlighting participation, the rule of law, accountability and fairness as the key pillars of good

governance.

Philip Osano, McGill University, presented a project on payments for wildlife conservation in Kenya, which he said helped communities near parks and reserves to respond to shocks such as droughts and to meet their food and other basic needs. He explained that the project addressed risks from government policies that had divided formerly communal rangelands into private plots, since these were often fenced and prevented wildlife and livestock mobility and affected traditional pastoralism.

John Ajigo, Nigerian Environmental Study/Action Team, presented an agroforestry project to stabilize mobile sand dunes in Nigeria, which he said looked to enhance climate adaptation and food security, stabilize the dunes and restore oases and

water availability in the targeted areas.

In the ensuing discussion, one participant asked what the key difference was between ecosystem-based adaptation (EbA) and normal adaptation interventions. Phalira identified as a unique trait of EbA approaches that they address the linkages between different ecosystem components and how they rely on each other and seek to address science, policy and social aspects.

In response to a question on how project managers had fully engaged the local community in the Mozambique project, Menomussanga indicated that a vulnerability assessment had been conducted with strong community participation and the community itself had identified the three adaptation activities

that were implemented.

One participant asked whether the projects presented had a sustainability model and infrastructure developments to keep the projects going longer than their lifespan. In response, Ajigo said the key was to get local governments and communities involved to ensure the latter requested continued government involvement in projects.

In response to a question on how projects could be scaled up, Osano said that there was no single approach to up-scaling and that there were many tradeoffs involved in adaptation approaches that must be considered when scaling up a project.

### **DISCUSSION SESSIONS**

On Tuesday afternoon, August 20, participants convened in four parallel working sessions to discuss the key themes of the conference. They then reconvened in plenary on the same day to hear presentations from the discussions held in each working session, with Sara J. Scherr, President, EcoAgriculture Partners, acting as moderator.

The following sections summarize the key issues addressed at each discussion session, as presented in plenary, and the plenary discussions that ensued.

### SESSION 1: UP-SCALING ECOSYSTEM-BASED APPROACHES FOR FOOD SECURITY AND CLIMATE CHANGE ADAPTATION

Summarizing the discussion in plenary, session moderator Alex Awiti, Director, East African Institute of Aga Khan University, said the deliberations had focused on: possible approaches to scaling up ecosystem-based approaches; barriers to scaling up; and mechanisms to unlock those barriers. He highlighted, *inter alia*, the need to: consider both social and ecological systems to define elements of each that could be brought up to scale; define what scaling up means; create new incentives for ecosystem-based approaches to counter existing incentives for large-scale industrial models; find mechanisms to support a socially-acceptable paradigm shift in food production; and ensure government implementation of climate-smart production policies and markets for sustainable products.

In the ensuing discussion, one participant stressed the need to harmonize the work of development partners on the ground, which he said often had conflicting goals, such as projects that promoted organic agriculture versus those that encouraged use of genetically-modified (GM) seeds. Uganda said the use of traditional drought-resistant and climate-resilient seeds should be promoted.

One participant said multinational corporations promote large-scale agriculture as Africa's solution to food insecurity and called for strong farmers' organizations and improved accountability for sustainable agriculture.

ICRAF stressed the need for capacity building of farmers in sustainable agriculture, and two farmers' organizations shared their success stories in improving food production, ecosystem productivity and farmers' livelihoods.

# SESSION 2: MAXIMIZING POLICY FRAMEWORKS TO INTEGRATE ECOSYSTEM-BASED APPROACHES FOR FOOD SECURITY AND ADAPTATION

The session was moderated by Tewolde Egziabher, Director-General, Ethiopia's Environmental Protection Agency. In plenary, session rapporteur Ake Mamo, Ethiopia private sector, said the session's discussion had focused on: how to integrate EbA approaches into existing national and regional food security policy frameworks; and shortcomings of current food security policies and frameworks. She said issues addressed included the need to ensure that food security policies are cross-sectoral and to monitor and evaluate policy measures and procure sufficient resources to implement them. She then outlined as key recommendations the need to: go beyond national borders, which do not define ecosystems; focus on implementation of existing policies, ensuring community involvement in implementation; incorporate the four pillars of good governance in food security; and create public-private partnerships that cascade to the grassroots level and make use of indigenous knowledge.

In the subsequent discussion, participants from Kenya and Senegal called for implementation of existing African climate adaptation policies, stressing that little progress had been achieved thus far. OXFAM said that new tenure regimes in several African countries had led to improved production and land care from securing people's rights to land. He stressed the need to address the issue of foreign investment policies that promoted a kind of agriculture that was contrary to ecosystem-based approaches.

Uganda shared its success story in the Karamoja region, noting that the region presented significant challenges and now had improved food production, water management and ecosystem productivity.

# SESSION 3: FUNDING MECHANISMS FOR ECOSYSTEM-BASED APPROACHES FOR FOOD SECURITY AND ADAPTATION

Session moderator Emmanuel Dlamini, Chair, Africa Group of Negotiators, summarized the discussions held by the group. He highlighted among the topics addressed, *inter alia*: the issue of new and additional resources to support ecosystem-based approaches; the need to mobilize private and development bank funding, which involved consideration of rates, profit, timelines and marketable products; and the need for public funds to support adaptation through national



budgets and to look at agriculture as a business to ensure that farmers generate income that enables them to meet their basic needs. He outlined key challenges discussed, including how to enhance local finance from all institutions and sectors and how to promote investments in grassroots farming that had community benefits.

In the following discussion, one participant emphasized the central role of farmers in transforming the prevailing agricultural model. Another said institutions such as the World Bank need to better reach farmers. One participant supported the notion of giving carbon credits to farmers who adopted ecosystem-based approaches with climate benefits.

A participant from Kenya shared his country's experience in Makueni, noting that it had provided surplus income for farmers in the district. Togo said that his country was experimenting with a new system that allocated funds to a group of small farmers and family households to provide a food security mechanism to cope with times of poor production. He said a key challenge was to promote the desirability of domestic produce in Togo.

### SESSION 4: THE SCIENTIFIC PERSPECTIVE ON ECOSYSTEM-BASED APPROACHES USED ACROSS AFRICA

Richard Munang, Africa Regional Climate Change Coordinator, UNEP ROA, moderated the session. In plenary, session rapporteur Fred Kizito, International Centre for Tropical Agriculture (CIAT), outlined key topics discussed during the session, including the need to: link local and farmer knowledge to science, saying that farmers could be considered scientists; address ecosystem services at the watershed level; produce ecosystem-based models adapted to local conditions; share country successes and failures and communicate them as accessible scientific outputs; consider policy and social issues in addition to bio-physical aspects; train young people and make agriculture a viable business; conduct further research on the use of GM organisms in food production; and mainstream ecosystem-based approaches into education curriculums.

In the discussion that ensued, one participant suggested that drought-resistant traditional seeds rather than GM seeds should be promoted. Another emphasized the crucial role of biodiversity in ensuring food resilience and effective adaptation policies.

Closing the plenary session, moderator Scherr reminded participants about the upcoming session of the African Ministerial Conference on the Environment (AMCEN) in Botswana in October 2013. She suggested the First Africa Food Security and Adaptation Conference had the opportunity to influence the AMCEN session, which she said was expected to discuss Africa's common position to the UN climate change conference to be held in Poland in November 2013.

#### PRESENTATION FROM DISCUSSION SESSIONS

On Wednesday morning, 21 August, Munang highlighted key messages from Tuesday's discussion, including the need to: involve communities in EbA project design; adopt a regional approach to coordinate EbA efforts; financially support grassroots farmers organizations; and ensure the EbA projects go beyond their lifespan.

One participant urged putting human and animal health issues at the centre of the food security and nutrition debate.

### BEYOND 2°C - IMPLICATIONS FOR FUTURE AFRICA FOOD SECURITY & ADAPTATION UNDER INCREASING TEMPERATURES (2°C, 3°C, 4°C)

On Wednesday morning in plenary, Sandra Freitas, Climate Analytics, presented key findings of the World Bank's 2013 "Turn Down the Heat" report, which she said examined the likely impact of global warming scenarios of 2 degree Celsius and 4 degree Celsius above pre-industrial levels in Africa and other regions. She said key issues for Africa included temperature increases and heat extremes, modification of rainfall patterns, increased aridity and rapid demographic growth. She then outlined as possible impacts under both scenarios, *inter alia*: reduced food production; increased poverty; higher rates of malnutrition and child stunting; and negative health impacts.

In the ensuing debate, moderated by Richard Munang, Munang asked four discussants to reflect on the report's key findings and comment on whether EbA could help reverse those trends.

Shem Oyoo Wandiga, University of Nairobi, said the only way to address the climate challenge was to use resources more efficiently and sustainably, stressing the role of sound water management and water purification efforts to address problems such as increased water-borne diseases.

Benjamin Delali Dovie, University of Ghana, said that increased use of groundwater was key to pursuing the food security agenda and EbA could be harnessed to achieve this. He stressed the need for science, policy and financial mechanisms to support food security and adaptation, highlighting as a key challenge the inclination of politicians to seek short-term rather than long-term results.

Linus Opara, Stellenbosch University, South Africa, emphasized the need to accept and address Africa's serious crisis of persistent starvation, which he said required a paradigm shift in Africa's agricultural model to modernize the sector and help inefficient farmers to move into agribusiness.

Idowu O. Oladele, University of North West, South Africa, said the solution lied in scaling up successful examples of sound practices that, *inter alia*, improved water and land management, maintained soil nutrients and increased production efficiency.

In the ensuing discussion, one participant remarked on Africa's low contribution to global climate change and wondered whether EbA could have a meaningful effect if large emitters continued with business-as-usual.

In response to a comment that climate models were unreliable, Freitas said there was a need to adopt a precautionary approach to deal with climate change. She added that adaptation was only part of the solution and it was essential to put pressure on politicians to achieve emissions reductions

One participant suggested that carbon-sequestering vegetation could be planted in 12 months across Africa, which would boost food production within two years. Another said the solution lied in: minimizing soil disturbance; ensuring permanent soil cover; and engaging in crop rotation. It was also suggested that EbA should be included in African education curriculums from the elementary to the university level, and that enhancing soil biodiversity was key to achieving food security.

International Fund for Agricultural Development (IFAD) in East and Southern Africa argued that Africa's agricultural systems were efficient given the limited resources available to farmers and suggested the need for a mechanism to support small-scale farmers with private and public funds. Opara reiterated the view that Africa's food production was inefficient so a radical departure from current practices was needed. He also stressed the need to address post-harvest crop loss and food spoilage.

One participant urged enhancing investments in research on non-conventional sources of food such as edible insects. A representative from Uganda proposed the creation of African centres of excellence to bring together food security researchers that could help develop crop varieties and technologies to help farmers to improve food production.

Delali Dovie said that climate change could be used as an opportunity to strengthen African institutions and innovation to implement EbA.

Wandiga said a growing number of research institutions in Africa were working with communities to deal with climate change. With Oladele, he said greater collaboration between them was needed.

One participant said that multilateral organizations were key to financing EbA approaches. Wandiga maintained that fuel subsidies reductions could become a source of revenue for EbA, while Opara suggested the need to address corruption first. One participant recommended a focus on the landscape level in EbA, stressing it was the scale at which all relevant elements converged.



### THE ROLE OF THE PRIVATE SECTOR: CHALLENGES AND OPPORTUNITIES

On Wednesday afternoon, participants convened in plenary to discuss the role of the private sector in harnessing EbA, with Tom James, Programme Editor, African High-Growth Markets, The Economist, acting as moderator. James said that the private sector had a key stake in EbA since climate change put supply chains at risk and since poverty and malnutrition were human problems that also destroyed markets and created political instability.

Bill Carter, Ashoka, suggested that the concept of "nutrients for all," which encompassed people, plants, soils and ecosystems, could provide a sound basis to ensure food security and think about how enterprises could help reverse malnutrition

and ecosystem degradation on a large scale.

Hans Joehr, Corporate Head of Agriculture, Nestle S.A., spoke about his company's sustainable agriculture initiative, noting that it involved mainly small holders and focused on the agricultural-health nexus in food production, including nutrition for plants, animals and people, which in turn depended on healthy ecosystems. He said the private sector had a major stake in agriculture and urged focusing on farmers training to promote sustainable farming.

Anesu Makina, Business & Biodiversity Programme, University of Pretoria, said that businesses in all sectors relied on biodiversity and ecosystem services and many companies had started to consider the business risks associated with neglecting ecosystem issues. Noting that supermarkets were highly vulnerable to these issues, she said some were engaging in efforts such as offering sustainable products and helping to

replenish ecosystems.

Alex Awiti, Director, East African Institute of Aga Khan University, said that despite being a major contributor to national economies the private sector had been marginally involved in food security policy discussions. He predicted growing private investments in farming, R&D and sustainable product certification and called for a debate on how to help carry these initiatives to farmer extension services and universities, for instance via tax incentives.

In the ensuing discussion, participants reflected on ways to increase private sector involvement in sustainable food

production.

One participant said governments could enable business involvement in sustainable food production through, *inter alia*, water and land allocation and helping liaise business with farmer organizations and extension agents. Another said the private sector could put pressure on governments to build the infrastructure needed to reach remote communities.

Several participants highlighted the role of certification systems supported by NGOs and businesses in supporting sustainable farming. Support was expressed for affordable interest rates and insurance to support small-scale farmers and

co-operatives.

Carter said solutions lied in collaboration and suggested that small farmers needed to become knowledge entrepreneurs and organize in co-operatives to get as close to the consumer as possible. Joehr highlighted predictability around rules and regulations, enforcement and road infrastructure as a key element. Makina said farmer collaboration was key to enable them to meet the private sector's demand for very large quantities of products that met certain criteria. Awiti said the rise of supermarkets presented a unique opportunity to link consumers and producers and maximize value chains.

A representative of Uganda suggested the private sector could support adult literacy in rural areas to enhance the ability of farmers to succeed and access micro-finance. Another participant said that the private sector could provide storage facilities to extend the shelf life of fresh produce and enhance information exchange between farmers and markets. One participant proposed drafting a corporate responsibility charter with criteria and engagement rules that all businesses should follow. OXFAM said it was critical to put in place regulations to support sustainable agriculture and small-scale farming and to ensure a level playing field for corporations. Makina suggested that on-the-ground best corporate practices could be identified and replicated. Noting that corporate sustainability reporting was growing and could help promote best practices, she identified lack of indicators and benchmarks on ecosystem management as a challenge.

Presenting concluding remarks, Carter urged tapping into the wisdom of farmers who had been able to restore soil nutrients and replicate the successful examples of soil and nutrient restoration that existed in Zambia, Ireland the Himalayas. Jhoer called for a strong focus on farmers and on the skills required to implement EbA.

#### PRESENTATION OF CONCLUSIONS AND RECOMMENDATIONS REACHED AND ADOPTION OF CONFERENCE DECLARATION

On Wednesday afternoon, Patrick Luganda, consultant, said that two drafting committees had convened immediately before and during the conference to produce, respectively, a set of recommendations and conclusions, and a declaration for

consideration by the conference.

Dorcas Otieno, Kenyatta University, said the conclusions and recommendations were based on the presentations made and discussions held during the conference, including experiences shared, approaches proposed, lessons learned during implementation of EbA projects, noting that they included sections on policy and planning, capacity building, implementation, demonstration projects, and research and development. She then invited comments on the draft "Conference Declaration on Ecosystem-based Approaches for Food Security and Climate Change Adaptation," which was projected on screen.

Several participants proposed amendments to a number of preambular paragraphs of the declaration. One participant cautioned against revising the text paragraph by paragraph and another said the declaration should be shortened to convey a clear message to the world. Participants then agreed to make

general substantive remarks on the document.

Substantive proposals included: putting emphasis on the role of farmers in achieving sustainable agriculture; recognizing the contribution of traditional communities and indigenous knowledge to food production; and focusing on solutions, and in particular carbon storage in Africa's soil. One participant warned against making reference to carbon sequestration in the declaration, claiming that this was an issue that AMCEN had been cautious about.

The conference adopted the declaration but requested the drafting committee to further refine and streamline the document, taking into account the various suggestions presented and additional inputs submitted to UNEP before the end of the conference.

In the operative section of the Declaration, the Conference, inter alia:

- Recognizes EbA approaches as the first step towards regenerating biodiversity, building resilient food systems and adapting to climate change in Africa;
- Resolves that EbA approaches should be up-scaled and funded:
- Appeals to UNEP and the FAO to, among other things, request governments and regional bodies to institutionalize EbA approaches into national policy frameworks for food security and climate change adaptation; and

 Urges AMCEN to adopt the recommendations and declaration of the First African Food Security and Adaptation Conference.

### **CLOSING SESSION**

Edward Kilawe, Subregional Office for Eastern Africa, FAO, said that achieving food security and climate adaptation required joint efforts and collaboration between governments, civil society and the private sector. Noting that the conference had brought practitioners together to share their experiences and determine how they could work together, he emphasized the need to build on the momentum generated to scale up EbA approaches. He urged participants to consider how to move forward and what kinds of actions were needed to promote the work of farmers in EbA.

Mounkaila Goumandakoye, Regional Director, UNEP ROA, drew attention to the upcoming session of AMCEN in Botswana in October 2013 and invited conference participants to attend the session, stressing that Africa was the only continent negotiating a common position on the next UN conference on climate change. He also invited delegates to participate in the Africa Adaptation Knowledge Network (AAKNet), which he said offered an opportunity to exchange ideas and create partnerships. Wishing everyone a safe journey and a pleasant stay in Nairobi, he closed the conference at 15:55.