

Adaptation

Climate Change Adaptation in Africa



Enhancing African Food Security in the Face of Climate Change: *Are existing risk management mechanisms adequate?*

CCCA COP 14 side event
December 6, 2008

Time: 19:30-21:00

Location: Aesculapian snake room, Poznan International Fair

Food insecurity remains endemic in most of Africa, with climate factors such as rainfall variability a major cause. In 2006, 25 African countries needed food aid, largely due to recurring drought.

This panel discussion, hosted by the Climate Change Adaptation in Africa program, invites representatives of key African subregional organizations to reflect on whether existing regional climate risk management mechanisms are adequate to achieve and sustain food security, in the context of long term climate change.

Speakers

- **Dr Jabavu C. Nkomo**, Senior Program Specialist, Climate Change Adaptation in Africa program
- **Dr Gilbert Ong'isa Ouma**, Project leader, IGAD Climate Prediction and Applications Centre (ICPAC)
- **Philippe Zoungrana**, Executive Secretary, Permanent Inter-State Committee on Drought Control in the Sahel (CILSS)
- **Nyambe H. Nyambe**, Senior Program Manager, Natural Resources, Environment and Sustainable Development, Southern Africa Development Community (SADC)

Introduction: Climate change implications for food security

Food insecurity remains endemic in most regions of Africa, with rainfall variability the main determining factor. In fact, many African countries have been coping for the past several decades with a “silent” crisis of climate variability whose impacts on food security have been devastating without always being highly visible.

In 2006, 39 countries, of which 25 were in Africa, needed external food aid to meet the consumption needs of their own populations¹. The areas of greatest need were in East and Southern Africa due to a climate hazard shared with a great number of African countries - recurrent drought.

This phenomenon is notable in the Sahel² where variability can reach 40 to 80%, while cumulative rainfall is on the decline. In this zone, the diminishing rainfall over the past three decades has created a permanent environment of food insecurity.

This situation has had a severe impact on cereal production, which relies mainly on rain-fed agriculture. Since the end of the 1980s, inter-annual gross cereal production in the Sahel has varied by 20%³ on average. The significance of this variability is clear when we consider that in sub-Saharan Africa, agricultural production accounts for up to 90%⁴ of food needs.

To address the adequacy of existing food security mechanisms in the context of climate change, the shock of extreme climate events has to be weighed alongside the structural vulnerability of these countries. While socioeconomic determinants of food security, such as markets for agricultural products, might be important in the short term, the long term stability and availability of food production are closely linked with environmental⁵ factors. The impact of climate change on food security can be summarized as follows:

- **Availability of food** will be reduced as a result of crop losses linked to extreme climate events.
- **Access to food** will be made more difficult by the destruction of infrastructure and loss of income from climate-related disasters.
- **Stability of food supplies** will be influenced by price fluctuations and heavy dependence on imports and food aid.
- **Utilization of food** may be affected indirectly by food safety hazards associated with pests and animal diseases as well as the increased incidence of climate-sensitive human diseases.

¹ FAO, 2006. Evaluation de la sécurité alimentaire mondiale. Rome. 15 pp.

² Sahel is defined from a climatic point of view as the zone located between Isohyets 200 and 600 mm (and sometimes 150 and 550 mm)

³ OECD, 2006. La zone écologique fragile des pays du sahel. France. 12 pp.

⁴ Dembélé, 2001. Sécurité alimentaire en Afrique sub-saharienne : quelle stratégie de réalisation. Bamako. 25 pp.

⁵ FAO, 2008. Climate Change adaptation and mitigation in the Food and Agriculture sector. Rome. 17 pp.

Regional responses to managing climate risk

African countries which have faced significant climate variability over the past several decades have developed different tentative responses at the regional, national and local levels. The regional approach that developed in this way follows a logic of economic and geographic complementarity, offering opportunities for stability and economies of scale between structurally weak countries.

In the Sahel, the Permanent Inter-State Committee on Drought Control in the Sahel (CILSS) was established in 1973 in the aftermath of the large-scale droughts that struck the region in the 1970s. Its membership today includes nine States: The Gambia, Guinea-Bissau, Mauritania, Senegal, Burkina Faso, Mali, Niger, Chad, and Cap Verde. CILSS' mandate is to invest in the search for food security and the struggle against the effects of drought and desertification.

CILSS has had a food security early warning and monitoring system since the 1980s. It holds consultations every year in March, June, September, and November. The Food Crisis Prevention Network (RCPN) has met every December (since 1984) at the end of the crop year to assess the agricultural and food situation and furnish political actors with the relevant information they need for appropriate decision-making. The network involves all relevant actors addressing food security: representatives of the Sahelian countries, donor agencies, researchers, experts, CILSS, and producers' organizations.

In January 2007, the Economic Community Of West African States (ECOWAS) also held a regional meeting, under CILSS leadership, which ended with the establishment of a task force comprising CILSS, the African Centre of Meteorological Application for Development (ACMAD), ECOWAS, and the Economic Commission for Africa (ECA), charged with the formulation of a sub-regional action plan for adaptation to climate change for West Africa and Chad.

In the Horn of Africa, ICPAC (the IGAD Climate Prediction and Application Centre) works regularly with national meteorological and hydrological institutions in generating and disseminating climate information products for various sectors (including agriculture, water, energy, and health, among others). These products are shared with the governments of member countries of IGAD (The Intergovernmental Authority on Development in Eastern Africa) namely Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Somalia, Tanzania, and Uganda.

In 1999, the Southern Africa Development Community (SADC) established a Regional Vulnerability Assessment Committee (RVAC) under the aegis of its Food, Agriculture and Natural Resource (FANR) department. RVAC's mission is to reinforce vulnerability analysis systems at the regional and national level in order to inform policy formulation, development programming, and emergency response initiatives to reduce vulnerability in the southern African region. The Committee's membership includes the SADC Secretariat, World Food Program (WFP), the UN Food and Agriculture Organization, FEWS NET (Famine Early Warning Systems Network), the UN Office for the Coordination of Humanitarian Affairs, and UNICEF. National counterparts to the Regional Vulnerability Assessment Committee have in turn been created by national governments in the region.

A Drought Monitoring Center for the region was established in 1998. Other mechanisms relevant to climate vulnerability and response include the Regional Early Warning System and the Regional Food Reserve Facility.

Framing the issue – Are existing mechanisms adequate to support food security in the context of climate change?

The institutional mechanisms put in place over the past several decades represent extensive experience in the area of climate risk management. They are, however undermined by a number of structural difficulties that limit their scope and operation. These constraints provide an impetus to revisit their sustainability and efficacy in the face of new environmental challenges – in particular, climate change.

In the course of this COP 14 side event, CILSS, ICPAC, and SADC, with support from the Climate Change Adaptation in Africa program, will address the following questions:

- How must existing climate risk mechanisms be improved in the face of likely extreme climate events? Can the climate challenge be addressed without creating new institutions?
- How can existing regional dynamics be made use of and how might national and local policies reinforce them?
- What needs to be done to facilitate these changes, in terms of policies and research?

CILSS will share its experience from a policy perspective on:

- current drought and famine early warning mechanisms in the Sahel;
- their efficacy and constraints in addressing food security;
- their level of uptake and use within national policies;
- the status of research and vulnerable groups in the activities and operation of these mechanisms; and
- prospects for mainstreaming climate change responses within the existing mechanisms.

ICPAC will share experience from a research perspective on:

- current early warning mechanisms in the Horn of Africa;
- their contribution to improving food security;
- the role of various actors (IGAD, national governments, NGOs and grassroots communities) in the development and use of climate information products;
- the role of policymakers and vulnerable groups in implementing and making use of these mechanisms;
- prospects for addressing climate change through existing mechanisms; and
- challenges and success stories that might inform similar initiatives in other regions.

SADC will share experience from a research and policy perspective on:

- current early warning mechanisms in the southern African region;
- their efficacy and constraints;
- the degree to which they are used and validated at the national policy level;
- the level of interaction between research and policy in this area; and
- prospects for mainstreaming climate change responses within current mechanisms for addressing food security.