SHORT DESCRIPTION OF ICPAC/IGAD DISASTER RISK REDUCTION PRODUCTS FOR THE MARTKENPLACE

The climates of the Greater Horn of Africa (GHA) of Africa can be classified largely as arid and semi arid with frequent recurrences of weather and climate extremes such droughts, floods, and cold/warm spells that always. It is estimated that over 90% of disasters in the region are related to climate. Such climate extremes always devastate rain dependent livelihoods of the communalities that are largely very poor. IPCC has shown that the world is warming, and there are also changes in regional and local patterns of droughts, floods and other extreme climate events with far reaching socio-economic implications. Africa has been identified as the most vulnerable continent to climate change impacts. Coping with current climate variability and adapting for future climate changes can therefore not be an option to sustainable development in Africa.

The IGAD Climate Prediction and Applications Centre (ICPAC) formerly known as the Drought Monitoring Centre, Nairobi (DMCN) is a specialized the Institution of Intergovernmental Authority on Development (IGAD), serving 10 countries in the Greater Horn of Africa (GHA) in providing climate risk reduction information and early warning services in support of the sustainable development of vulnerable communities.

The products in the ICPAC/IGAD marketplace will include the following disaster risk reduction products among others:

1. CLIMATE HAZARDS MAPS

- Regional Risks of various droughts, floods and other climate hazards
- Time series of temporal changes : daily, seasonal, annual, decadal, and climate change variability modes

2. MONITORING AND EARLY WARNING PRODUCTS

- Including products from the innovative process known as the regional climate outlook forum (RCOF) aimed at providing consensus early warning seasonal climate information. RCOF process involves a forum to catalyze linkages amongst meteorologists, users' specific sectors, governments, NGOs, universities, and international climate instructions, where a consensus seasonal climate outlook for the region for the coming season is formally released. The users also develop strategies for reducing potential risks associated with the released RCOF products. The RCOF also includes a pre rainfall season capacity building component for climate scientists from the member countries to improve the understanding of the regional climate processes and develop seasonal specific climate outlooks.
- 10 days and monthly climate updates

3. REDUCING SECTOR SPECIFIC CLIMATE RISKS

3.1 Health Applications

Many vector borne diseases are sensitive to changes in meteorological parameters such as rainfall, temperature, and humidity. Capacities for providing climate information for the health sector have been developed through USIAD/OFDA support. ICPAC now releases regular climate based malaria outlook based on regional consensus climate outlooks. So far four malaria outlooks have been organized with the health sector communities during the last four rainfall seasons (Examples).

3.2 Agriculture and food security

Through partnership with FEWS/NET seasonal food security early warning draft is now released by FEWS/NET based on ICPAC's seasonal climate outlook products (examples).

3.3. Water resources and hydro power management

In most of the GHA countries ICPAC is collaborating with the hydrological institutions on the translations of the seasonal climate outlooks to useful products to monitor the inflows into the hydropower dams and prediction of hydrological droughts and floods. This involves the enhancing regional capacity in translating probabilistic forecasts into real rainfall amounts useful in seasonal stream flow modeling, prediction and early warning of hydrological droughts and floods (examples). Such RCOF based in formations are now being used on management of water dams domestic, hydropower and other uses.

3.4 Disaster Management

The climate products from ICPAC now form important tools for disaster early warning, preparedness, contingency planning and conflict early warning and response. ICPAC is also working with a local community in Kenya to integrate indigenous knowledge and modern climate forecasts for climate disaster risk reduction. Dissemination of the information to rural community is also being tried using RANET, and few other local forums (examples).

3.5. Education, Awareness and roles of the Media

Most of the users of climate information in Greater Horn of Africa are illiterate. This is a key challenge for effective dissemination of the early warning climate information. ICPAC has trained several journalists and editors to be used for translating and down scaling climate information to community levels products and local languages. Such collaboration with the media community has led to the formation of the network of climate journalist fro the Greater Horn of Africa (NECJOGHA). This has enabled a better coverage and dissemination of climate early warning information by the media (examples).

3.6. Climate variability Impacts and vulnerability mapping

Including socio-economic costs: Few examples from the region are presented based on some recent climate extremes

3.7. Capacity building, Tools and methods

ICPAC is the centre of excellence for capacity building in all climate variability risk areas, and development and implementations of new tools and methods eg for risk screening, impacts, vulnerability, adaptation, etc (Few examples)

3.9. Climate change adaptation

Various examples from regional evidences and attributions, regional down scaling and regional climate scenarios development, impacts/ vulnerability and adaptation (regional examples)