Summary of the 7th NBDF Webinars

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And Key Messages

Climate change adaptation sessions

CS1: Flood forecasting science (144).
CS2: Management of flood emergencies (128)
CS3: Impacts of climate change on streamflow and lake and reservoir storage (165)
CS4: Implications of climate change on sustainable development and disaster risk management in hydrological basins. (183)
CS5: Climate change adaptation in the smallholder farming sector (155)
CS6: Applying analytical and monitoring tools to improve climate change adaptation in the agricultural sector (99)
CS7: Building resilience to climate change impacts (119)
CS8: Early Warning for All In the Nile Basin (135)
Total CC attendees: 1128
Total attendance of all sessions: 2703

% 42

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- The Africa region is experiencing climate and weather extremes at increased frequency and with bigger socio-economic and environmental impacts.
- Analysis into the future climate underscores the need for NBI Member States to start to implement climate change adaptation and mitigation measures.
- GCMs seem to agree in predicting warming of surface temperature over the Nile Basin. There is a high level of uncertainty about the sign of the predicted change in precipitation.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- The population in the basin countries is projected to reach 0.9 to 1.1 billion inhabitants by 2050. Currently, about 40% of the population in Africa lives in urban areas, and it is expected to grow to about 60% by 2050.
- It is conceivable to see competing demand for water from different sectors in the future. Climate change may result in additional stress to the region beyond the population growth.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- There is also need to develop a rigorous risk management approach to propose, appraise and prioritize a basket of adaptation measures to address weather and climate risks to sustainable water resources management and development in the Nile Basin.
- As more than 75% of the food production within the Nile Basin takes place on smallholder rainfed systems, it is necessary to support the promotion of climate smart agricultural technologies and practices in the smallholder sector to contribute to attainment of the targets of SDG2, SDG5 and SDG13.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- The capacity to survive, successfully adapt and prosper in the face of change and uncertainty related to disturbances, whether they be caused by resource stresses, societal stresses and/or acute [weather and climate-related] events.
- Provide decision makers on local to national scales with the facts and methods necessary to design and execute an adaptation strategy to natural hazards in a changing climate, in a robust and replicable way.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Climate change is already affecting every inhabited region along the globe, with human influence contributing to many observed changes in weather and climate extremes.
- Compensate lack of ground data by using a digital solution to better manage water resources.
- Assess hydrological impacts of climate change anywhere on a basin.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Rigorous risk management approach to assess (quantify) risk today, additional risk due to socio-economic development and climate change.
- Rigorous risk management approach to propose, appraise and prioritize a basket of adaptation measures to address weather and climate risk on an economic basis.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Hydro-meteorological hazards account for 90% of natural disasters in East Africa region.
- Every dollar invested in disaster mitigation and climate-resilient infrastructure, 6 dollars are saved.
- Poor data sharing between institutions and countries complicated the flood management and response.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Flood and drought forecasting and early warning tools have been developed in the region to deal with increased frequency of extreme hydrological events.
- The remaining weakness is in updating, refining, and timely dissemination of early warning messages, and timely mobilization of affected communities to avoid damage from climate-related disasters.
- It is imperative to increase the resilience to flood and drought Looking at flood and drought holistically: Temperature, soil, agricultural practices, etc.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Leverage programs, initiatives to improve data gap and to strengthen the modeling capacities for an effective monitoring and forecasting.
- Utilizing existing all-inclusive partnerships and agreements to deepen water use and development, and enhance multilateral development.
- Dissemination via email for the selected stakeholders and government agencies for appropriate process.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Ample evidence points towards more frequent large peak flow events in the Nile Basin. The need for continuous Reporting of:
  - Current Reservoir Levels
  - Recent Releases
  - Expected Releases from Turbines and Spillways.
- As a result, each reservoir operator MUST know how much water to expect in the coming days.
- Measurement system to track flood wave propagation.
- Continuously Updated Reporting and Forecasting.
- Developing emergency protocols.
- Dam flooding/failure early warning system and response plan is required.

THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- develop an enhanced national and regional climate resilience that accommodate climate risk into the water resources.
- Bridge the gap between the science and the community.
- Inadequate access to funding and institutional capacity in the region. More effort to mobilize resources and improvement for the local capacity.
- Lack of enforcement of the existing laws on riparian lake encroachment.

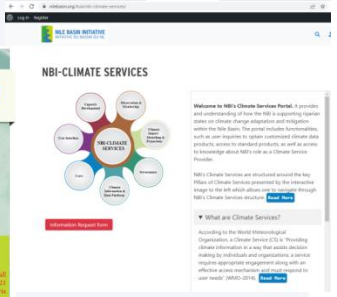
THEMATIC AREA 3: CLIMATE CHANGE ADAPTATION AND MITIGATION

- Climate change is a cross cutting activity and the umbrella for many NBI projects. CC is a key concern in the NB and justification for funding:
- Institutional Strengthen Project (ISP) 2008-2012, NCORE, NCCR, and CSI.

NBI support to member states: Resources and tools

- **Climate Change Projection dataset for impact studies in the Nile Basin**
- **NBI Climate Change Projections Studies:**
  (what does a global average temperature rise of 1.5 and 2 degree mean for the Nile basin?)
- **Projected hydrological scenarios over the Nile Basin**
- **Nile Basin River Flow Forecasting System:**
- **Drought monitoring and early warning System**
- **NBI Climate Proofing Hub**
- **Basin monitoring Bulletin**
- **Nile Basin Decision Support System**

You can't manage what you don't understand




NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL
THANK
YOU!