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Water Security for Africa's Development in light of Climate Change

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Africa Climate Resilience Infrastructure Summit

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Water Security for Africa's Development in light of Climate Change

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Climate Change/Variation:

Impact on Water-Africa

- ❑ **Most impacts** of climate change appear in **water-related** phenomena: droughts, floods and sea level rise
- ❑ Climate change will add **extra burden to the existing water challenges** Africa is already facing
- ❑ Africa is likely to be **significantly affected** by climate change due to its **low adaptive capacity**



Climate Resilience Water Infrastructure: Soft

Catalyzing Infrastructure Investment

- ☐ Preparation: Data, information and knowledge, ready to finance projects
- ☐ Capacity development:
- ☐ Institutional strengthening: Efficient & effective delivery

Readiness of Water Resources Management

- ☐ Develop strategies and action plans
-based on good understanding of CC
- ☐ Regional cooperation: greatest opportunity for analyzing and understanding the problems and designing strategies

Secure Infrastructure Sustainability



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Climate Resilience Water Infrastructure: Hard

Investments in Infrastructure Development

- ☐ Insufficient infrastructure -water insecurity.

Mobilising financial resources

- ☐ Innovative financing mechanisms
- ☐ Increase financing envelop

Promote Multi-Purpose Infrastructure

- ☐ Prioritise MPI development

Maximise Financing Potential



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Examples: Bank's Climate Resilience Water Projects

Water Resources Information Management (example)

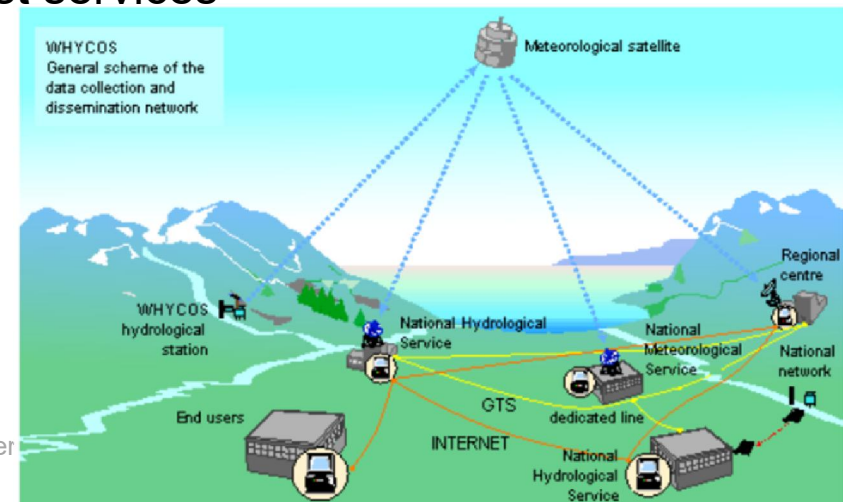
Niger Basin HYCOS Project: Niger Basin Authority (Benin, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Guinea, Mali, Niger and Nigeria)

Objective

- Promote effective management of the water resources in the Niger Basin through quality hydrological data and information

Outputs

- Modernization of water information system;
- Strengthening the national hydrological services;
- Capacity building of the Niger Basin Authority; and
- Strengthening the hydrological forecast services



Examples: Bank's Climate Resilience Water Projects



Water Resources Management (examples)

Detailed Plan of the Songwe River Basin Development Programme: Malawi and Tanzania

Objective

- Create a conducive environment for TWRM in the Songwe River Basin

Outputs

- Preparation of Shared Vision for 2050;
- Feasibility studies and detailed plans for investment projects including multi purpose dams, and flood control works; and
- Establishment and capacity development of river basin commission.



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Examples: Bank's Climate Resilience Water Projects



Water Resources Management (examples)

Agriculture water management: Improved agricultural and land management practices to strengthen productivity and resilience

- Improving control and management of on-farm water resources (Botswana)
- Watershed protection (Kenya)
- Piloting more productive agriculture water technologies, such as rainwater harvesting for multiple purposes (Djibouti, Rwanda).
- Helping small-scale farmers adapt to climate change and ensure sustained agricultural-based livelihoods (Zambia, South Africa)



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Examples: Bank's Climate Resilience Water Projects

Infrastructure Development

Enhancing water storage capacity:

- Thwake multi-purpose water resources development (Kenya), Mahe water augmentation (Seychelles), small scale water storage in rural areas etc.

Urban water management:

- Upgrading urban drainage to cope with severe/frequent floods (Yaounde, Nakuru, Harar)
- Wastewater treatment for reuse (Tunisia)

Water Supply and Sanitation:

- Provision and protection of water for human, agriculture and ecosystem



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Projects: Climate Related Finance

Uganda WSSP

- Building resilience to CC in flood-prone areas
- Ensuring climate-resilient sanitation in flood-prone peri-urban areas
- Ensuring access to water for production in drought-prone areas
- KM and M&E

LDCF: USD 8.37 m (GEF CEO endorsed)

Cameroon PADY-II

- Strengthening institutional capacity to improve long term urban resilience to flood risks
- Improve readiness and adaptive capacity of the local communities
- Climate resilient interventions for flood control
- KM and M&E

SCCF: USD 7.032 m (GEF CEO endorsed)

Mauritania PNISER

- Capacity building for sustainable management of natural resource
- Reducing vulnerability to CC of rural water infrastructures and activities
- Diversify and strengthening livelihoods and source of incomes of the rural and agro-pastoral population
- KM and M&E

LDCF: USD 6.35 m (GEF CEO endorsed)

Sierra Leone RWSS

- Climate-resilient water supply and sanitation
- Building institutional framework for climate-resilient management of the sector
- Awareness on climate-resilient WASH practices
- Establishing collaborative research and monitoring
- KM and M&E

LDCF: USD 4.00 m (PIF cleared)

Zambia Transforming Rural Livelihoods –NRWSSP-II

- Groundwater Monitoring System for Climate Resilient Water Management
- Guideline for Sustainable Groundwater Extraction Technology
- Community Capacity Development on Multi-purpose Use of Groundwater

NDF: EUR 2.25 m (approved by NDF's board)

Central Africa Sub-program for WSS in Bangui and Four Prefectures

- Capacity development to facilitate integration of climate risks in WS and WRM
- Reduced vulnerability to climate change in the provision of drinking water supply
- KM and M&E

LDCF: USD 7.14 m (PIF cleared)



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And a lot more...

KEY MESSAGES

- Strong national institutions a prerequisite: benefit from emerging opportunities.
- Quality information, skills & technology: efficient investment decision
- Long-term public finance
- Need for additional resources targeting Africa:
- CC is an opportunity for the water sector: Improved efficiency & effectiveness.
- AfDB's Water Operations mainstreaming CC: Stronger partnership

Stronger Infrastructure Base: For Adaptation & Water Security



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Thank you
Merci



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