

# Financing Instruments for Climate Resilience in Africa:

The Case of the Nile Basin

Gustavo Saltiel  
Program Manager  
Africa Water Resources Unit  
The World Bank

1st ICA Water Platform Meeting (Session 3)  
March 9, 2012  
Frankfurt, Germany

# Overview of Presentation

- **The Water Situation in Africa**
- **Case Study: Engagement in the Nile Basin**
- **New World Bank Financing Instruments**
  - (i) **The Climate Investment Funds (CIF) and the Pilot Program for Climate Resilience (PPCR)**  
*Example: Niger*
  - (ii) **The Cooperation in International Waters (CIWA) Trust Fund**
- **Conclusions**



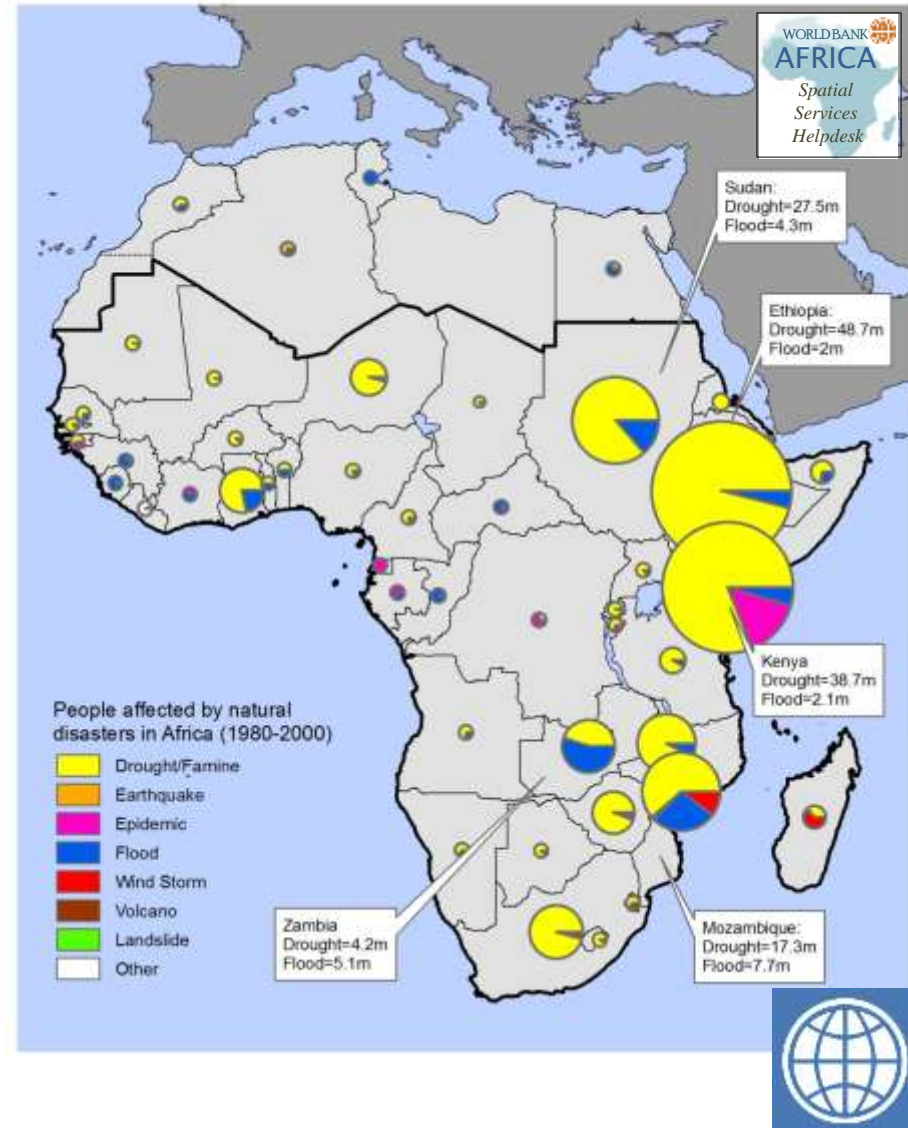
# The Water Situation in Africa

- Water is central to Africa's development (food security, energy, human well-being and environmental health), but management and development are challenging:
  - **Productive use of water is severely under-developed:**
    - Only 5% of Africa's cultivated land is irrigated; rain-fed subsistence agriculture sustains majority.
    - Less than 10% of hydropower potential has been tapped (compared to 75% in Europe); ~ one fifth of population has access to electricity.
    - Almost 40% of Africans do not have access to safe water; even fewer to sanitation.
    - Average storage capacity is only about 200 cubic meters/person/year (compared to nearly 6000 in North America).
  - Twin 'legacies' of very high **hydro-climatic variability and risks** (across time & space) and 60+ **rivers that cut across national boundaries.**



## The Water Situation in Africa (2)

- In challenges lie the opportunities: Productive use of water and mitigating climate risks is achievable through **cooperative management & development of shared water resources**.
- With a changing climate and increasing variability – including extremes of floods and droughts – comes a **greater necessity to work cooperatively towards managing risks and building a climate resilient future**.

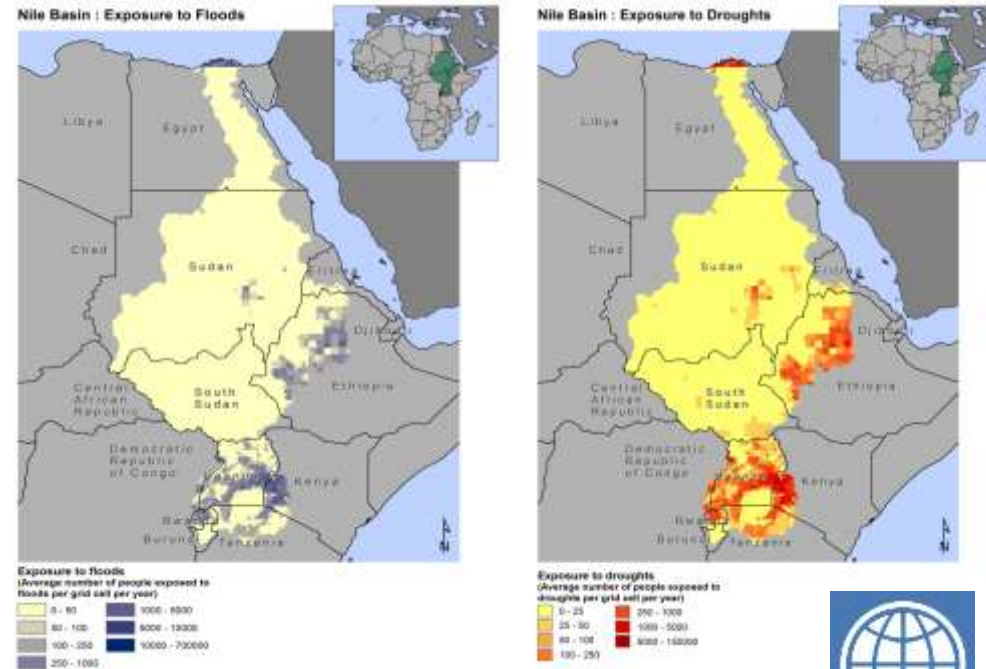
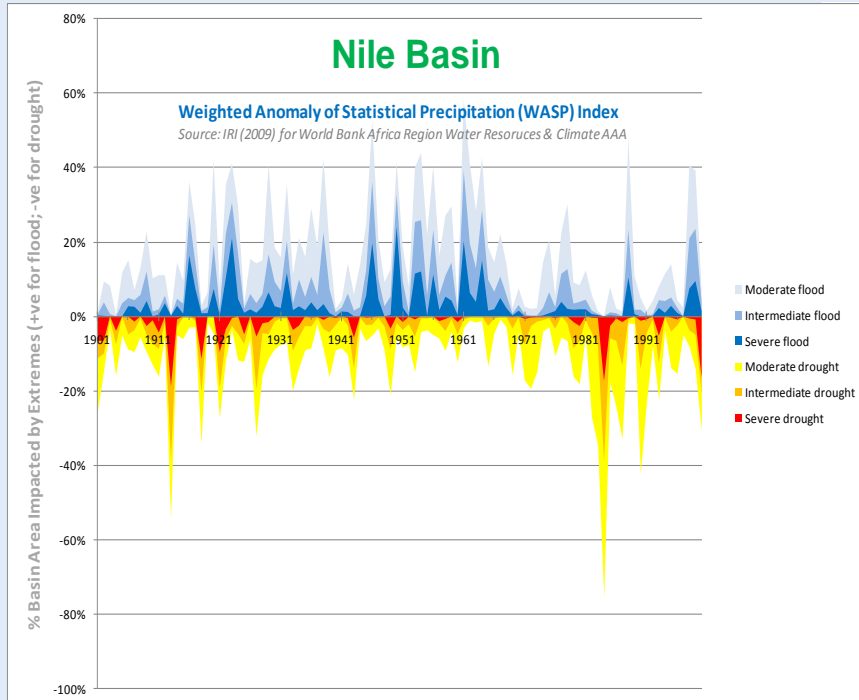


# The Nile Basin

- The Nile Basin is already susceptible to climate risks – the worst in Africa.
- Floods and droughts routinely cause devastation in the region.
- High spatial and temporal variability is also a challenge for agriculture, water resources management, hydropower generation, etc.

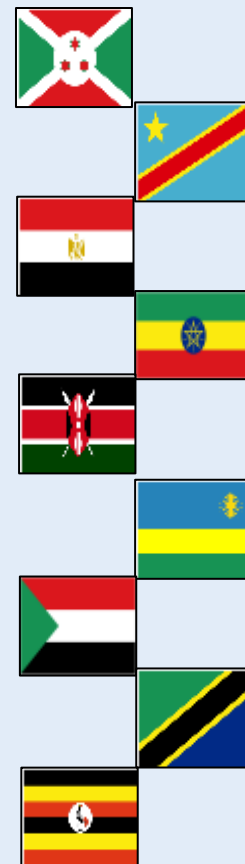
## Examples:

- **Kenya:** Between 1997 and 2000, floods and droughts were estimated to reduce GDP by 10-16% in each of the three years.
- **Ethiopia:** Hydrological variability was found to cost the economy 38% of its potential growth rate and cause 25% increase in poverty rates.



# New Nile Basin Climate Resilient Growth Program - Introduction

- This new program will support NBI's long-term objectives through its programmatic pillars (cooperation, WRM, WRD), all of which are working towards climate resilient growth
- Two phases of support over 5 years
  - > First Phase: \$15 m from 2013 to 2015
  - > Second Phase: \$30 m proposed from 2015-2018
  - > Financing for all 3 NBI Centers
- **Programmatic approach** with focus on **results** and use of **performance indicators**
  - > Disbursements are made against results
- Increased country commitment, including financing
- Flexibility given changing context



# New Nile Basin Climate Resilient Growth Program – Programmatic Approach

- Support elements of NBI’s program that also strengthen climate resilience
- Program falls into two tracks:
  - **Track 1: Grant Financing** (Investment preparation, Knowledge Management and Cooperation Services)
  - **Track 2: Investment Implementation** and detailed project design

Example of NELSAP Program,  
NBI Consolidated Note for 2013-16

Type of Financing Required	Program	Project Name	Duration	Budget
Grant Financing	Power	Preparation of Power Transmission Lines and Interconnection	5 years	\$11.7 M
		Operationalizing NELSAP Regional Interconnected Power Grid	3 years	\$3.0 M
		Preparation of Hydropower Projects	5 years	\$13.0M
	Agriculture	Regional Agricultural Trade and Productivity Project	4 years	\$25.6 M
	River Basin Management	Kagera RBM, Mara RBM, Sic-Malaba Malakisi RBM pre-investment studies	3 years	\$24.0 M
		Feasibility and detailed design for investments under the Multi-Sectoral Investment Opportunity Analysis	3 years	\$30.0 M
	Climate Change	Mainstreaming Climate Change Adaptation into Investment Programs	2 years	\$5.0 M
Institutional	NELSAP Program Coordination, Supervision, Monitoring and Implementation of the 5 year Strategic Plan	5 years	\$ 5.14 M	
<b>Total Grant Financing</b>				<b>\$123.8 M</b>
Investment Financing	Power	Implementation of Power Projects	5 years	\$904.0 M
	River Basin Management	RBM Projects - Small Dams Storage Infrastructure Development for Multi-purpose use	4 years	\$147.8 M
		Integrated Management of Transboundary water resources of lakes Rweru and Cyohoha and Akanyaru Marshland	3 years	\$50.0 M
	River Basin Management	RBM Projects: Restoration of watersheds for improved livelihoods	3 years	\$96.5 M
	Agriculture	Multi-national Lakes Edward and Albert integrated fisheries and water resources management project (DR Congo and Uganda)	5 years	\$40.0 M
<b>Total Investment Financing</b>				<b>\$1,238.3 M</b>



**Track 1: Grant Financing**  
Nile Basin Knowledge and Facilitation Services: *Support through Nile Basin Climate Resilient Growth Program*



**Track 2: Investment Implementation**  
Nile Basin Investment Programs – *Support through traditional World Bank Financing + new Instruments*



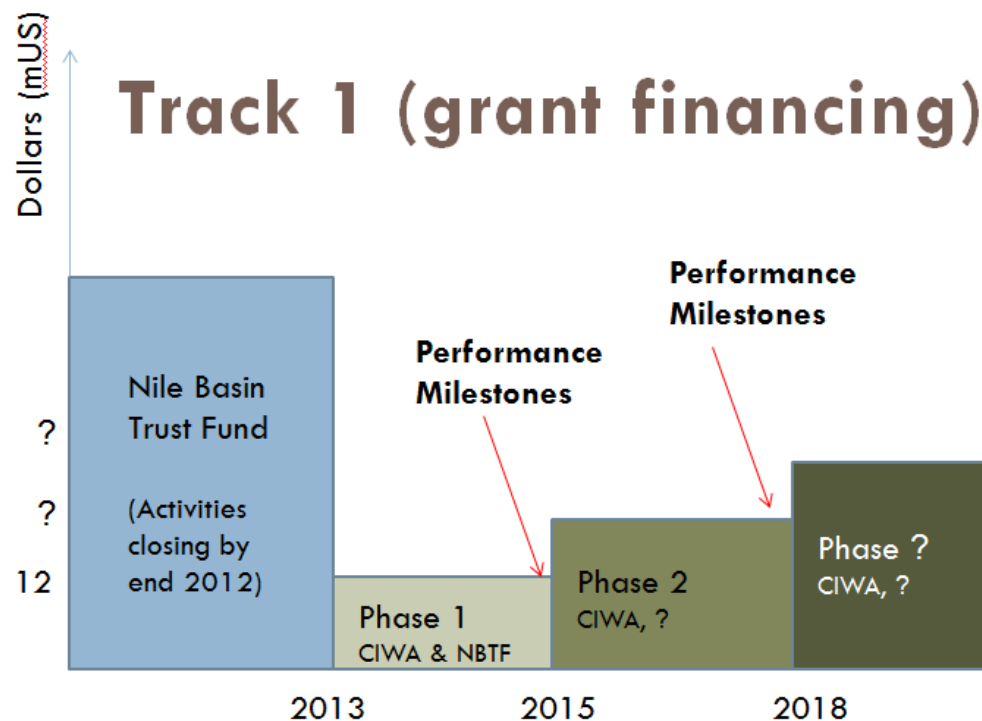


# New Nile Basin Climate Resilient Growth Program – Results-based Support

- A results based project creates a direct link between disbursement of financial contributions and the achievement of specific results.
- Results can include actions, outputs, and/or outcomes so that funding flows throughout course of project (not only at completion)
- Requires in-depth assessment of client capacity (mgmt., fiduciary, env./social, etc) and action plan (if necessary) to strengthen capacity, as there is less donor oversight than in traditional projects

## **Proposed Components:**

- (i) **NELSAP:** Advancing investment preparation of hydropower generation, irrigation and watershed development, and undertaking consultations (including regional investment forum).
- (ii) **ENTRO:** Scaling up of watershed management project, development of framework for climate-resilient WR planning and development and dam safety; and increasing flood resilience through flood mapping, info mgmt, and training.
- (iii) **Nile-SEC** Improving modeling and knowledge services for IWRM (including dev. of an integrated KM system), operationalization and maintenance of Nile Decision Support System; and delivering improved services for governance bodies and stakeholder to facilitate cooperation.



\* CIWA = Cooperation in International Waters Trust Fund



# Financing Instruments

- **Two new instruments would be available:**
- Under the **Climate Investment Funds (CIFs)**, administrated by the World Bank, new funding instruments are being explored to manage the **complexity and costs** associated with climate resilience and adaptation programs. These include the **Pilot Program for Climate Resilience (PPCR)**.
  - The **PPCR** instrument aims to pilot and demonstrate ways to integrate climate risk and resilience into core development planning and implementation.
  - **Strategic Programs for Climate Resilience (SPCRs)** help to coordinate PPCR activities; SPCR developed in AFR so far include those in Niger & Mozambique.
- **CIF / SPCRs** fund largely **Track 2** (Detailed design and project implementation) activities
- The **Cooperation in International Waters (CIWA) Trust Fund** New Trust Fund instrument who goal is to to strengthen cooperative management and development of international waters in Africa to facilitate sustainable, climate resilient growth
- **CIWA funds** largely **Track 1** (investment preparation) activities





## Mainstreaming new Instruments for Climate Resilience:

# Pilot Program for Climate Resilience (PPCR)

## Purpose

To help **highly vulnerable countries pilot and demonstrate ways to integrate climate risk and resilience into core development planning** while complementing other ongoing activities.

## Scale

**US\$ 992 million** in pledges, mainly grants with option to augment with IDA-like/highly concessional resources.

## Governance

Sub-Committee: Australia/UK, Bangladesh, Canada, Denmark/Norway, Germany, Jamaica, Japan, Samoa, Tajikistan, USA, Yemen, Zambia, the Adaptation Fund Board + observers (4 civil society, 2 indigenous peoples, 2 private sector, 1 rep. of community dependent on adaptation approaches), GEF, UNDP, UNEP, UNFCCC

## Measuring Success

- Increased capacity to integrate climate resilience into development
- Increased awareness of vulnerabilities and potential impacts
- Scaled-up investments for broader interventions and programming
- Improved coordination among stakeholders
- Capture & transfer of lessons learned



## Example: Niger SPCR

### Context

- Climate is characterized by *high variability* especially in terms of rainfall. Over the past forty years, the country has experienced *seven episodes of droughts*
- Chronic food insecurity affects half of the population and there is a heavy dependence on food aid during major droughts
- During the most recent drought in 2010, agricultural output fell 12% below the average and malnutrition affected 32% of the population
- Drought impacts are exacerbated by the extensive, “low-input”, “low-output” agricultural and livestock practices → soils exposed and vulnerable to erosion
- Other climate-related hazards include floods, sandstorms and locust invasions.

**For Niger improved climate resilience  
and improved food security go hand in hand**

# Activities and Projects Under Niger SPCR

## Pillars of the SPCR

## Activities

## Investment projects

Improved mainstreaming of climate resilience into poverty reduction and development planning strategies

Climate information and forecast

Tools of climate and environmental resilience for practitioners and policy makers

Capacity building and communication strategy

CLIMATE INFORMATION DEVELOPMENT AND FORECASTING PROJECT(PDIPC)

Investing in proven and innovative approaches which increase resilience to climate change

Support to sustainable land management

Social protection

Insurance against climate risks

COMMUNITY ACTION PROJECT FOR CLIMATE RESILIENCE (PACR)

Support to integrated management of water resources

PROJECT FOR THE MOBILIZATION AND DEVELOPMENT OF WATER RESOURCES (PROMOVARE)

Providing knowledge management and strategic coordination of the program

Strategic coordination of the activities of the program

Knowledge management

PACR + PDIPC + PROMOVARE

# The CIWA Trust Fund (1)

- Cooperation in International Waters in Africa (CIWA) Trust Fund has recently been established
  - The objective is ***to strengthen cooperative management and development of international waters in Africa to facilitate sustainable, climate resilient growth.***
  - Can support regional cooperation, upstream technical assistance, pre-investment activities, institutional strengthening, capacity building and knowledge sharing, stakeholder engagement and communication, etc.
- This new instrument can be utilized to support a new generation of climate-related activities in Africa, based on the need, demand, and readiness.
- CIWA is funded through a Multi Donor Trust Fund administered by the World Bank in accordance with its operational procedures.



# The CIWA Trust Fund (2)

- **Focus:** CIWA incorporates key current development issues – climate change, disaster risk management, etc. and has a clear *Investment Focus*. The program is oriented towards facilitating growth and development that will have real impact on the continent.
- **Long Term Program:** 10 years (2011 – 2020).
- **Funding Available:** Initial contributions = \$ 20 M (DFID + DANIDA)
- **Rationale:** to bring together the experience gained in different river basins into a focused initiative to support cooperation in international waters.
- **Immediate beneficiaries:** River Basin Organizations (RBOs), riparian governments and Regional Economic Communities (RECs) and other relevant regional agencies.

# Conclusions (1)

- **The Water Situation in Africa:** Twin ‘legacies’ of (i) very high hydro-climatic variability and risks (across time & space) and (ii) 60+ rivers that cut across national boundaries.
- **Urgent needs for financing the continent’s water security + adaptation “deficits”:** There is a need for both “**hard**” (> \$10 billion/year) and “**soft**”(>\$1 billion/year) investments.

## *Case Study: Engagement in the Nile Basin*

- The **Nile Basin Climate Resilient Growth (NBCRG)** program embodies a **new approach** to support the NBI’s long-term objectives that is **programmatic, results-oriented**, and focuses on select activities that promote **climate-resilient growth** in the Nile basin.
- The NBCRG program provides grant financing for “**Track 1**” (Investment preparation) activities – while “**Track 2**” (Investment Implementation and Detailed Project Design) activities are being picked up by WB and other DPs through more “traditional” funding mechanisms.



# Conclusions (2)

- ICA Water Platform, CIF, CIWA, and others are interesting initiatives:
  - The **Climate Investment Fund (CIF)**, under which the **Pilot Program for Climate Resilience (PPCR)** supports largely Track 2 – Investment implementation and project design activities.
  - The **Cooperation in International Waters (CIWA) Trust Fund** (which supports largely Track 1 – Investment preparation activities).  
*-Includes support to the Nile Basin Climate Resilient Growth program*
- **However: a new generation of Adaptation Financing instruments is needed to** respond to the impacts of climate change through significant investment programs



**Thank you for your attention.**

Gustavo Saltiel  
Program Manager  
Africa Water Resources Unit  
The World Bank

[gsaltiel@worldbank.org](mailto:gsaltiel@worldbank.org)