



## Fifth Nile Basin Development Forum

23-25 October 2017, Kigali, Rwanda

Investing in Nile Cooperation for a Water Secure Future



### PROGRAMME OVERVIEW

Day 1 – 23 October 2017					
15:30 – 18:00	Opening Session				
16:00 – 21:00	Nile Media Awards ceremony and concert by The Nile Project				
Day 2 – 24 October 2017					
09:00 – 10:00	Plenary Session 1 – <i>Water Security – from concept to practice</i>				
10:00 – 10:30	Coffee break				
	<b>Paper presentation sessions – <i>Taking stock of what we know</i></b>				
	<b>Ensuring water availability for a growing demand</b>	<b>Sustaining the water ecosystems of the Nile Basin</b>	<b>Water-Energy-Food Nexus</b>	<b>Governance in the Nile Basin</b>	<b>Economic Perspectives for Basin Management</b>
10:30 – 12:00	WA1 - Climate change	ECO1 - Catchment/Watershed Management	WEF1 - Food production and water management	GOV1 - Transboundary cooperation: sharing experiences	ECN1 - Economic valuation of ecosystem services
12:00 – 13:30	<i>Lunch break</i>				
13:30 – 15:00	WA2 - WR Availability and Variability	ECO2 - Sustainable management of Wetlands	WEF2 - Multi-sector Planning and tradeoffs	GOV2 - Hydro-politics of the Nile Basin	ECN2 - Hydro-economics of water allocation
15:00 – 15:30	<i>Coffee break</i>				
15:30 – 17:00	WA3 - Enhancing water resources supply	ECO3 - Environmental Flows	WEF3 - Coordinated planning and management	GOV3 – Multi-track Hydro diplomacy	ECN3 – investment and trade: the current landscape
Day 3 – 25 October 2017					
08:30 – 10:15	Plenary 2 – <i>Water Security in the Nile Basin</i>				
10:15 – 10:45	Coffee Break				
	<b>Panel Sessions – <i>Exploring solutions and pathways</i></b>				
10:45 – 12:15	<b>Thematic Panel 1:</b> Options for conserving and diversifying water source	<b>Thematic Panel 2:</b> Reconciling ecosystem sustainability with water resources investment planning	<b>Thematic Panel 3:</b> Towards a basin approach for efficient agricultural water management and food security	<b>Thematic Panel 4:</b> Regional integration through hydraulic infrastructure	
12:15 – 13:30	<i>Lunch Break</i>				
	<b>Synthesis Panel Sessions – <i>How to take it forward</i></b>				
13:30 – 15:15	<b>Synthesis Panel 1:</b> Nile Cooperation, how to make the qualitative leap forward?		<b>Synthesis Panel 2:</b> Rethinking basin planning and investment in the Nile Basin		
15:15 – 16:00	<i>Coffee Break</i>				
16:00 – 17:00	<b>High level panel</b>				
17:00 – 17:30	<b>Closing</b>				



## Fifth Nile Basin Development Forum

23-25 October 2017

Radisson Blu Hotel & Convention Center, Kigali, Rwanda  
*Investing in Nile Cooperation for a Water Secure Future*



*DRAFT PROGRAMME*

### **DAY 1 – Monday, 23<sup>rd</sup> October 2017**

*Participants are expected to register for the event at the Opening Session. Organisers, hosts and partners welcome participants to the Fifth Nile Basin Development Forum and introduce the programme for the following days. The Guest of Honour will visit the exhibition which will be open to participants for the duration of the NBDF.*

<b>Opening Session</b>	
<b>15:30 – 16:00</b>	Registration over tea and coffee
<b>16:00 – 16:05</b>	Welcome statement by MC
<b>16:05 – 16:15</b>	Poem presentation by school children
<b>16:15 – 16:25</b>	Welcome remarks by Eng Innocent Ntabana, Executive Director, NBI Secretariat
<b>16:25 – 16:35</b>	Welcome remarks by HE Amb. Rolf Welberts, German Special Envoy for Nile Cooperation Affairs
<b>16:35 – 16:45</b>	Welcome remarks by World Bank representative
<b>16:45 – 16:55</b>	Welcome remarks (possibly) Nile-COM member of Rwanda
<b>16:55 – 17:05</b>	Opening speech by the Guest of Honor
<b>17:05 – 17:25</b>	Introduction to the program by MC
<b>17:25 – 18:00</b>	Exhibition

*The Nile Media Awards 2017 seek to recognize journalists from within the Nile Basin for excellent reporting on Nile cooperation issues in order to promote increased, factual and increased, accurate and factual reporting on these issues.*

<b>Nile Media Awards 2017 Ceremony and Nile Project Concert</b>	
<b>18:00 – 19:00</b>	Nile Media Awards Ceremony (incl. dinner)
<b>19:00 – 21:00</b>	The Nile Project Concert

## DAY 2 – Tuesday, 24<sup>th</sup> October 2017

As water in the Nile Basin becomes an increasingly scarce resource, given the impacts of climate change, demand continues to rise with the growing populations and economies of the Nile Basin states. However, there are a wide range of options available to riparian states seeking to meet these growing demands by investing in cooperative solutions to managing water resources in an integrated and equitable manner. The first Plenary Session of the 5<sup>th</sup> NBDF will explore the concept of water security, what it means for the Nile Basin, and how cooperation can help achieve it for up- and downstream countries alike.

09:00 – 10:00	<p style="text-align: center;"><b>Plenary Session 1: Water Security – from concept to practice</b></p> <ul style="list-style-type: none"> <li>- <b>Brief introduction to the programme and theme of NBDF; MC</b></li> <li>- <b>Keynote 1:</b> River Basin Management Pathways to Water Security; <i>Don Blackmore</i></li> <li>- <b>Keynote 2:</b> Indicative scenarios of cooperative solutions for addressing up- and downstream water demands; <i>Prof. Dale Whittington</i></li> </ul>
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10:00 – 10:30	Coffee break
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A first step in moving towards a basin-wide approach to managing the waters of the Nile is to take stock of the knowledge and solutions already available in the basin. Three rounds of paper presentation sessions will collect the experience of scientists and practitioners on topics ranging from water resources and food security, energy access – and the nexus between these three –, water ecosystems, governance, financing options and knowledge assets. These have been arranged in five parallel session series, as outlined below, with each session featuring presentations from four experts as well as a short discussion.

Session Series	Session Series I: Ensuring water availability for a growing water demand (WA)	Session Series II: Sustaining the water ecosystems of the Nile Basin (ECO)	Session Series III: Water – energy – food nexus (WEF)	Session Series IV: Governance (GOV)	Session Series V: Economic Perspectives for Basin Management (ECN)
	This session aims to build common understanding on current and projected future availability, variability (natural and due to climate change) and accessibility of water resources in the Nile Basin and generate options for enhancing water supply/availability for meeting the growing water demands.	The objective of this session is to take stock of current understanding and knowledge of the two most critical elements of the Nile basin environment – wetlands and catchments; explore options for their sustainable management determining technical, policy and institutional requirements.	This session shall identify key intra-, inter-sectoral and u/s – d/s tradeoffs and explore/propose/recommend strategic options for regional coordinated approaches (infrastructure, institutions and policies) to meet the growing water, energy, and food demands in the Nile Basin	The objective of this session is to identify constraints and opportunities for effective transboundary water governance, explore options and draw workable recommendations for cooperative management and development of the Nile Basin.	This session seeks to create a shared understanding of how economic considerations are currently impacting the management of water resources, as well as the potential opportunities for economics, trade and business in furthering sustainable development of the Nile waters.

Paper presentation sessions: <i>taking stock of what we know</i>					
10:30 – 12:00	WA1 - Climate change	ECO1 - Catchment/Watershed Management	WEF1 – Food production and water management	GOV1 - Transboundary cooperation: sharing experiences	ECN1 - Economic valuation of ecosystem services
	Climate Change projections for the Nile Basin: what do the climate models tell us?	Soil and Water conservation, experiences from upper Blue Nile Basin, Ethiopia	Harnessing Water for Food Security: Challenges and options	Beyond legalisms: toward cooperative governance of resource security	The Value of the Sudd Wetland: Implications for Integrated Policies in the Nile River Basin
	<i>Dr. Bruce Hewston (tbc)</i>	<i>Mr. Adugnaw Tadesse</i>	<i>Dr. Eltigani Abdelgalil</i>	<i>Ms. Belynda Petrie</i>	<i>Dr. Hannes Lang</i>
	Analyzing the future climate change of Upper Blue Nile River Basin (UBNRB) using statistical down scaling techniques	Assessing impact of land use and land cover change on stream flow response: Dinder and Rahad	Technical efficiency of large scale irrigated wheat production in Blue Nile basin, case of Koga irrigation scheme	TB water governance and cooperation through Benefit Opportunities Assessment Dialogue in the Sio-Malaba-Malakisi sub-basin	Applying standardized methodology to value biodiversity and ecosystem services in the Lake Victoria Basin
	<i>Mr. Dagnenet Fenta Mekonnen</i>	<i>Eng, Khalid Hassaballah</i>	<i>Mr. Anteneh Belay</i>	<i>Mr. John Owino</i>	<i>Dr. Brenda Bergman</i>
	Impact of climate change on precipitation distribution and water availability in the Nile basin	Livelihood Contribution of landscape restoration;	Impacts of irrigation development in the upper blue Nile basin using Nile basin DSS	Project based transboundary cooperation: the case of GERD-P	Rapid Assessment of Ecosystem Service values at Yala Wetland, Kenya
	<i>Mr. Zelalem Mekonnen</i>	<i>Mr. Yitbarek Tibebe Welde semaet</i>	<i>Eng. Habtam Achenif</i>	<i>Eng. Gedion Asfaw</i>	<i>Mr. Justus Amayo</i>
	The National Impact of 1.5 and 2 Degree Global Warming over Africa, and the Role of Aridity	Catchment restoration for a sustainable renewable energy production in Upper Nyabarongo Catchment, Rwanda	Satellite based ICT for improved crop production in the Gezira Scheme – Sudan	GERD and Hydro-politics in the Eastern Nile, from water to benefit sharing?	Economic Valuation of Wetlands Ecosystems for Wise Use Review and Case Studies from the Nile Basin
	<i>Dr. Modathir Zaroug</i>	<i>Mr. Francois Tetero</i>	<i>Prof. Younis Gismalla</i>	<i>Dr. Rawia Tawfik</i>	<i>Dr. Amel Azab</i>
	Discussion	Discussion	Discussion	Discussion	Discussion

12:00 – 13:30	Lunch break				
13:30-15:00	<b>WA2 - WR Availability and Variability</b>	<b>ECO2 - Sustainable use and management of Wetlands</b>	<b>WEF2: Multi-sector planning and tradeoffs</b>	<b>GOV2 - Hydro-politics of the Nile Basin</b>	<b>ECN2 - Hydro -economics of water allocation</b>
	Invited presentation on surface water availability; variability; climate change impacts;	Supporting Sustainable Management of the Mara Wetlands in the Mara River Basin	Eastern Nile Multi-Sectoral Investment Opportunity Analysis	Collective Action Theory and Nile Basin Cooperation: Past Experience, Future Directions	Water in national economic planning: utilization, challenges and valuation.
	<i>Prof. Alaa El-Zawahiri</i>	<i>Mr. Emmanuel Mгимwa</i>	<i>Ms. Azeb Mersha</i>	<i>Dr. Alan Nicol</i>	<i>Dr. Khalid Siddig</i>
	Use of EO Data for Monitoring River Basins.	Community Conservation Agreements Model for Sustainable Management of Winam Gulf Wetlands,	Influence of Roseires Dam Heightening on Performance of Al-guneid Irrigation Pumps in Sudan	Hydro politics, Hydro-hegemony and the Problem of Egypt's Securitization of the EN Basin	Eastern Nile Multipurpose Option Scoping Model
	<i>Ms. Milly Mbuliro</i>	<i>Ms. Roniance Adhiambo</i>	<i>Prof. Ali Adeeb</i>	<i>Dr. Akwei Benjamin</i>	<i>Ms. Azeb Mersha</i>
	Assessment of GW of Blue Nile Sudan	How Healthy is the Lake Victoria Ecosystems Goods and Services?: Gender-Ecosystem-Poverty linkage Perspective.	Using WEAP Model to Monitor and Manage the Blue Nile River Basin	Role of water diplomacy in TB cooperation in EN: Application of experimental games	Projecting downstream impacts of the GERD: the case of irrigated schemes in Sudan
	<i>Dr. Elmusalami Fadlallah</i>	<i>Dr. Aloyce Hepelwa</i>	<i>Eng. Mohamed Mokhtar</i>	<i>Dr. Mahsa Motlagh</i>	<i>Dr. Shamseddin Ahmed</i>
	Flood forecasting and early warning	Incentives Based Conservation Approach for Nile Basin Wetlands Wise-use by	Mainstreaming value of Ecosystems and Biodiversity in Development Planning: Tana River Basin	The Emotional River: The Hydro political Psychology of the Nile	Updating the hydrology of the Baro-Akobo-Sobat
	<i>Eng. Surafel Mamo Woldegbrael</i>	<i>Amos Thiongo</i>	<i>Ms. Julie Mulonga</i>	<i>Mr. Wondwosen Michago Seide</i>	<i>Dr. Verno Jonker</i>
	Discussion	Discussion	Discussion	Discussion	Discussion

15:00-15:30	<i>Coffee Break</i>				
15:30-17:00	<b>WA3 - Enhancing water resources supply</b>	<b>ECO4 – Environmental Flows</b>	<b>WEF3 – Coordinated planning and management</b>	<b>GOV3 – Multi-track Hydro- diplomacy</b>	<b>ECN3 – Investment and trade: exploring the current landscape</b>
	Scope for diversifying water resources supply in the Nile Basin	A Framework Model for Strategic Environmental Assessment for River Engineering Development	Towards operation of dam cascades, approaches of NBI in the Eastern Nile	Realizing the water security of the Nile Basin states: exploring the options	Political economy of large scale agricultural investment in the Nile Basin: exploring opportunities and challenges
	<i>Dr. Yassir Abas</i>	<i>Mr. Lugard Kaunda Ogaro</i>	<i>Eng. Michael Abebe;</i>	<i>Dr. John R. Nyaoro</i>	<i>Ramy Hanna</i>
	Rainfall Harvesting Projects in Sudan	Environmental flow assessment: NBI experience; include case studies (dinder)	Challenges facing Atbara Dam Complex (ADC) Operation Management	The role of media and science communication in shaping debates and negotiations over the Nile.	Food, Fodder and Flowers: the critical role of global and regional virtual water trade in the Nile Basin
	<i>Dr. Ahmed Adam</i>	<i>Dr. Mohsen Alarabawy</i>	<i>Prof. Abdalla Abdelsalam Ahmed</i>	<i>Dr. Emanuele Fantini</i>	<i>Dr. Ana Elisa Cascao</i>
	Challenges and success factors to enhancing rural community resilience to drought- Case study Bugesera in Rwanda	Environmental flow for the Nile Basin: Framework for regional evaluations and a case study from the Mara river	Seeking Compromise with the GERD	Integrated diagnostic approach to understand stakeholder's role and impact on water governance in the Nile Basin	Business Corporations in the Eastern Nile Basin: Engine or Barrier of Effective Water Governance?
	<i>Eng. Lazare Nzeyimana</i>	<i>Dr. Gordon O'Brien</i>	<i>Dr. Kevin Wheeler</i>	<i>Mr. Mohamedh Tawfik</i>	<i>Ms. Abeer Abazeed</i>
Groundwater availability and potential in the Nile Basin	Evaluation of experiences with e-flow assessments in the East Africa	National Water Projects in the Eastern Nile Basin: Drivers to Conflict or Cooperation?	The Nile Project: culture and education dimensions of water diplomacy;	Climate finance: opportunities for investment in the water sector	
<i>Dr. Seifu Kebede (tbc)</i>	<i>Prof. Michael McClain</i>	<i>Eng. Mina Michel Samaan</i>	<i>Mina Girgis</i>	<i>Herman Kwoba</i>	
Discussion	Discussion	Discussion	Discussion	Discussion	
17:00 – 18:00	<i>Open Space (Exhibition visits, book launches, side meetings)</i>				

## DAY 3 – Wednesday, 25<sup>th</sup> October 2017

Day 3 aims to pave a way forward for Nile Basin countries to explore joint solutions to river basin management. The Plenary introduces current strategies at the national level, NBI's approach to exploring possible solution pathways and examples of how two other river basins are addressing similar challenges.

08:30 – 10:25	<b>Plenary Session 2: Coordinated planning and management of shared water resources for enhancing water security in the Nile Basin</b> <ul style="list-style-type: none"> <li>• Review of Day 2, introduction to Day 3; <i>MC</i></li> <li>• <b>Country perspectives (4) on future water demands, challenges and strategies for addressing the growing water demands</b></li> <li>• <b>Keynote 1:</b> Exploring how to address projected growth in water demands, NBI's approach; <i>Dr. Abdulkarim Seid</i></li> <li>• <b>Keynote 2:</b> Water security through regional basin planning – an example from the SADC region; <i>(tbc)</i></li> <li>• <b>Keynote 3:</b> Adapting water governance to emerging needs and challenges, example from the Colorado river basin; <i>Prof. Edith Zagona</i></li> </ul>
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10:20 – 10:45	<i>Coffee break</i>
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Four parallel panel sessions draw on the vast knowledge collected on day two and begin to explore possible solutions and pathways to the sustainable and cooperative management and development of the Nile Basin's resources. Each panel will feature three short expert inputs to stimulate discussion.

10:45 – 12:15	<b>Panel Sessions: exploring solutions and pathways</b>			
	<b>Thematic Panel 1: Options for conserving and diversifying water source</b>	<b>Thematic Panel 2: Reconciling ecosystem sustainability with water resources investment planning</b>	<b>Thematic Panel 3: Towards a basin approach for efficient water management and food security</b>	<b>Thematic Panel 4: Regional integration through hydraulic infrastructure</b>
	<i>Enhancing and diversifying water sources: scanning the options for the Nile Basin</i>	<i>Environmental flows: how to use existing best practice in the Nile Basin region</i>	<i>Food security through basin-wide approaches of agricultural water management</i>	<i>Coordinated operation of cascade of dams, experiences from the Colorado Basin, USA</i>
	<i>Dr. Yassir Abbas</i>	<i>Prof. Michael McClain</i>	<i>Bart Hilhorst</i>	<i>Prof. Edith Zagona</i>
	<i>Improved demand side management and use of non-conventional water;</i>	<i>Water requirements of Wetlands: Integrating wetland sustainable use and management in basin planning</i>	<i>Regional agricultural trade and investment in the Nile Basin;</i>	<i>Power inter-connection and energy trade, NBI's experience.</i>
	<i>Dr. Mohammed Hassan (tbc)</i>	<i>Paul Ouédraogo</i>	<i>Dr. Claudia Ringler</i>	<i>Mr. Ellicad Nyabeeya</i>
	<i>Groundwater as complementary water source</i>	<i>Integrated watershed management for protection of water source areas and sustainable livelihoods</i>	<i>Aligning national agricultural policies with basin perspective</i>	<i>Regional integration through hydraulic infrastructure: the economic arguments</i>
	<i>Dr. Callist Tindimugaya (tbc)</i>	<i>Dr. Seifu A. Tilahun (tbc)</i>	<i>Prof Rashid Hassan</i>	<i>Marc Jeuland</i>
	<i>Short interventions by three additional panelists</i>	<i>Short interventions by three additional panelists</i>	<i>Short interventions by three additional panelists</i>	<i>Short interventions by three additional panelists</i>
	<i>Discussion and audience Q&amp;A</i>	<i>Discussion and audience Q&amp;A</i>	<i>Discussion and audience Q&amp;A</i>	<i>Discussion and audience Q&amp;A</i>

12:15 – 13:30	Lunch break
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Two parallel synthesis panels seek to further focus the discussions of the previous days and translate them into specific options for Nile Basin countries to take move their cooperation forward.

13:30- 15:15	<b>Synthesis Panel Session: <i>how to take it forward</i></b>	
	<b>Synthesis Panel 1:</b> Nile Cooperation, how to make the qualitative leap forward?	<b>Synthesis Panel 2:</b> Rethinking basin planning and investment in the Nile Basin
	<i>Qualitative leap in Nile cooperation, reflecting on the outcomes of the paper and panel sessions</i>	<i>Building blocks for a water secure Nile Basin: reflecting on the outcomes of the paper and panel sessions</i>
	<i>Strengthening the dialogue: structured dialogue as a means for exploring breakthrough options in transboundary cooperation</i>	<i>NBI's 10 year strategy: Re-thinking regional investment and basin planning</i>
	<i>Prof Jon Martin Trondalen</i>	<i>Dr. Abdulkarim Seid</i>
	<i>International water law perspectives</i>	<i>International experience in joint basin planning and investments</i>
	<i>Dr. Salman Salman</i>	<i>Don Blackmore</i>
	<i>Short interventions by other panelists</i>	<i>Short interventions by other panelists</i>
	Discussion: Q and A from audience, panel members reflection	Discussion: Q and A from audience, panel members reflection

15:15 – 16:00	Lunch break
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In the High Level Panel, Nile Basin Ministers of Water Affairs will deliberate on the messages and possible solution pathways emerging from the 5<sup>th</sup> NBDF.

16:00 – 17:00	<b>High Level Panel – <i>moving the agenda forward together</i></b> <ul style="list-style-type: none"> <li>- <i>Reporting back on key issues: chief rapporteur</i></li> <li>- <i>Introduction by Moderator</i></li> <li>- <i>Ministers of water affairs from Nile Basin countries deliberate on issues and solution options synthesized from the sessions</i></li> <li>- <i>Wrap-up of the high level panel deliberations by Moderator</i></li> </ul>
17:00 – 17:30	<b>Closing</b> <ul style="list-style-type: none"> <li>- Messages from the forum, by <i>chief rapporteur</i></li> <li>- Words of thanks, by Executive Director of NBI;</li> <li>- Closing remarks by Host Country Nile-COM member</li> </ul>