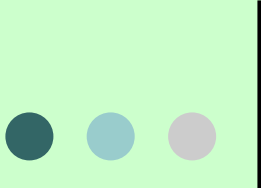




# **Environmental Assessment in the International Context**

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Chief Counsel  
Environmental and International Law  
Legal Vice Presidency  
March 24, 2009**



# Demands for Infrastructure

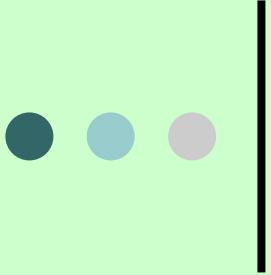
- **Developing Country Needs:** 884 million people without access to safe water, 1.6 billion without electricity, and 2.5 billion without sanitation.
- **Demand for infrastructure:** Developing countries require investment near US\$900 billion p.a. for maintaining existing infrastructure and building anew to respond to pressing development needs.
- **Key trends:**
  - climate change;
  - globalization of trade and services;
  - growing regional disparities in the context of rapid urbanization and decentralization;
  - changing global financial conditions, including increases in private investment in infrastructure in emerging markets;
  - an increasingly complex global aid architecture;
  - rising energy prices;
  - the potential breakthroughs in sustainable technologies; and
  - the food crisis.
- **For FY08-11,** WBG plans scale in finance and advisory services between US\$59 and US\$72 billion, and leverage additional US\$109 to US\$149 billion.



# World Bank Policy on Environmental Assessment

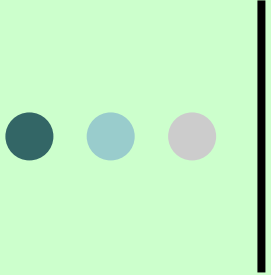
- Brief history

- **1984** – First Bankwide Policy Statement on Environment, “Environmental Aspects of Bank Work”
- **1989** – Operational instructions on environmental assessment (Operational Directive 4.00, Annex A)
- **1991** – Operational Directive 4.01 on Environmental Assessment
- **1999** – Operational Policy 4.01 on Environmental Assessment



# Highlights of OP 4.01

- The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus improve decision-making.



# Highlights of OP 4.01

- EA takes into account the natural environment ... human health and safety; social aspects (involuntary resettlement, indigenous peoples, and cultural property); and transboundary and global aspects. EA...also takes into account obligations, pertaining to project activities, under relevant international environmental agreements. Bank does not finance project activities that would contravene such obligations....



# EA Instruments

- Depending on the project, a range of instruments can be used to satisfy the Bank's EA requirement.
  - EIA
  - Regional or sectoral EA
  - Environmental audit
  - Hazard or risk assessment
  - Environmental management plan



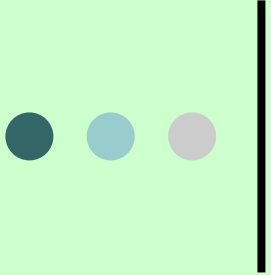
# EA Categories

- **Category A** – likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented
- **Category B** – potentially adverse environmental impacts that are site specific and mostly reversible;



# EA Categories

- **Category C** – likely to have minimal or no adverse environmental impacts
- **Category FI** – involve investment of World Bank funds through a financial intermediary (Apex bank) in sub-projects that may result in adverse environmental impacts



# EA Report for Category A

- The EA report should include:

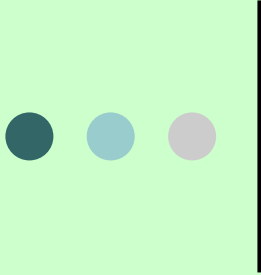
*Policy, legal, and administrative framework*

*Project description for area of influence*

*Baseline date*

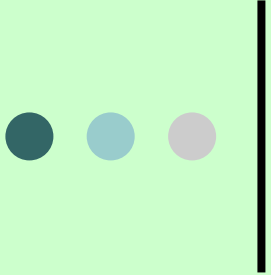
*Analysis of alternatives*

*Environmental Management Plan*



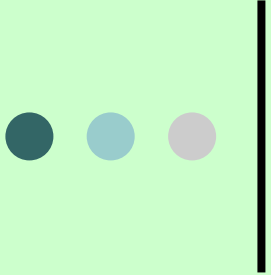
# EIA and International Law

- International environmental conventions
  - UN Convention on Biological Diversity
  - UN Framework Convention on Climate Change
- Regional Environmental Agreements
  - Espoo Convention
  - Aarhus Convention
- Other “soft laws”
  - Equator Principles
  - Other MDB operational policies
  - World Bank Group Environmental, Health, and Safety Guidelines  
(<http://www.ifc.org/ifcext/sustainability.nsf/Content/EnvironmentalGuidelines>)



# EIA: National Context

- During the 1990s, practically half of the countries in Sub-Saharan Africa developed legislation on EIA
- e.g. South Africa: 4 step procedure
  - Plan of study for scoping
  - Scoping report
  - Plan of study for environmental impact assessment
  - Environmental impact report
    - Consultation throughout all these steps with the affected communities and relevant authorities

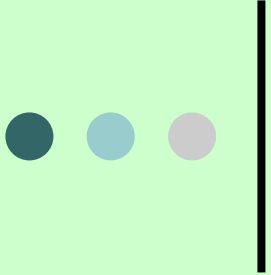


# EIA: Case Study

- Uganda

- National Environment Act (NEA)– main EIA law

- “any development that involves dams, rivers and water resources (including storage dams, barrages and weirs) or electrical infrastructure (including electricity generation stations, electrical transmission lines and electrical substations) requires an EIA.”



# EIA: Case Study

- Bujagali Hydropower Project – 250 Megawatt on the Victoria Nile
  - Potential environmental impacts include inundation of certain land
  - Proposed mitigation measures: restoration of native vegetation on former agricultural lands and the reservoir margins, measures to enhance natural habitats at the Kalagala-Itanda offset sites

## Summary of World Bank Group and Government of Uganda's Environmental Standards and Guidelines Applicable to the Proposed Bujagali HPP

Parameter	WBG Guidelines	GOU Stand.	Project Stand./Req
<b><i>Air Emissions</i></b>			
Air emissions – dust control measures for materials handling and storage	Equipment related to material handling and storage (such as conveyor systems, silos and all transfer points) should be covered and equipped with dust collectors.	None stated	Equipment related to material handling and storage should be covered and equipped with dust collectors.
<b><i>Ambient Air Quality</i></b>			
Ground level concentrations of particulate matter	Annual arithmetic mean < 50 µg/m <sup>3</sup> (at Plant boundary) Maximum 24 hour average: 70 µg/m <sup>3</sup> (95% of the time), at plant boundary.	Maximum 24 hour ave.: 300 µg/m <sup>3</sup>	Annual arithmetic mean < 50 µg/m <sup>3</sup> (at plant boundary) Max 24 hour average: 70 µg/m <sup>3</sup> (95% of the time).
<b><i>Workplace Air Quality</i></b>			
Workplace air quality: monitoring	<p>Periodic monitoring of workplace air contaminants relative to worker tasks and plant operations is required. Workplace air quality monitoring equipment should be well maintained.</p> <p>Ventilation systems should be provided and appropriately maintained to control work area temperatures and humidity. HVAC and industrial cooling systems shall be operated in a manner to prevent growth/spread of disease agents.</p>	None stated	Periodic monitoring of workplace air quality should be conducted for air contaminants relevant to employee tasks and the plant's operations.

# Compliance of the Bujagali Hydropower Facility with Government of Uganda Legislation and Regulations

Act or Regulation	Project Status: Rationale
The Constitution of the Republic of Uganda, 1995	Complies: The Bujagali hydropower facility has been planned in accordance with all relevant government enacted laws to protect and preserve the environment from abuse, pollution and degradation, and to manage the environment for sustainable development. The Government of Uganda executed the Power Purchase Agreement with BEL in December 2005.
The Investment Code No. 1/91	Complies: BEL, being a foreign company, has applied for and been granted an Investment Licence by the Uganda Investment Authority.
The Electricity Act, 1999	Compliance Underway: BEL will require a generation license for the hydropower facility, under S.52 of the Act. Under S.76 (7). This license can only be granted after the SEA report has been approved by NEMA. BEL, as a holder of a license for hydropower generation, will pay royalties to the Jinja and Mukono District governments, as agreed upon by the Electricity Regulatory Authority. BEL will provide compensation for affected people, determined in accordance with the Land Act, 1998 and the Land Acquisition Act, 1965. Where an interest in land greater than the right of use is required for purposes of construction, the Government of Uganda may exercise compulsory acquisition.
The National Environment Management Statute, 1995 and its Regulations	Complies: Social and Environmental Assessment Study was prepared following the requirements of the EIA Regulations. Under S.35 (2), NEMA must grant a written waiver to BEL of the prohibitions in S. 35 (1) of in-river construction activities. A requirement of the National Environment (Wetlands, Riverbanks and Lakeshores) Management Regulations states that rivers like the Victoria Nile shall have a protection zone of one hundred meters from their highest watermark. This will be upheld by BEL following inundation of the reservoir and this zone shall be regulated by NEMA.

## Compliance of the Bujagali Hydropower Facility with International Treaties and Conventions Ratified by Uganda

Treaty/Convention	Status: Rationale
1992 International Convention to Combat Desertification	Complies: Activities associated with the Bujagali Hydropower Facility will not promote desertification.
1992 Convention on Biological Diversity	Complies: The Bujagali Hydropower Facility addresses effects on biodiversity.
1992 Climate Change Convention	Complies: Under the convention, developing countries are not bound by formal emission requirements. Regardless, electricity production by hydropower is considered to release relatively low CO <sub>2</sub> emissions compared to main alternative of electricity production by combustion of fossil fuels, and therefore contributes positively to an overall strategy to minimise CO <sub>2</sub> emissions.
Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in World Flora and Fauna	Complies: The Bujagali Hydropower Facility will not involve importation or exportation of flora or fauna. Measures are in place to manage illegal take of bush meat during construction.