



Water in Africa: Hydro-Pessimism or Hydro-Optimism?

Água em África: Hidro-pessimismo ou Hidro-optimismo

Centro de Estudos Africanos da Universidade do Porto
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Social and Cultural Impacts of Large Dams: the Case-study of the Merowe Dam in Sudan

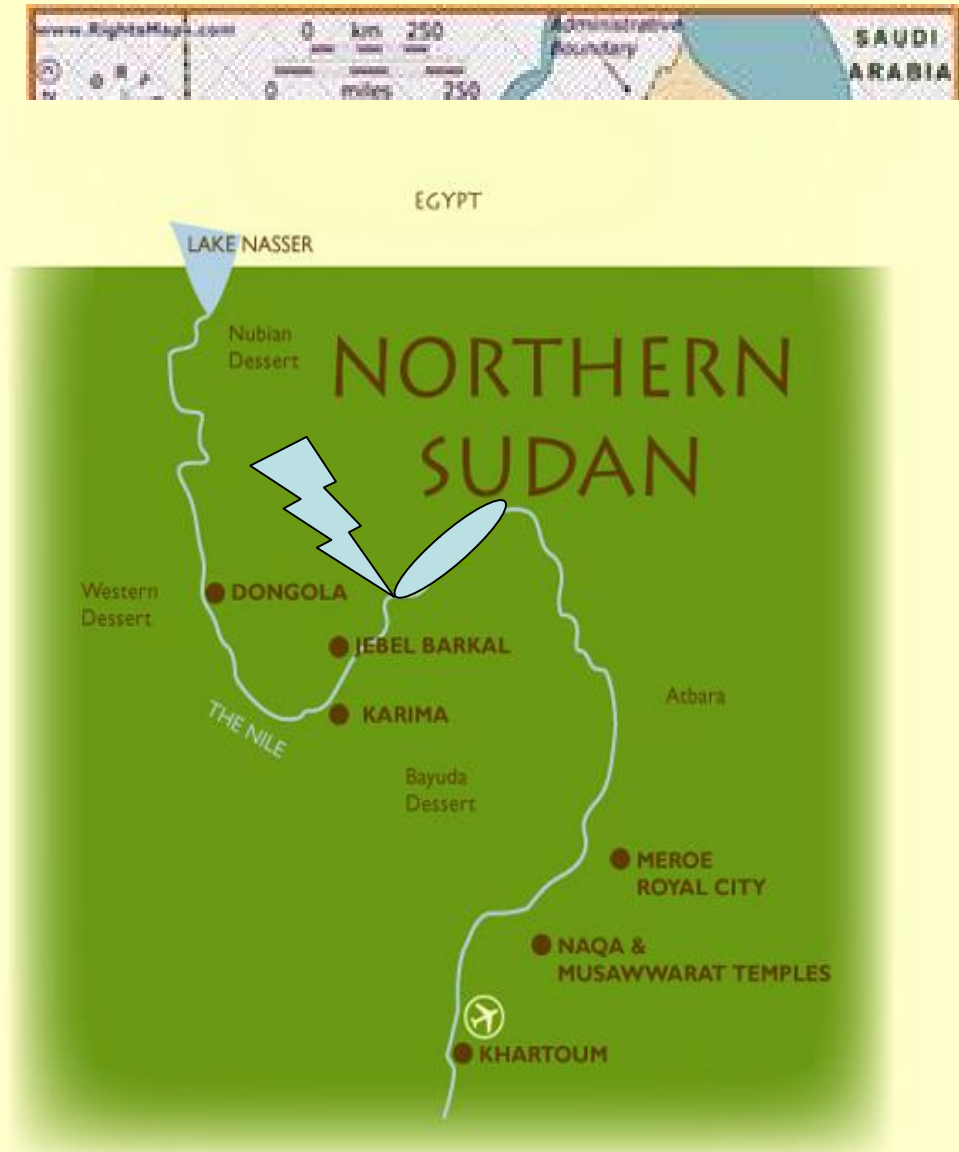
Jean-Gabriel Leturcq (CEDEJ-Cairo)
Porto 2nd-3rd of October 2008



The Merowe Dam Project

A brief history

- 1946 First plans under the British administration
- 1979 Alexander Jib consultancy: 750MV project
- 1983-86 SWECO pre-feasibility study: electricity, irrigation, navigation, fish
- 1993: publication of the MONENCO Agra feasibility study
- 2001 Hydro-project Institute (Russian) Project design
- 2001-2002 Lahmeyer final Review
- 2002-2008 Construction



International investment

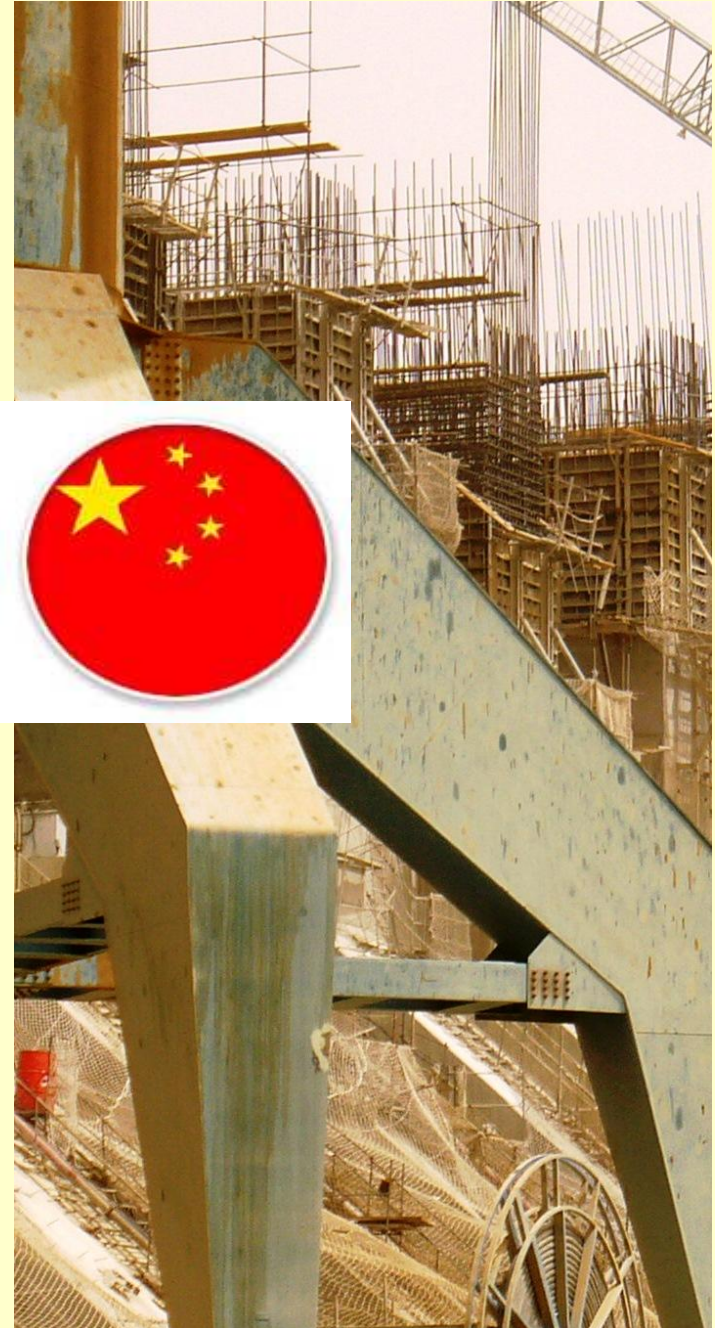
Total cost: US\$1,96 billion

Funding:

- The Arab Fund for Economical and Social Development (US\$250 million)
- Diverse Arab funds (US\$620 million)
- Government of Sudan (US\$575 million)
- Government of China (US\$520 million)

Construction companies:

- Lahmeyer international (Germany)
- Alstom (France)
- The China International Water and Electric Corporation CWE and CCMD Consortium (China)
- Harbin Power Engineering Company Ltd. (China)



Fact sheet

Dam structure:

9,2 km long (maximum length)
earth core rockfill dam

Hydro-Power Plant:

1250 MW (maximum capacity): 10 Francis
turbines of 125 MW capacity each

7 power stations

1500km of transmission lines -500kV

Reservoir:

12,5 km³

175km long (20% Nile's annual flows)



Benefits

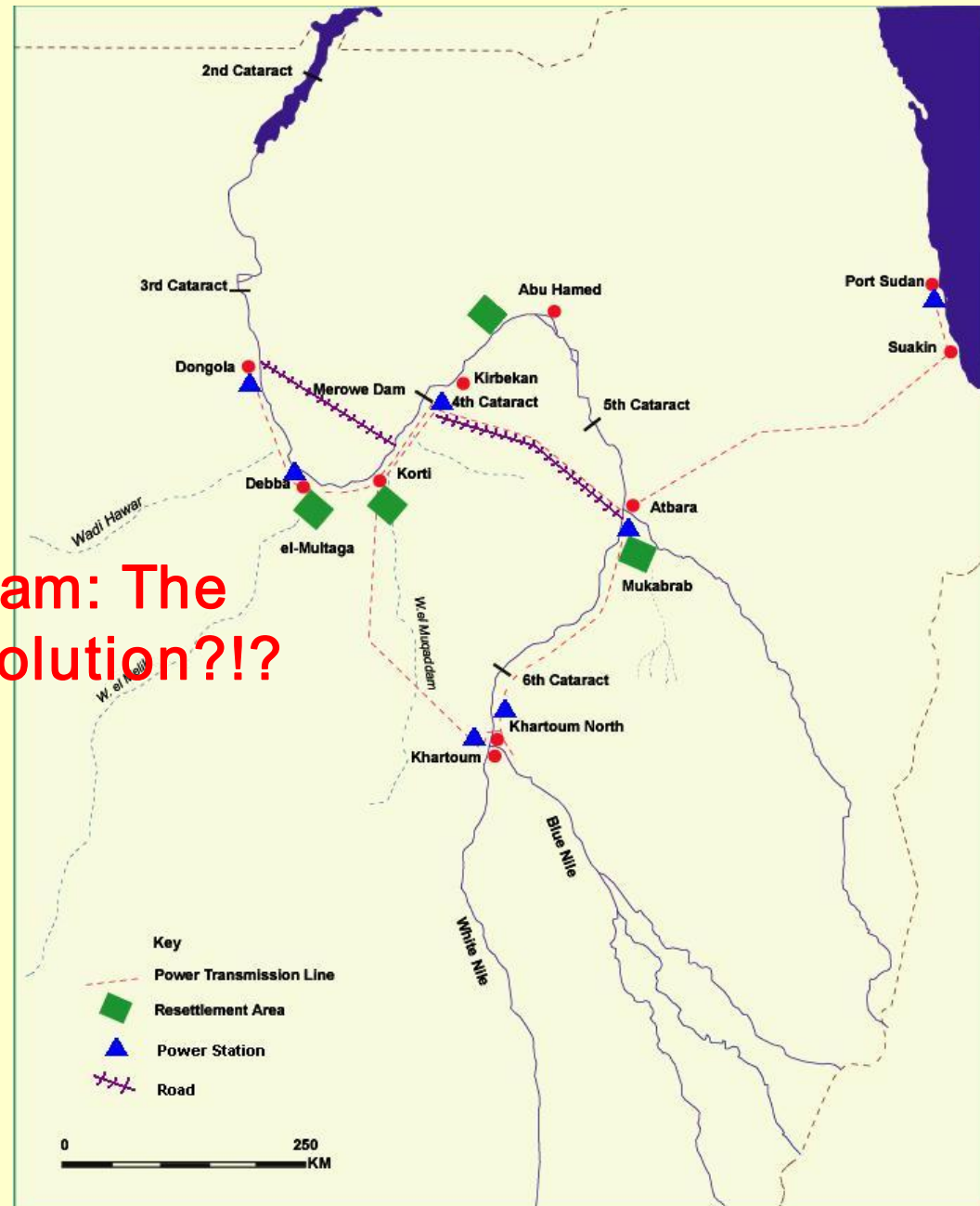
Economic development:

“The Hydro-electric plant will cover 50% of the national needs of the economic development of Sudan” (governmental source)

Structural development of Sudan:

New roads, new bridges
New hospitals
New cultivable land

Merowe Dam: The ultimate solution?!?



MEROWE DAM ARCHAEOLOGICAL SALVAGE PROJECT (MDASP)

Social and cultural impacts

- More than 3.000 archaeological sites submerged
- the Merowe Archaeological Salvage mission was launched in 2002
- 55.000 to 70.000 inhabitants displaced:
 - 3 groups displaced
 - 4 resettlement areas
- 2003 and 2006 clashes between local communities and governmental armed forces

**Collateral
damages?**







Criticism: LOHAP and International Rivers Network

- weakness of 1993 Monenco
Agra feasibility studies
Canadian:

- Out dated assessment studies
- Inadequacies of the resettlement
issues or the environmental and
cultural impacts studies
- Lack of transparency
- Disregard of the international
principles

**Violation of
Human and
Community
rights?**

The « Rights and Risks » approach

- World Commission on Dams' report 2000:
“Recognition of rights and assessment of risks are the basis for the identification and inclusion of stakeholders in decision-making on energy and water resources development”

Relevant rights :

- constitutional rights
- customary rights
- rights codified through legislation
- property rights
- rights of developers and investors

...and the risks include:

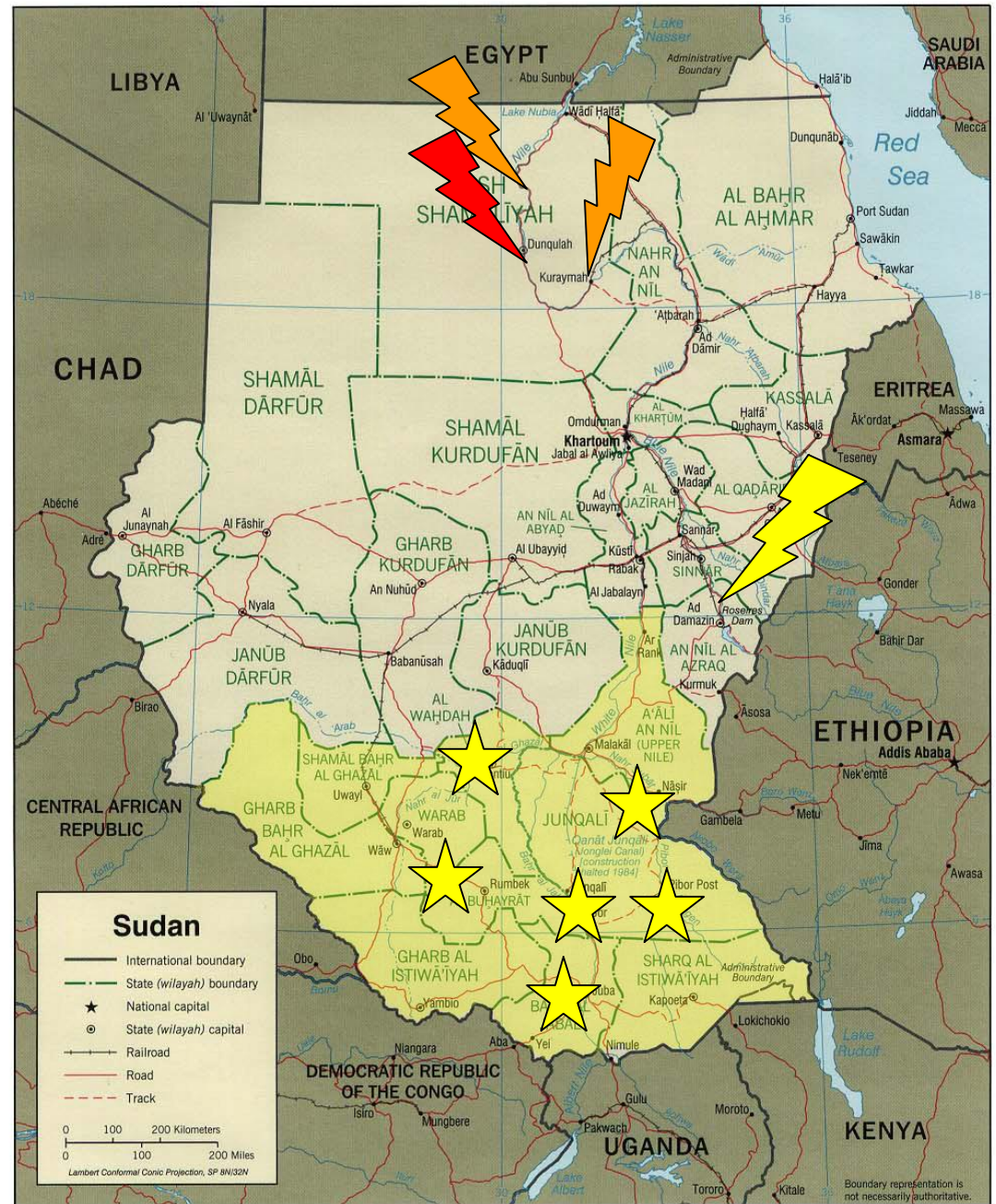
- voluntary risk takers (developers, investors, governments..)
- involuntary risk bearers (displaced people, those whose livelihoods are affected..)

**Negotiated
approach?**



Damming Sudan...

- Which model of dam construction?
- Inclusion of local communities?
- Respect of international standards?



2008: Khartoum
statement on future
dams and
development on the
Nile provides:

«a provision of advice
and direction on
engaging civil society
and local communities
in dams and
development
processes. This should
take place from the
conception of all the
projects »

... towards a
model of fair
dams?

**An Hydro-
optimistic
vision?**

Thanks!

