



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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“From Hydro-Pessimism to Hydro-Optimism in Southern Africa Water Resource Management: challenging the *Hydropolitical Risk* at work”.

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Where does the *Hydropolitical Risk* come from?

- ❑ Comparing French and English speaking Research on Water Resource.
- ❑ The *Hydropolitical Risk* could be defined as a potential link between both French and English concerns of improving Water Resource Management.
- ❑ Is there any possibility of a long lasting Southern Africa Water Resource Management?

I. Once upon a time there was the *Hydropolitical Risk...*

A. Old sad couples: nature/culture, natural hazard/vulnerability...when will the divorce be pronounced?

B. Connecting People and Risks...

*Former identified as
« natural hazards »*
Environmental factors
Low rainfall→scarcity
Cyclones→floods
Upstream/downstream
flow relation

« *Vulnerability* »: Risk Society factors
Water allocation: inequality in water
access, who gets what?
Water governance: multiple Water
Institutions, new Water Laws
Various development level inside States

Hydropolitical Risk

Sharing Water factors
Water allocation between States
Various development level between States
Political instability
Multiple Water Institutions

II. Identifying for improving, a first alternative?

- A.** The *Southern Africa Hydropolitical Complex* and the *High Hydropolitical Risk Profile*: which potential interactions?
- B.** Identifying *Hydropolitical Risks* in the Southern African context.
- C.** Developing alternatives in Water Resource Management, a long swim to Freedom...

The Southern African Hydropolitical Complex

The Southern African hydropolitical complex as encapsulated in the first hypothesis

Riparian state	International river basin								
	Pivotal basins		Impacted basins						
	Orange	Limpopo	Okavango	Cunene	Incomati	Maputo	Pungué	Save	Zambezi
Namibia	PS		PS	PS					PS
Botswana	SC	PS	PS						PS
South Africa	PS	PS			PS	PS			
Zimbabwe		PS					PS	PS	PS
Angola			IS	IS					IS
Mozambique		IS			IS	IS	IS	IS	IS
Swaziland					IS	IS			
Lesotho	IS								
Zambia									IS
Malawi									IS
Tanzania									IS

PS = pivotal state IS = impacted state SC = special case

Source: Turton, 2002b; 2003c

**Cyclones Connie,
Eline, Gloria
from february to
march 2000
Limpopo major
floods**



**Mozambican Civil War 1977-1992:
resulting in lack of cyclones alert,
management.
New government, new State, first
phases of rebuilding: lack of
infrastructures, lack of roads...**



Hydropolitical Risk → Hydropolitical Disaster



**Transboundary River: the Limpopo with Mozambique as the
downstream riparian
Intervention of South Africa: air intervention to help people
locked by floods: lack of training of the State and Civil Society in
case of major floods.**



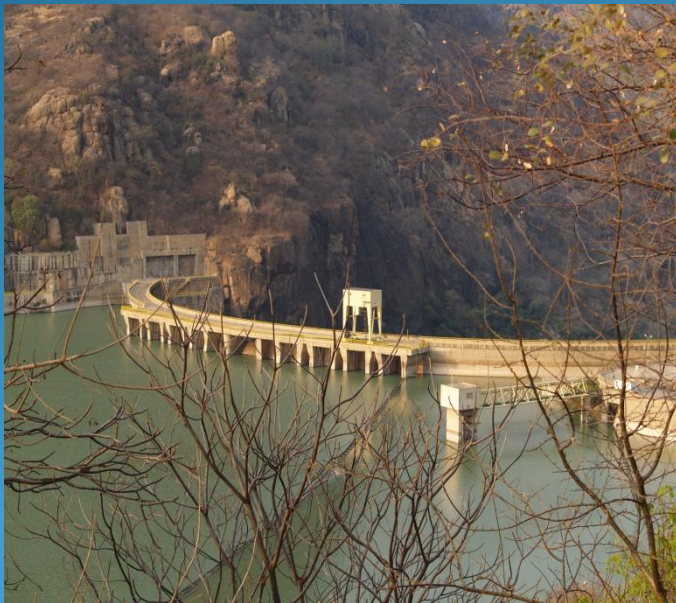
**Effects of the *a posteriori* identification of Hydropolitical Risk:
creation of the LIMCOM, implementation of meteorological survey...**

Identifying *Hydropolitical Risks* = putting the lack of connections in Water Resource Management Institutions in foreground.

- ❑ Improving Water Resource Management = Taking all Water Resource Management levels in Southern Africa into account

- ❑ It seems necessary to sort out the numerous Water Institutions

- BLAIKIE, P. and al. 1994. *At risk-natural hazards, people's vulnerability and disasters*. Routledge, London, 284p.
- BRYANT, E. 1991. *Natural hazards*. Cambridge Univ. Press, 294p.
- BURTON, I. KATES, RW., WHITE, GF. 1978. *The environment as hazard*. Oxford Univ. Press., Now-York. 240p.
- CANNON, T. 1994. "Vulnerability analysis and the explanation of "natural" disasters ", in VARLEY, A. ed., *Disasters, development and environment*. J.Wiley and sons. 167p.
- FRAMPTON, S. et al. 1996. *Natural hazards: causes, consequences and management*. Hodder et Stoughton Educational, London. 126p.
- HEWITT, K. 1997. *Regions of risk: geographical introduction to disasters*. Longman, Londres, 388p.
- PIGEON, 2005, *Géographie critique des risques*. Economica, Paris. 200p.
- TOBIN, GA., MONTZ, BE., 1997. *Natural hazards-explanation and integration*. Guilford Press, London. 388p.
- TURTON, AR. 1999. "Water scarcity and social adaptive capacity: towards an understanding of the social dynamics of water demand management in developing countries". MEWREW Occasional Paper, n°9, SOAS, London.
- TURTON, AR. 2002. *Hydropolitics in the developing world. A Southern African perspective*. AWIRU, Pretoria.
- TURTON, AR. 2005. *A Critical Assessment of the Basins at Risk in the Southern African Hydropolitical Complex*. CSIR Report, Pretoria.
- ZEITOUN, M.; ALLAN, JA. 2008. "Applying hegemony and power theory to transboundary water analysis". *Water Policy*.
- ZEITOUN, M.; MIRUMACHI, N. 2008. "Transboundary Water Interaction Nexus: reconsidering conflict and



Thank you!