



Second Order Water Scarcity in Southern Africa

Welcome to our first newsletter of 2005. It is devoted to the seminar this project held in Lusaka in December 2004. Special thanks to Paxina Chileshe for organising the seminar, and heartfelt thanks also to those of you who attended and contributed to the ongoing research project. The first draft of the hydropolitical maps will be completed by May this year. This newsletter includes information that will hopefully be useful to the actors who participated in the seminar. You are welcome to share more information if you wish by sending it to the following email address leanne.wilson@ncl.ac.uk. Leanne Wilson will kindly manage the information flows in order to avoid clogging your inboxes uselessly.

IUCN recently concluded its regional water demand management analysis that has gathered a wealth of information over the past 5 years. As part of its dissemination strategy, it is making free literature available in the shape of hard copies and CD ROMs. These publications range from water demand management guidelines for the specific sectors listed below, to training modules and analytical research papers which can be found on the website given below. The guidelines may be relevant for institutions involved in:

- Industrial Water
- Irrigation
- Monitoring and Evaluation
- Bulk Suppliers of Portable Water
- Bulk Suppliers of Unthreatened water
- Rural Communities and Subsistence Farming
- Policy
- Municipal
- Integrated Water Resources

These guidelines will be sent to all SADC countries and may be useful for a wide range of target readers. If this is not directly relevant to you, please do pass it on to anyone who may appreciate such information. For further details, and/or copies of any of the documentation, please contact Michael Raimondo (michael.raimondo@iucn.org) or visit the website: (<http://www.iucnsa.org.za>).

Yours sincerely,

Julie Trottier Principal Investigator
www.waterscarcity.org

Overview of the Lusaka Seminar:

The second order water scarcity seminar in Lusaka on the 8th December 2004 was attended by 25 hydropolitical actors involved in a variety of activities ranging from agriculture, mining, water quality, rural water development and commercial utilities to urban and peri-urban water supply schemes. The seminar participants included public administration employees, government officials, academics, students, and two NGO workers. The range of specialisations of the participants strengthened our analytical framework by ensuring that the multifaceted nature of governance regimes concerning water management in Zambia was quite visible and therefore more easily incorporated into our ongoing research. The primary aims of the seminar were to present an overview and maintain a broader forum with which to triangulate the research in Zambia over the past year, to further develop the theoretical components of the hydropolitical map, and to provide a forum for other water professionals to present their roles within the Zambian water sector. The active participation and enthusiasm shown towards the research project was very encouraging and appreciated.

The key factors which we view as influencing the production of the hydropolitical map were emphasised by the participants within the seminar. The issue of formal water rights and how they are interpreted by various actors at different scales was discussed, including the human right to water. The scalar dimensions of the map were quite extensively debated, and there was dispute over whether hydrology provides the most logical boundaries for planning, analysis and implementation of water development and research. Seasonality is an issue in the research, but in Zambia, most fieldwork was undertaken during the dry season. The role of the map as a management tool was queried, specifically relating to the detection of unaccounted for water, and how the map could improve water management systems.

Integrated water resource management (IWRM) is being piloted by some government institutions and other institutions in the water sector, together with a range of stakeholders in the Kafue basin, and it is likely that IWRM will become an integral feature of the new water legislation in Zambia where there is now a clear separation of water services and resource management. The notion of resource capture is perceived to be a major driver in hydropolitics in Zambia, specifically relating to groundwater which is only recently being addressed with new legislation. This is a multileveled concern throughout the Zambian water sector, strongly connected to the level or scale at which water management can be considered sustainable. A confounding variable to the sustainability of water supply systems is the frequently erratic power supply systems which impede water provision specifically to the most vulnerable sections of urban and peri-urban communities in many areas of Zambia. There are other institutional obstacles to reducing vulnerability as a result of vertical government policies which on one hand promote backyard gardening to improve livelihoods, but on the other introduce demand management strategies such as water meters which preclude small scale irrigation in some urban and peri urban areas. This strategy is justified by the drive to diminish breeding sites for mosquitoes, but there are transaction costs involved because of the reduction in food and nutritional security.

As the seminar came to a conclusion, the participants were invited to draw up a prioritised 'wish list' limited to three items. This allows us to better identify the perceived dynamics concerning water management in Zambia. The participants were also asked to list whatever pieces of information they felt would be useful to them if they could access it. The water wishes can be broadly categorised into 4 main themes. These include the modalities of increasing access to both domestic and productive water with a focus on vulnerability,

improvements in water quality monitoring systems, and enhanced institutional and/or management capacity including the roles and responsibilities of citizens in Zambia.

The list of information identified by the seminar participants as useful to them was the following:

- ∑ How to mitigate levels of heavy metals in water
- ∑ Available donor funds for the expansion of water storage capacity for domestic supply
- ∑ Readily available information on donors willing to assist community managed water utilities, donors with alternative cost effective water systems for the poorest of the poor and institutions that are ready to sponsor training programmes for professionals in the community managed water projects
- ∑ Information on simple community managed sanitation options
- ∑ Information on water distribution systems to different landscapes or areas for example from places of abundant water to places of drought
- ∑ Information on effective and efficient water use regarding water preservation
- ∑ Delivery mechanisms for clean water supply to people irrespective of their economic status
- ∑ Water quality information of water supplies
- ∑ Mechanisms which ensure that large scale public institutions pay for the water they consume
- ∑ Methods to detect water leaks remotely without use of the cumbersome leak detection systems currently in use
- ∑ Comprehensive lists of suppliers of eco-san urine diversion toilet parts
- ∑ Information on low tech sanitation options for peri-urban areas
- ∑ Information on low tech water pumping especially with renewable energy or animal draft power
- ∑ Information on the location of aquifers in Zambia and what are the dangers they face
- ∑ Levels of pesticide contamination in Zambian surface water bodies or any other bodies
- ∑ What would happen to the Kafue river or any other river if mine dewatering was stopped?

The prevalent Zambian focus upon hard engineering solutions, for example in relation to the Millenium Development Goals, emerged quite strongly during the seminar. Donors and water sector institutions still have a focus upon interventions which are easily quantifiable. Incorporating some kind of timescale for project boreholes in order to ascertain what kind of lifespan these type of technical fix options have within communities once the donor withdraws was discussed as an interesting way forward.