



**From the EXCO:**

**"Water Resources as Ecosystems: Scientists, Government and Society at the Crossroads" SASAqS CONFERENCE 2004 – Gauteng:** The Exco wishes to thank all the members who participated in the Annual Conference. It was a great success with 140 delegates from science, government and society debating issues on water resources. The conference culminated in a one-day workshop. The outcomes of the workshop will be circulated to all members in due course.

**MEMBERSHIP DUES – 2004:** The invoices for 2004 membership fees have been posted to all members. If you have not received your invoice it most likely because the postal details that we have for you are incorrect. Please contact the treasurer, Dirk Roux ([droux@csir.co.za](mailto:droux@csir.co.za)), if you have any queries relating to membership fees or invoice addresses.

**EXCO 2005-2007:** The new SASAqS Exco was approved by the annual general meeting held on 5 July 2004 at the ESCOM Conference Center in Midrand, Gauteng. The EXCO is as follows: Digby Cyrus (President), Wynand Vlok (Vice-president), Hendrik Jerling (Treasurer) and Rodney Owen (Secretary).

**LEADERSHIP NEWS LETTERS:** Enclosed also find Letter 11 on CMA's by Mark Dent. Any queries regarding back issues or other comments can be sent to Mark Dent ([mark@netshare.co.za](mailto:mark@netshare.co.za)).

## ► OPINION – AFRICAN JOURNAL OF AQUATIC SCIENCES

The following contribution was originally solicited as a guest editorial for publication in the Society Journal; the African Journal of Aquatic Sciences (AJAS). Due to its controversial nature there was "divided opinion" on whether it should be published and it was subsequently withdrawn from the second issue of the 2003 volume. Since it is the Society's journal the Exco would like to provide the membership with the opportunity of providing some comment on the issues raised. Please forward all comments to the secretary (vw@na.rau.ac.za).

### **What is the purpose of this Journal?**

I was flattered to be invited to make an editorial contribution to this journal and accepted on the spur of the moment. Now, after considerable prodding from the Editor, I am faced with the challenge of selecting a suitable topic to catch the eye of an already work-stressed readership.

Why me? I am not African, although I have maintained a long love affair with the continent and its people since my initiation into the academic arena at Makerere University, Uganda, in the early sixties. I have certainly shared the excitement, challenges and frustrations of a wetland ecologist working in Africa. But now I am based in Europe and can retreat to the physical, academic and electronic comforts offered there. I can access libraries easily, browse a plethora of journals, and decide where to submit my next pupating manuscript - preferably to a journal with a high citation index. I am not inexperienced in drafting manuscripts and have been on a number of Editorial Boards, which has given me the opportunity to hone my scientific writing skills. Indeed, I was privileged to be on the Board of this learned journal at its inception. It is easy for me to go to conferences and exchange the latest ideas: I have the financial support to pay for membership of learned societies, take their journals and to repose with a sense of scientific security.

But, what of my African colleagues from the poorer regions of the continent? For them funds and infrastructural facilities are limited, salaries are low and teaching and administrative responsibilities excessive, to the extent that even the keenest scientist may have to sacrifice spare time and opportunities for intellectual thought for secondary incomes to support their families. They have limited opportunities to 'hone writing skills' and to participate in journal editorial activities. Perhaps most frustrating, though, is the lack of access to recent publications.

A significant amount of African ecology is published in Northern Hemisphere journals by Northern scientists - sometimes by those disparagingly dubbed "safari scientists" who fly in, grab material, and fly out again. Outlets for publishing within Africa are limited. For local scientists there is a perceived (or real) need to publish in "international journals of high repute" – especially those from America and Europe. The irony is that, if they do so, few can then afford even to access their own publications in such journals, let alone those of their colleagues.

When I first heard of the *African Journal of Aquatic Science* I asked myself 'What is its purpose and what function can it serve?' It occupies an ecological niche for the publication of fundamental and applied aquatic science in Africa. It is an outlet for, and a facility to transmit and exchange, knowledge amongst scientists with a specialist interest in tropical and sub-tropical ecosystems. Its evolution from the *Newsletter* to the *Journal of the Limnological Society of southern Africa*, then to the *Southern African* and, finally, the *African Journal of Aquatic Science* amply demonstrates the broadening of both its academic and political fields to embrace a wider readership: a readership not only from within the continent but also globally.

What are the boundary conditions for fulfilling such aspirations? Crucial is a strong editorial board, which sets the academic standards for publication so that the journal becomes respected internationally. Without this, potential authors will publish in it only as a 'last resort'. Complementary to this must be a wide and appreciative readership, especially from within Africa. Finally, there must be financial security for the journal.

Does this Journal address these conditions, or are they unrealistic?

Not all potential contributors have developed fully the necessary data-analysis and paper-writing skills, but this should not detract from the intrinsic value of good research and the knowledge-base available therefrom. I see quality, depth and breadth in the material published thus far. The cries of pain and cascades of sweat, drawn from authors and referees alike through the editorial process, are to be applauded. With this level of quality the journal's circulation should increase and the dreaded (and, in my view, over-emphasized) citation index should ascend the ladder of credibility progressively.

What about accessibility and costs? One indicator of success for the journal is its ability to attract manuscripts from all parts of Africa. Another is its ability to ensure that its readership within Africa has easy and affordable access to its contents. Journals are undeniably expensive to publish and someone, normally the readership or the Society membership, has to pay for them. When I was on the Editorial Board the mechanism for recovering these costs became a bone of contention. After a brief initial period of free publishing, subsequent authors were to be charged for each page of text printed. *Wow!* That indubitably constricted the spectrum of potential contributors and created an economic 'exclusion zone'. It was fine for those who could afford it, or who had grants to 'pick up the tab', but the door was closed firmly to many who then had to recourse to those journals without page charges. And what about the readership? The poorer universities and institutes cannot afford expensive journals, and subscriptions by individual members are confined to the more affluent.

Finally, there is the Editorial Board itself. Membership of the Board needs broad representation from Africa and should attract contributions and subscriptions from all over the continent so as to develop the feeling of ownership and to provide essential experience. However, Board members from economically disadvantaged regions need to receive some remuneration or recompense for their services to compensate for the loss of earnings from their vital 'secondary incomes'; or else to receive complimentary copies of the journal for their efforts.

The long-term success of this journal depends upon getting these aspects into balance.

But, there remains the conundrum: who covers the costs? In the spirit of partnership between North and South; in the encouragement of the transfer of skills and knowledge, and in the fulfilment of capacity development towards equality, a solution can, and indeed *must*, be found. Could not partnerships with Northern donor agents, plus innovative ways of achieving the long-term sustainability of the journal, be investigated? The potential of this journal is far too valuable for it simply to be abandoned. If it fails, then African aquatic scientific knowledge will continue to be regulated by the dominance of the North for the North's benefit.

Patrick Denny,  
UNESCO-IHE Institute for Water Education,  
P.O. Box 3015  
2601 DA Delft,  
The Netherlands.  
den@ihe.nl

## ► RESEARCH:

### Leadership Letter 11

Myths and misconceptions about information

In my previous letter I emphasised the importance of information systems for CMA leaders. I also indicated some of the key attributes needed for CMA information systems. This letter continues on the theme of information. The information dialogue is receiving increasing prominence as CMAs begin to form.

Myths and misconceptions about information systems for water resource management abound. Belief in myths drives behaviour and thus although these myths are seldom discussed explicitly, the behaviour of individuals and organisations indicates that these myths are strongly implicit in their framework of thinking. Two such myths are :-

- 1.. all the information is available, somewhere;
- 2.. information generation systems (models) are objective.

#### **Myth:- all the data and information is available, somewhere**

It is a myth that all the data and information necessary for integrated water resource management is available, somewhere. An example will illustrate this point. If one takes the raincatch surface area of ten thousand raingauges (approx RSA total historical record) and divides it by the surface area of South Africa, the answer is 1 over 10 to the power 14. Rainfall is the primary input into our water modelling systems.

Belief in this myth leads to thinking that it is simply a case of finding the information, putting it together in a GIS and/or a relational database and disseminating it on the Web. The plethora of efforts to compile lists of meta data and information, is an indication that this myth is a strong implicit driver of behaviour.

The reality is that most of the information required for integrated water resource management is not available and has to be generated, through models of various forms. The credibility of this generated information is a key factor in integrated water resource management since it impacts on reasoning, shared understanding, trust, acceptability and wisdom as explained in my previous letter. Credibility will be conferred by those impacted by the consequences of the information use, i.e. the CMA Stakeholders. This has major implications for the paradigms of information management under the 1998 NWA. Co-operative governance over data and information will be a key issue for leadership.

#### **Myth :- information generation systems (models) are objective**

Models (information generation systems) are subjective. In essence, models are a sequence of assumptions, each of which is subjective. Information generation systems (models) are often construed as being objective because once the subjective assumption has been made it is applied consistently at all times (unless specifically changed). In this sense the information generation system (model) is consistent in its subjectivity. Models are not "fickle", like people, who can and do change their minds. Thank goodness !

Why is it so important for leaders to recognize and openly acknowledge the subjectivity of models? The subjective nature of models which generate information has an effect on their use in negotiations. One of the worlds leading experts in the use of models in water resources

negotiations had this to say, "The sharing of models and information among interest groups assumes the acceptance by all parties of those models. At first this may seem straightforward and non-problematic since models are intended to represent the objective properties of the natural resource. However, since information generation systems are the product of human thought and are in essence a sequence of assumptions they typically have a subjective, cultural background. In addition they are often developed within groups or organizations that also partake in the negotiation process, either as parties or as external domain experts".

Negotiation experts concur that a careful study of the role of simulation models in water resource negotiations requires analysis of a number of:-

- a.. strategic,
- b.. tactical, and
- c.. managerial aspects of model use.

In most decision-making situations the models are a means to help organise a learning or bargaining process, where it is important that they provide a framework, a mirror for our thinking, our reasoning, or justification for compromise. Models provide a safe space for us to test the possible consequences of our proposed actions.

▶ **JOB OPPORTUNITIES/ COURSES / BURSARIES AND FELLOWSHIPS:**

The Water Research Commission (WRC) is a dynamic hub for water centred knowledge, innovation and intellectual capital, providing leadership for research and development through the support of knowledge creation, transfer and application. It engages stakeholders and partners in solving water-related problems, which are critical to South Africa's sustainable development and economic growth and it is committed to promoting a better quality of life for all.

Applications are invited from suitably qualified individuals for the following position within the Key Strategic Area (KSA) of Water Linked-Ecosystems, based in Pretoria.

**RESEARCH MANAGER**

This innovative thinker should be in possession of at least a Master's degree in Natural Science, augmented by five to ten years' research experience in an ecosystem related field and have a proven management track record. Able to network, communicate and co-ordinate effectively, he/she should have project management skills, as well as knowledge of aquatic ecosystem function and process, and the management of these to enable the sustained delivery of the goods and services for the well-being of the national and local economy. Good interpersonal skills and the ability to integrate knowledge from diverse sources are essential for success.

The successful candidate will: - Engage with stakeholders nationally to establish research needs and priorities in the area of water-linked ecosystems; lead research thrusts consisting of portfolios of research programmes and projects; assume responsibility for all facets of project management; chair committees constituted to assist in project management; contribute to the KSA's business planning process; and work closely with colleagues in this and other KSAs within the WRC.

Appointment will be made in line with the WRC's employment equity policy and remuneration will be negotiated on the basis of an all-inclusive flexible package.

Applications, accompanied by a detailed CV with three references, should be submitted to the Water Research Commission, Private Bag X03, Gezina, Pretoria 0031, fax: (012) 331-2565, e-mail: [reshmilil@wrc.org.za](mailto:reshmilil@wrc.org.za) for the attention of Ms Reshmili Lutchman, tel: (012) 330-9033. Closing date: 2<sup>nd</sup> August 2004. Should you not be contacted by 16<sup>th</sup> of August 2004, please consider your application as unsuccessful.

**Please visit the Society website on [www.dwaf.gov.za/iwqs/sasaqs/](http://www.dwaf.gov.za/iwqs/sasaqs/) for updates on SASAqS matters.**