

**REPORT ON THE ROUNDTABLE ON “WATER RESEARCH: WORKING ACROSS THE
DISCIPLINES” HELD ON 22 MARCH 2012 AT THE UP CONFERENCE CENTRE,
UNIVERSITY OF PRETORIA**

1. The University of Pretoria Water Institute and the Institute for Strategic and Political Affairs (ISPA) of the Department of Political Sciences, jointly hosted a seminar under the theme “Water research: working across the disciplines” on 22 March 2012.
2. As stated in the invitation to the roundtable discussion, South Africa, and the African region generally, is faced with serious and complex issues of water management, usage and protection. The role of research continues to be crucial in providing the country and the region with the knowledge, tools and technologies to enable the provision of water to all, allowing for healthy and productive livelihoods.
3. The aim of the roundtable was to bring together experts, academics and postgraduate students associated with the University of Pretoria, to discuss matters of mutual interest in water research. The premise of the initiative was that water research could be enhanced if it involved transdisciplinary collaboration, and shared and common points of focus.
4. The first part of the meeting was facilitated by Professor Rivka Kfir an advisor to the Water Institute. Welcome remarks in support of the initiative were made by Prof Anton Ströh, Dean of Natural and Agricultural Sciences and Chairperson of the Advisory Board of the Water Institute, and Prof Hennie Stander, Acting Dean of the Faculty of Humanities. Thereafter Prof Hannes Rautenbach, Acting Director of the Water Institute presented a short introduction to the Water Institute, its role and structure.
5. Ms Eiman Karar, Director of Water Resource Management at the Water Research Commission (WRC) and Dr Achuo Enow, Programme Director: Global Change at the

National Research Foundation (NRF), presented on the subject of transdisciplinary research and its significance where different dimensions of water security are of concern. Ms Karar gave an overview on emerging water research issues and the need for transdisciplinary research. She pointed out some of the research needs as follows:

- Culture of water and its traditional leverage
- Social trade-offs
- Political economy
- Role of women in water education, economy, water policy
- Future, forecasting and back casting
- Constitutional and legal provisions

Dr Achuo gave an overview of opportunities for strengthening interdisciplinary research on water. He pointed out that the research areas the NRF is involved in include:

- Developing dynamic prediction models
- Water security
- Ecosystems limits
- Transboundary water
- Innovative technologies for building resilience and capabilities
- Changing human behaviour
- Improving water harvesting, storage
- Improving water use efficiency in agriculture
- Exploring the role of market mechanism in facilitating water security

He also informed guests that there will be a research call issued on 28-03-2012.

6. After the two presentations the floor was opened for discussion, facilitated by Prof Rautenbach. The dialogue addressed possible mechanisms that could allow researchers

at the University of Pretoria and their partners to contribute new knowledge required for enhancing sustainable water security. The meeting noted a need for a shift in water research from a predominantly hard sciences and natural sciences perspective, to an increasingly transdisciplinary mode where the human sciences play an equally prominent role.

7. Prof Kfir noted that it was encouraging that the Faculty of Humanities was interested in coming on board the water research agenda. It was noted that some years earlier, the Faculty of Humanities had been more engaged in water research, particularly through the Department of Political Sciences. Momentum had declined, however, as students and some academics left for other research institutions or think tanks. This was a general problem since water research was a critical policy issue and there were few specialists in this field.
8. One of the suggestions made in the roundtable discussion was for the different faculties to collaborate in creating a **water governance group**, where diverse ideas, expertise and knowledge could be harnessed to formulate sustainable policy solutions. The Faculty of Law together with the Department of Political Sciences and the Department of Public Administration and Management, as well as and the Faculty of Natural and Agricultural Sciences, (SADC Centre for Land Related Regional Policy and Development Policy and the Centre for Environmental Economic and Policy in Africa (CEEPA)) could develop a constructive framework for research into the governance of water and its related problems.
9. The Faculty of Engineering, Build Environment and Information Technology (EBIT) could **develop approaches and technologies for assisting in enhancing the quality of water, and improved mechanisms for recycling used water with less harmful chemicals**. In collaboration with EBIT, the Faculty of Education and the Department of Political Sciences could explore the role of education in raising awareness, and the governance

issues associated with such changes, respectively. In this way both the hard sciences and the soft sciences would be equally involved in such a research project. **Water and indigenous knowledge** was also raised as a potential research theme especially addressing alternative technologies and knowledge for water storage and conservation. The Faculties of Humanities, Education and EBIT could develop this research theme further.

10. Another area of interest identified was **the impact of floods**, particularly the threat to life posed where people settled in high-risk areas. Linked to this problem, researchers from the Faculty of Education identified an area where their contribution could be of value. The proposed contribution was on **awareness of hygiene and food safety during flood periods**. The argument is that during and after floods, people, especially in disadvantaged areas are at risk of bacterial, fungal and/or viral infections transmitted through food during preparation. The emphasis of the research will be on improved standards of food quality, which can be attained through the awareness of hygiene.
11. Another suggested area of focus was gender. **Gender studies** bring an alternative view to water research and can focus on both water use and water resource management. Analysis through gendered lenses brings to light the different uses of water, different focus areas and different reasons for water scarcity. Women and men tend to use water to perform tasks that are socially constructed as well as embedded in their culture practices. The issue of hygiene and hygiene education was raised as a focal point for gender studies. Another suggestion was the study of infrastructure planning and development addressing the need for inclusion of women in decision-making. All the above are gendered issues which could be supported by research done across several faculties.
12. The Faculty of Economics and Management Sciences had also had in the past some involvement in water research, with the main points of focus being the demand and

supply of water, taxation of water and pricing of water along with its effects on the economy. The **household modelling of water supply** needs to be further understood from the needs of the individual rather than that of the state. These too, are policy issues, which could see transdisciplinary collaboration.

13. It was noted that the arena of water research was a very busy space. The University of Pretoria and its research partners would therefore have to consider carefully what it wished to achieve, if it wanted to leave an institutional footprint. A suggestion was made that the model used could be that of the Institutional Research Themes (IRTs) that are part of the University's Strategic Plan. The University should also be cognisant of the national conversation around water research which is currently underway. It needs to assess and find its niche in this conversation. As an example, it was suggested, the University should be part of the inter-institute dialogue on water that sees the South African Government and New Partnership for Africa's Development (NEPAD) exploring policy options.
14. Even though participants at the roundtable were energetic in brainstorming different possibilities and areas of collaboration, some felt that these ideas were too broad. An alternative suggestion was put on the table. It was suggested that a follow-up discussion be held to rally the university research community around more specific themes. In the meantime, the different disciplines could on their own terms begin exploring areas of collaboration, with the benefit of the exchanges that had taken place at the roundtable.
15. It was suggested that the Water Institute will convene a conference that includes all faculties and where researchers and students will present their research. The conference can serve for further development of studies across the disciplines.
16. It would be beneficial for the Water Institute to create an **experts' database** that is constantly updated. Included in the database would be actual and potential scholars or

practitioners interested in enhancing the study of water security at UP. The Water Institute website could also be used as the portal where the research of the different disciplines (and the trans-disciplinary research) is posted, in order for members to be updated and informed of what their colleagues are doing.

17. The meeting concluded with a brief summary of the afternoon's proceedings by Prof Sandy Africa of the Institute for Strategic and Political Affairs, who also thanked all the participants for their attendance. It was agreed that the Water Institute would take the lead in initiating further discussions, and with their understanding of which departments were involved in different areas of research, would facilitate discussions between the different role-players in water research at the University of Pretoria.