

Science fills the holes left by apartheid

By Staff Reporter

The CSIR's water resources manager, Dr Marius Claassen, has told an international conference how South Africa is reversing its past inequities through maximising and sharing benefits derived from water resources.

"Apartheid," he told the World Water Week in Stockholm this week, "resulted in social, structural and resource inequity that took decades (if not centuries) to evolve."

His paper explained that solace can be taken from the fact that South Africa has "a sophisticated scientific community with considerable capacity for innovative problem-solving".

"This fact, coupled with the country's smooth transition to democracy, means that a solid foundation has been laid for a national culture of engagement, negotiation and nation-building," he said.

"This has been informed by the scientific community, specifically in the water sector, where pioneering work has taken place on assessing and sharing benefits from natural resources," Claassen said.

"The key to this research has been the need to reduce the uncertainty of a negotiated settlement by providing rigorous assessments of complex ecosystem goods and services and cost-benefit analyses of different allocation scenarios," he added.

The paper stated that the CSIR was at the forefront of the development of some of these innovative research tools.

The organisation initially developed them as experimental instruments in support of legal imperatives arising from the National Water Act and the National Constitution. "These legal instruments revolve around two fundamental pillars - the need for historic redress and the need for a balance between protection and use (equity, efficiency and sustainability)," explained Claassen.

Decision-support tools developed by the CSIR include the Eco² Model, which quantifies ecological and economic costs and benefits associated with different use scenarios; and the Resource Directed Management of Water Quality initiative (RDM-WQ), which develops specific resource water quality objectives in support of equitable and sustainable socio-economic development.

The two function in tandem and involve integration between hard science processes and the softer social and economic imperatives.

According to Claassen, they have proven useful in facilitating negotiations by reducing the level of potential contestation and quantifying direct benefits. "This is a significant development in the field because one of the known shortcomings of benefit-sharing literature is the absence of concrete processes or methodologies," he added.

The CSIR is engaging with a broad range of potential partners at the World Water Week. A highlight of the discussions will be the signing of a memorandum of understanding with the Stockholm International Water Institute.

The agreement will promote collaboration in the areas of water policy, governance, and trans-boundary water resource management towards the attainment of the millennium development goals and to provide research support for Nepad.

Published on the web by Pretoria News on August 24, 2006.

© Pretoria News 2006. All rights reserved.