

# Synthesis: IWRM lessons for implementation

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## Abstract

This paper provides a synthesis of the main issues discussed at a conference (*International Conference on Integrated Water Resource Management (IWRM) entitled: Lessons from Implementation in Developing Countries which took place from 10 to 12 March 2008 in Cape Town, South Africa, at the Cape Town International Convention Centre*) which was coordinated to share experiences and lessons learned on the implementation of IWRM in developing countries. This paper discusses six themes that emerged from the conference. These themes provide a perspective on the current status of IWRM and assist in formulating the agenda for further research and implementation approaches based on lessons learned. Firstly, although there is considerable history and international acceptance of IWRM, there is still ongoing debate on how IWRM is defined. However, aside from these debates there is general agreement on the principles underlying IWRM and the potential it holds for managing complex systems that cannot be adequately achieved through the single-sector management approach of the past. To overcome past management paradigms, new capacity building approaches are required. Secondly, implementation of IWRM requires a balance between policy and institutional support and community level projects that have small-scale tangible results for the poor. Thirdly, IWRM involves integration across many spheres, specifically the integration of groundwater management into long-term water resource planning. Fourthly, although there is general endorsement of the importance of public engagement in supporting IWRM approaches, effective public engagement requires considerable strategic planning to ensure that efforts are both applicable and relevant to those involved. Fifthly, the conference highlighted the importance of developing appropriate economic methods and instruments to address the economic trade-offs and decisions that are apparent in water management. Finally, appropriate data, information systems and indicators are required to adequately monitor progress with IWRM implementation.

**Keywords:** integrated water resource management, implementation, managing complex systems, poverty alleviation

## Introduction

To celebrate the 10-year anniversary of implementing the South African Water Act, a 3-day conference was held to share experiences and lessons learned on the implementation of IWRM in developing countries. The workshop was attended by 200 international delegates from across the water sector. The conference themes included water for growth and development, IWRM and environment, IWRM and the economy, IWRM and society. The conference provided an opportunity for extensive debate and analysis of IWRM approaches and implementation lessons. Although the collection of papers presented in this edition covers a range of the issues presented and discussed at the conference, they do not include the full dearth of issues. This paper provides a summary of the main issues outlined in the 10 papers as well as touching on additional themes and findings that were discussed during the conference; provides a perspective on the current status of IWRM; and assists in formulating new agendas and approaches for further research and implementation based on lessons learned.

## Defining IWRM

The concept of IWRM is widely endorsed over the alternative and it has emerged as the dominant paradigm for water management in rich and poor countries. The IWRM approach has been endorsed by many international agencies as a holistic approach to water resource management and is being increasingly accepted and integrated in the planning and decision-making processes of water managers and policy-makers. Although some argue that IWRM has been practised in different forms for many decades, its origins are usually traced to the 1992 Dublin Principles. The concept was also promoted by several international organisations prior to Dublin, at forums such as the UN Water Conference in Mar del Plata in 1977 (Biswas, 2004). Regardless of its exact origins, IWRM emerged in response to the much-criticised, sector-by-sector approach to water management. The UN World Water Development Report (2006) states that 'IWRM represents a holistic, ecosystem-based approach which, at both strategic and local levels, is the best management approach to address growing water management challenges and is seen as the best approach for meeting the Millennium Development Goals' (UNESCO-WWP 2006, p. 526).

Aside from its considerable history and international acceptance, the conference highlighted the ongoing debate on the difficulties in developing a clear and common definition of IWRM. Biswas (2008) argues that even after more than half a century of existence, there is still no acceptable operational definition as to what IWRM is and which issues should be integrated.

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