



MESSAGES

**International Conference on
Integrated Water Resources Management**

Management of Water in a Changing World: Lessons Learnt and Innovative Perspectives

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Dresden, Germany



Message from the Dresden International Conference on Integrated Water Resources Management

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In the light of the global challenges caused by climate change, land use and demographic changes the sustainable use and the protection of natural resources are top priorities for sustainable development. Enormous efforts will be necessary to ensure the supply of clean and safe water to the world population and to protect vital aquatic ecosystems. To meet this challenge the **concept of Integrated Water Resources Management (IWRM)** was introduced under the Agenda 21 and aimed at the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. Ten years later, at the World Summit for Sustainable Development in **Johannesburg in 2002, all countries agreed to “develop IWRM and Water Efficiency Plans”**.

Part of this ongoing process was the **Dresden International Conference on IWRM “Management of Water in a Changing World: Lessons learnt and innovative perspectives”**, which took place from 12th – 13th October 2011 and was funded by the German Federal Ministry of Education and Research under a priority research programme on IWRM. The event attracted an audience of more than 350 participants, representing 40 countries worldwide. Hereby the following conclusions were drawn:

- 1. The concept of IWRM has gained wide acceptance** in the majority of countries worldwide in the last 20 years. However, while considerable progress has been made to include IWRM in national policies, strategies and laws, the actual implementation of IWRM is lagging behind.
- 2. There are strong linkages but also substantial trade-offs between water security, food security and energy security.** IWRM should be seen as a pathfinder process for the implementation of an Integrated Resource Management.
- 3. Besides economy, energy and food the environment with its vital ecosystems should be treated with high relevance.**
- 4. Successful IWRM works across sectors and levels:** horizontally across sectors such as economy, energy, agriculture, environment, science, vertically from international over national, regional, basin to local levels. It works with an intense dialogue between governmental institutions, science, NGO's and society in order to achieve more sustainable solutions.
- 5. Successful IWRM includes targeted and coordinated Capacity Development** on different levels (in particular academic, administrative, technical, stakeholder).
- 6. Economics plays a key role in effective water resources management.** Not the natural resource as such, but the water services should be treated as an economic good.

7. **IWRM based infrastructures** typically **serve multi-purpose schemes** (e.g. wastewater management for protecting the environment and human health, water storage schemes for producing energy or food and mitigation of extreme events such as floods and droughts).
8. **IWRM provides a framework** for the necessary integration of all the sectors involved. However, there are limitations due to insufficient knowledge about their interactions.
9. It is necessary to further **strengthen the scientific basis of water resources management**. Required research approaches have to be **interdisciplinary including development and innovation, action oriented and transdisciplinary with a substantiated science policy interface**.
10. **The implementation of IWRM and the realisation of the respective programs have to be accelerated**. Dynamics of change are fast and already lead to irreversible damages of water resources in many regions of the world.

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