

IWRM Toolkit: Collection of Sources for Information and Tools on IWRM – A tool for supporting planning and decision making processes –

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During a workshop by the CuveWaters project in February 2011 in Oshakati, the need of an instrument supporting the implementation of integrated water resources management (IWRM) in the Cuvelai-Etoshia basin (CEB) has been expressed. This instrument should booster the implementation process by facilitating the common understanding of the rather abstract concept of IWRM. However, there exists already numerous information and tools supporting IWRM implementation. These information and tools go closely along with the discussed need on the workshop but they are partly not well known by many stakeholders working in the field of IWRM. Thus, we gathered and reviewed available information materials and tools for further distribution to interested stakeholders.

This document contains a selected collection of links providing interesting information about promoting and implementing integrated water resources management (IWRM). Please let us know if you have any additions, questions or problems by contacting Ms Julia Röhrig (roehrig@isoe.de).

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Definition of IWRM

“Integrated water resources management (IWRM) is as a process that promotes the co-ordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems” (GWP 2000:22).

Thus, IWRM is “a systematic process for the sustainable development, distribution and monitoring of water use based on social, economic and environmental objectives. This is in contrast of sectoral approaches applied in many countries” (Cap-Net 2008:1).

International Institutions

- **African Ministers' Council on Water** (AMCOW; <http://www.amcow-online.org>)
 - The AMCOW was formed in 2002 and aims to promote cooperation, security, social and economic development and poverty eradication among member states through the effective management of the continent's water resources and provision of water supply services.
 - The web site (in English and French) contains information about AMCOW and agreed work plans and thematic fields of activities. Further, it gives information on initiatives, partnerships, relevant publications and other resources and media like a newsletter.
- **Cap-Net/UNDP** (United Nations Development Programme; <http://www.cap-net.org/>)
 - Cap-Net is an international network for capacity building in sustainable water management. It is made up of a partnership of autonomous international, regional and national institutions and networks committed to capacity building in the water sector.
 - The web site contains diverse information about IWRM, material and training packages supporting the implementation of the strategy (e.g. IWRM Tutorial, Sustainable Sanitation and Water Management Toolbox)
- **Global Water Partnership** (GWP; <http://www.gwp.org>)
 - GWP was founded in 1996 by the World Bank, the United Nations Development Programme (UNDP), and the Swedish International Development Cooperation Agency (SIDA) to foster IWRM.
 - The web site contains diverse information about IWRM, material and tools supporting the implementation of the strategy (e.g. GWP Toolbox)

Handbooks and Manuals

- Cap-Net (2008): [Integrated water resources management for river basin organisations](#). Pretoria.
- DRFN (2008): [Basins Management Approach: A Guidebook](#). Desert Research Foundation of Namibia (DRFN), Windhoek
- GWP & INBO (2009): [A Handbook for Integrated Water Resources Management in Basins](#). Global Water Partnership (GWP) and the International Network of Basin Organizations (INBO).
- GWP (2000): [Integrated Water Resources Management](#). TAC Background Papers No.4. Global Water Partnership. Stockholm.
- INBO & GWP (2012): [New Handbook for Integrated Water Resources Management in the Basins of Transboundary Rivers, Lakes and Aquifers](#). Handbook. International Network of Basin Organizations (INBO) and the Global Water Partnership (GWP), Stockholm, Paris.

Presentations and documents

- AMCOW (2012): [“AMCOW 2012: Status Report on the Application of Integrated Approaches to Water Resources Management in Africa”](#). African Ministers' Council on Water.
- Boroto, R. J. (2008): [“IWRM IN AFRICA: From Concept to Practice”](#). Cape Town. GWP.
- UNEP (2010): [“Africa Water Atlas – Summary for Decision Makers”](#).

Namibian Governmental Documents

- GRN (2004): Water Resources Management Act, Windhoek
- MAWF (2008): Water Supply and Sanitation Policy, Windhoek
- MAWRD (1995): National Agricultural Policy. Presented as a White paper to parliament, Windhoek
- MAWRD (2000): National Water Policy White Paper. Policy Framework for Equitable, Efficient, and Sustainable Water Resources Management and Water Services, Windhoek

Web Sites

Web Sites with focus on Namibia

- **Orange-Senqu River Awareness Kit (RAK)** (Homepage: <http://orangesenqurak.org/>)
 - Orange-Senqu RAK is an information and knowledge management tool for the Orange-Senqu River basin, which includes self-learning resources, supported by interactive visualisation tools (e.g. about IWRM), maps, documents and quizzes
- **Kunene River Awareness Kit (RAK)** (Homepage: <http://www.kunenerak.org/>)
 - Kunene RAK is a multilingual information and knowledge management tool for the Kunene River basin, very similar to the Orange-Senqu River Awareness Kit. It includes also self-learning resources, supported by interactive visualisation tools (e.g. about IWRM), maps, documents and quizzes.

Web Sites with Focus on Africa

- **IWRM – Water for Growth and Development** (<http://www.iwrn.co.za>)
 - Programme initiated in 2000 by the South African Department of Water Affairs and Forestry (DWAF), with the assistance of the Royal Danish Government (DANIDA) to pilot Integrated Water Resources Management (IWRM) approaches in three water management areas of South Africa.
- [Overview on Declarations and Decisions](#) given by the African Ministers’ Council on Water (AMCOW)

Web Sites with Focus on IWRM in general

- **IWRM-education** – E-Learning Module on Integrated Water Resources Management: www.iwrn-education.de
 - “IWAS (International Water Research Alliance Saxony), together with the German IHP/HWRP (International Hydrological Programme of UNESCO and Hydrology and Water Resources Programme of WMO), has developed an E-learning module on IWRM that is supposed to complement classical learning options.”
 - “Since IWRM is complex and as interdisciplinarity is often missing in water management, the module interlinks lectures, i.e. thematic and geographical linkages (e.g. climate change) between the lectures appear, allowing the user to switch from one lecture to another one.”

IWRM Toolkit

- **GWP ToolBox IWRM:** <http://www.gwptoolbox.org/>
 - “The ToolBox is a free and open database with a library of case studies and references that can be used by anyone who is interested in implementing better approaches for the management of water or learning more about improving water management on a local, national, regional or global level.”
- **Sustainable Sanitation and Water Management Toolbox** – an integrative tool for capacity development on the local level «Linking up Sustainable Sanitation, Water Management & Agriculture» (Homepage: <http://www.sswm.info/home>)
 - “The SSWM Toolbox is an integrated capacity development tool and to date the most comprehensive open source collection of approaches from the water and the sanitation sector. It covers planning approaches, hardware (technology) and software (behavioural approaches) to make water management and sanitation more sustainable.”
 - The SSWM Toolbox is divided into six main sections. It contains
 1. a guided exercise to prioritize and understand the local problems of a specific situation (e.g. of the focus area of the toolbox user);
 2. a large compilation of factsheets on *hardware* and *software* tools and approaches (implementation tools);
 3. the tools you need to plan and process solutions;
 4. plus a section explaining the concept and one providing background information;
 5. a Train-the-Trainers section; and
 6. all topped with further readings, a library, a glossary and ready-made PowerPoints.

Newsletters

- UNESCO Water e-Newsletter: <http://www.unesco.org/water/news/newsletter>
- GWP NewsFlow: <http://www.gwp.org/en/Get-involved/Subscribe-to-NewsFlow>

International Educational Programmes and Courses

- **Austria**, Vienna: University of Natural Resources and Life Sciences, Vienna (Universität für Bodenkultur Wien, BOKU); Master Program on Water Management and Environmental Engineering (WMEE); [Link](#)
- **Barbados**, St Michael: University of the West Indies, CERMES Department; Graduate Programme on Natural Resource and Environmental Management; [Link](#)
- **Burkina Faso**, Ouagadougou: Institut International d'Ingénierie de l'Eau et de l'Environnement (2iE); On-Campus Degree Programms, E-Learning Programms, PhD Programm; [Link](#)
- **Germany**, Duisburg-Essen / **Netherlands**, Nijmegen: University of Duisburg-Essen and Radboud University Nijmegen; Master Programme on Transnational ecosystem-based Water Management (TWM); [Link](#)
- **Netherlands**, Delft: UNESCO-IHE; Master Programmes in Water Management, Water Science and Engineering, Municipal Water and Infrastructure, Environmental Science; [Link](#)

- **South Africa**, Bellville: University of the Western Cape; Integrated Water Resources Management Masters Programme; [Link](#)
- **South Africa**, Johannesburg / **Australia**, Brisbane: International Water Center (IWC) at Monash University South Africa; Master in Integrated Water Management, [Link](#)
- **UK**, Cranfield: Cranfield University; Degree Programmes with environment and water courses, e.g. Land and Water Management PhD with Integrated Studies; [Link](#)