

WATERNET

Upscaling regional human and institutional capacity



WaterNet Members

- Members:**
1. Dept. of Ecology, University of Stellenbosch, South Africa
 2. Water Supply and Sewerage Department, University of Botswana, Gaborone
 3. National Centre for Research in Natural Sciences, Botswana, Gaborone
 4. Faculty of Engineering, University of Zululand, KwaZulu-Natal
 5. Dept. of Environmental and Environmental Engineering, Stellenbosch University of Agriculture and Forestry, Stellenbosch
 6. Institute of Agricultural Sciences, University of Zimbabwe, Harare
 7. Dept. of Agricultural Economics and Extension, National University of Science and Technology, Harare
 8. Dept. of Civil Engineering, University of Botswana, Gaborone
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- Supporting Members:**
1. SADC Water Officers, Directorate for Infrastructure and Services, Gaborone
 2. Global Water Partnership Southern Africa
 3. Botswana government
 4. Lesotho government
 5. UNESCO International Hydrological Programme, Paris

For any further information, please contact the WaterNet Secretariat.

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A strategic programme of the SADC Water Sector

The Network

- Capacity building network in IWRM
- Founded in 1999
- A strategic program of the SADC Water Sector
- Links with other networks through affiliation with Cap-Net
- 60 member institutions from 15 countries in East and Southern Africa

Vision and Mission

- Vision
 - “equitable and sustainable utilisation of water for social, environmental justice, economic integration and economic benefit for present and future generations in Southern Africa.”
- Mission
 - To enhance regional capacity in Integrated Water Resources Management through training, education, research and outreach by sharing the complementary expertise of members.

WaterNet Core Business

- Education
 - Regional Masters Program in IWRM
- Training
 - Short professional courses
- Research
 - Challenge Program on Water and Food (CPWF)
 - Smallholder systems innovation program
- Outreach
 - Annual Symposia
 - Publications (Journal *Physics & Chemistry of the Earth*, Research Documents)
 - Collaboration with sector organizations (GWP-SA)

Education

- Regional Masters Program in IWRM (2003)
- Six participating universities (2 core, 4 for specializations)
- Institutions contribute and share comparative strengths in water-related expertise
- Six specializations based on research themes
- 200+ IWRM graduates to-date
- Establishment of SADC-WaterNet-Professorial Chairs



Professional Training

- Professional short courses
- To complement academic training
- To meet capacity building demands of River Basin Organisations, Country Water Partnerships and practicing water professionals
- Courses are demand driven
- Normally led by member institutions

Research- CPWF Project 17

- **Title**

- Managing Risk, Mitigating Drought & Improving Water Productivity in the Limpopo Basin

- **Goal**

- To contribute to improved rural livelihoods of poor smallholder farmers through the development of an IWRM framework for increased productive use of green and blue water flows and risk management for drought and dry-spell mitigation at all scales in the Limpopo basin.

- **Themes**

- Crop water productivity (theme 1)
- Water and people in catchments (theme 2)
- and integrated basin water management (theme 4)

PN17: IWRM for Improved Rural Livelihoods





Research Areas

- Improved understanding of water resources
- Farmer field-based action research (agriculture)
- Institutional Research

Impact Matrix

Intervention	Technology	Policies & Institutions	New Knowledge
Mainstreaming capacity building in food and water research	X	X	X
Soil water management strategies	X		X
Mulching	X		X
Rainwater harvesting		X	X
Low head drip kits	X	X	X
Managing salinity in irrigation	X		X
Alluvial aquifers & smallholder irrig.	X		X
Stress analysis for groundwater loc.	X		X
Improving flood forecasting	X	X	X
Water chemistry monitoring	X	X	X
Upstream-downstream modelling	X	X	X
Effects of dams on rivers	X		X
Intermediate level institutions		X	X
National institutional models		X	X
River Basin Game		X	

Outreach

- Raising awareness of IWRM within the region
- Annual Symposia
 - 10th WaterNet/WARFSA/GWP-SA Symposium 28-30 Oct 2009, Entebbe, Uganda
- Publications (Journal *Physics & Chemistry of the Earth*, Research Documents)
 - Peer reviewed journal
- Collaboration with sector organizations (GWP-SA)

ACHIEVEMENTS

- Forging the network
 - Transparent governance
 - Regional legitimacy
- Mobilising funds
 - €15 M 1999-2009
 - €4.9 M 2008-2011
 - Main funding agencies DGIS, Sida, Danida, EU-ACP
- Relevant research
 - Capacity building
 - Drip kit protocol
- N-S Partnerships
 - UNESCO-IHE
 - GWP
 - Other (PoWER, Cap-Net, UN, WRC)

THREATS AND CHALLENGES

- Research outputs
 - Relevance and impact (Impact factors?)
 - Developmental issues (poverty alleviation, food security, climate change, policies)
- Integration in multidisciplinary research
 - High staff turnover in partner institutions
 - Climate variability
- Potential loss of important links (UNESCO-IHE)
- Limited local, national and regional funding
- Access to information (journals, proceedings)