

Learning from a regional knowledge network in IWRM – the case of WaterNet in Southern Africa

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Learning from a regional knowledge network in IWRM – the case of WaterNet

Two issues in Southern Africa:

- Lack of capacity in IWRM
- Need to strengthen transboundary cooperation

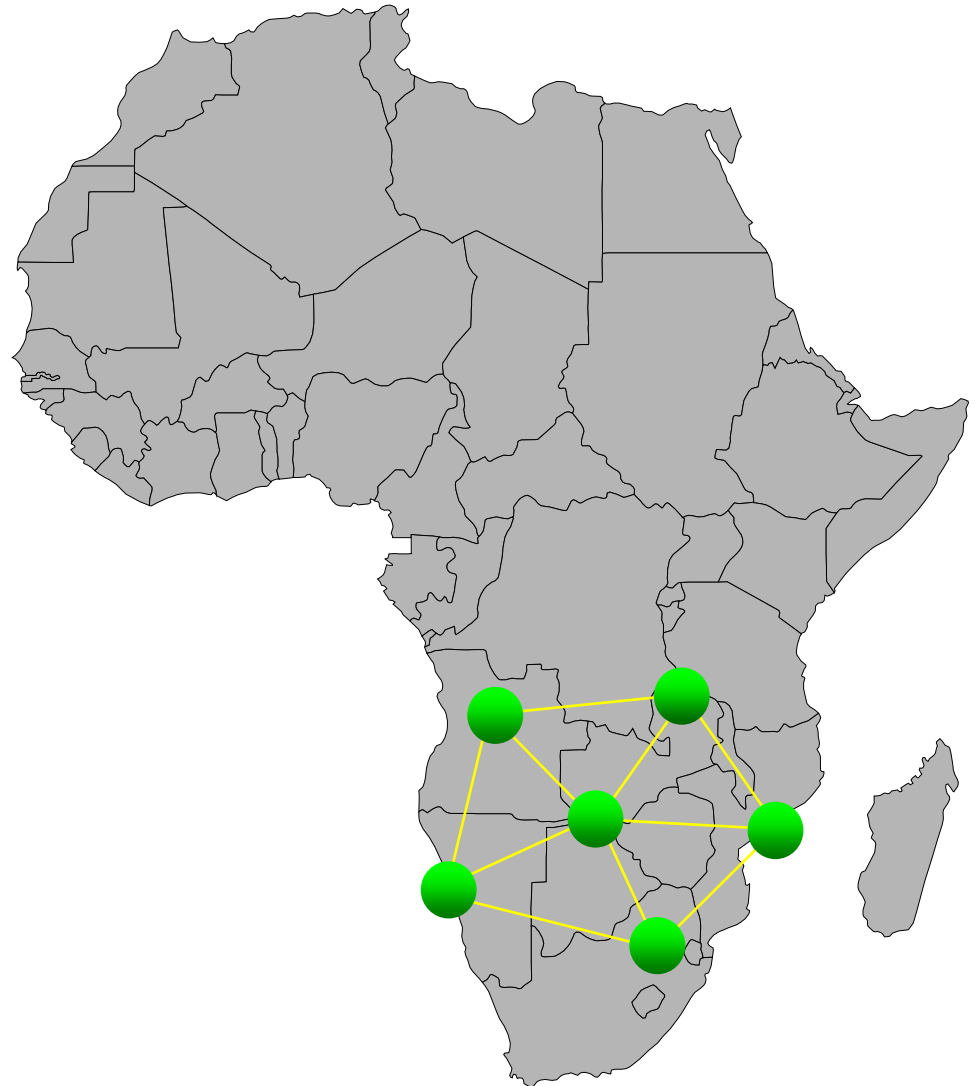
Solution:

- Regional network of knowledge institutions that establish and deliver a joint regional IWRM Master programme

WaterNet

A network for education,
training and research in
Integrated Water
Resources Management
(IWRM)

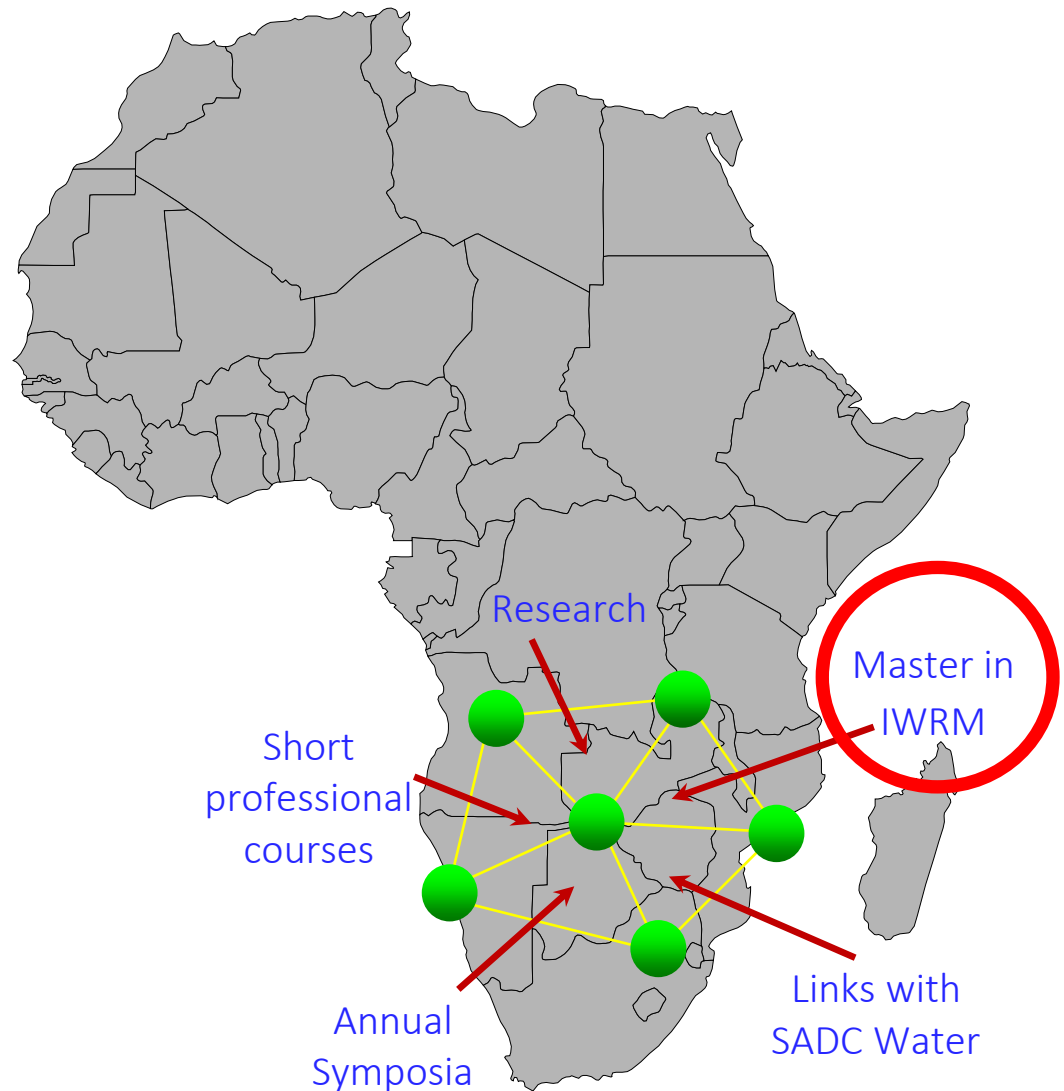
with 65 university
departments & research
institutes
in 15 countries of
Southern and Eastern
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WaterNet

Regional Master in IWRM

Objectives:

1. through a broad foundation curriculum expose disciplinary trained 1st degree holders to a wide spectrum of perspectives and to a common conceptual water language;
2. through a specialisation phase and a thesis research project, offer students the possibility to either further deepen their specialist expertise or develop their generalist knowledge and skills.

professional
courses

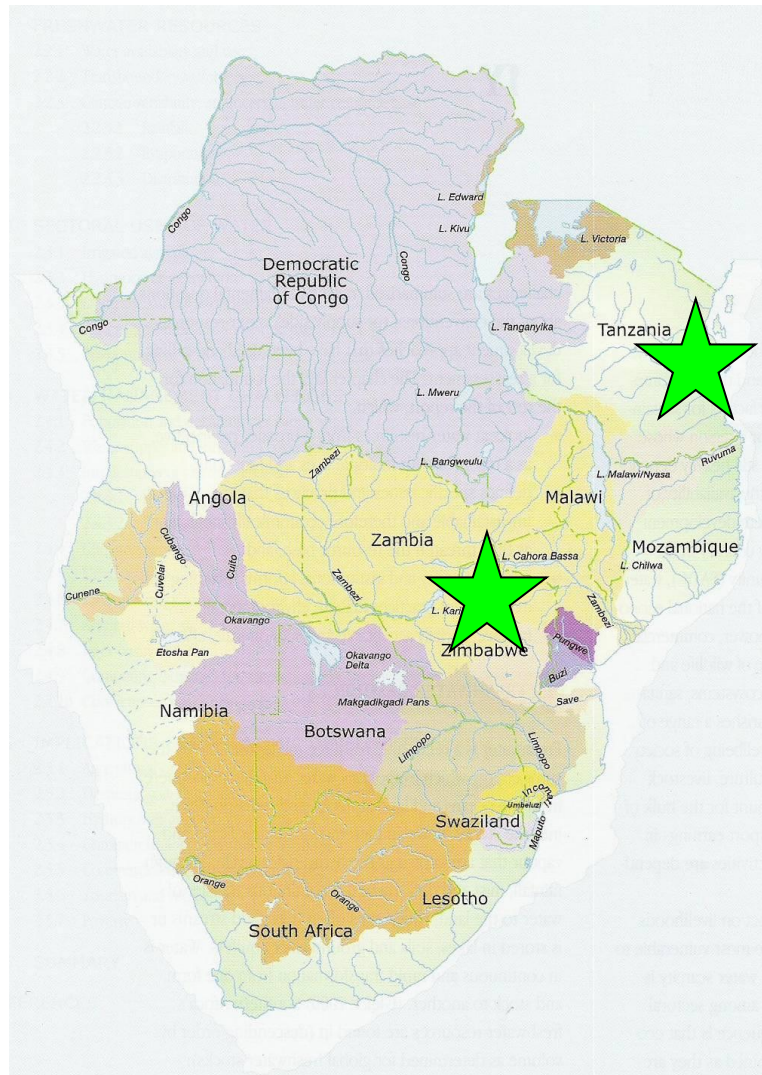
Annual
Symposia

Links with
SADC Water

Regional Master in IWRM

Agreed modality:

- two universities award the Master of IWRM degree (UDSM and UZ), both universities approving identical curricula, including course modules that would not be taught on their own campuses, but elsewhere;
- these two universities offer the core modules as well as one specialisation each;
- the other specialisations are offered by other member universities with a comparative strength in that field;
- UDSM and UZ accredit, and accept the courses offered, examined and the credits awarded, by the other universities.



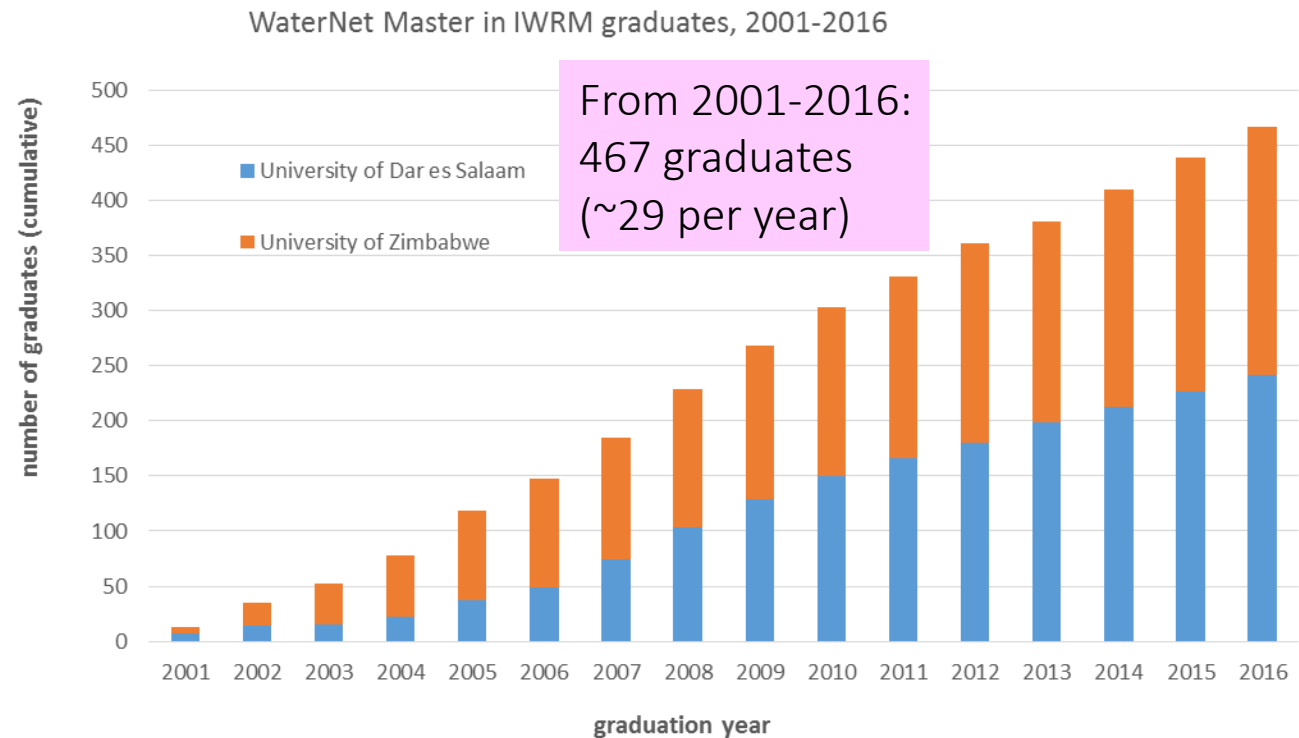
A map of Southern Africa with five stars marking specific locations: a green star in Tanzania, a cyan star in Malawi, a green star in Zimbabwe, a cyan star in Botswana, and a cyan star in South Africa. The map shows major rivers like the Congo, Orange, and Zambezi, and lakes like Victoria, Tanganyika, and Malawi/Nyasa. Country names include Democratic Republic of Congo, Angola, Zambia, Zimbabwe, Mozambique, Namibia, Botswana, Swaziland, Lesotho, and South Africa.

- Operational since 2000
- 18 months duration
- 6 universities in six SADC * countries involved
- Most students study in two countries
- Six specialisations:
 - Hydrology (UDSM, Tanzania)
 - Water for People (Polytechnic of Namibia)
 - Water and Environment (University of Malawi)
 - Water and Society (UWC, South Africa)
 - Water and Land (University of Botswana)
 - Water Resources Management (UZ, Zimbabwe)

WaterNet

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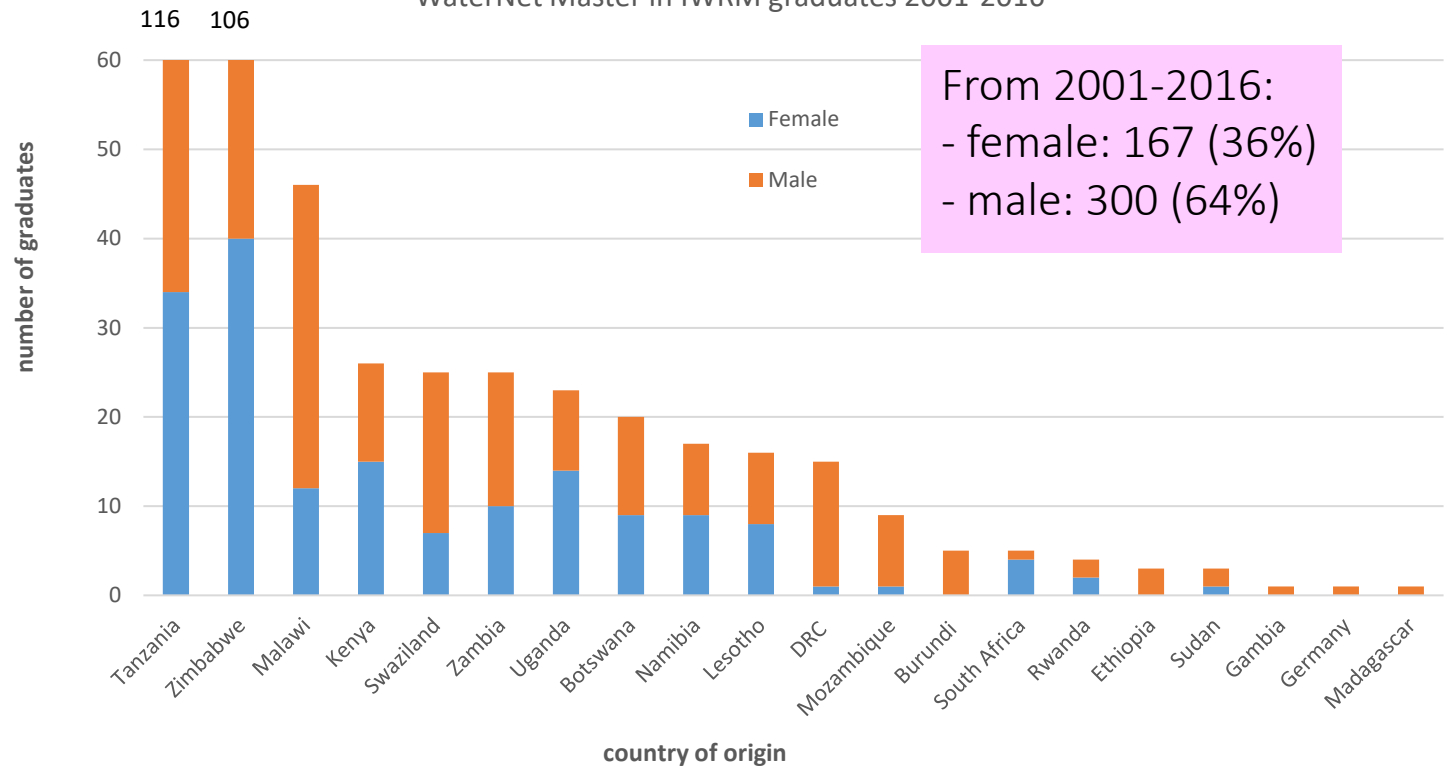


WaterNet

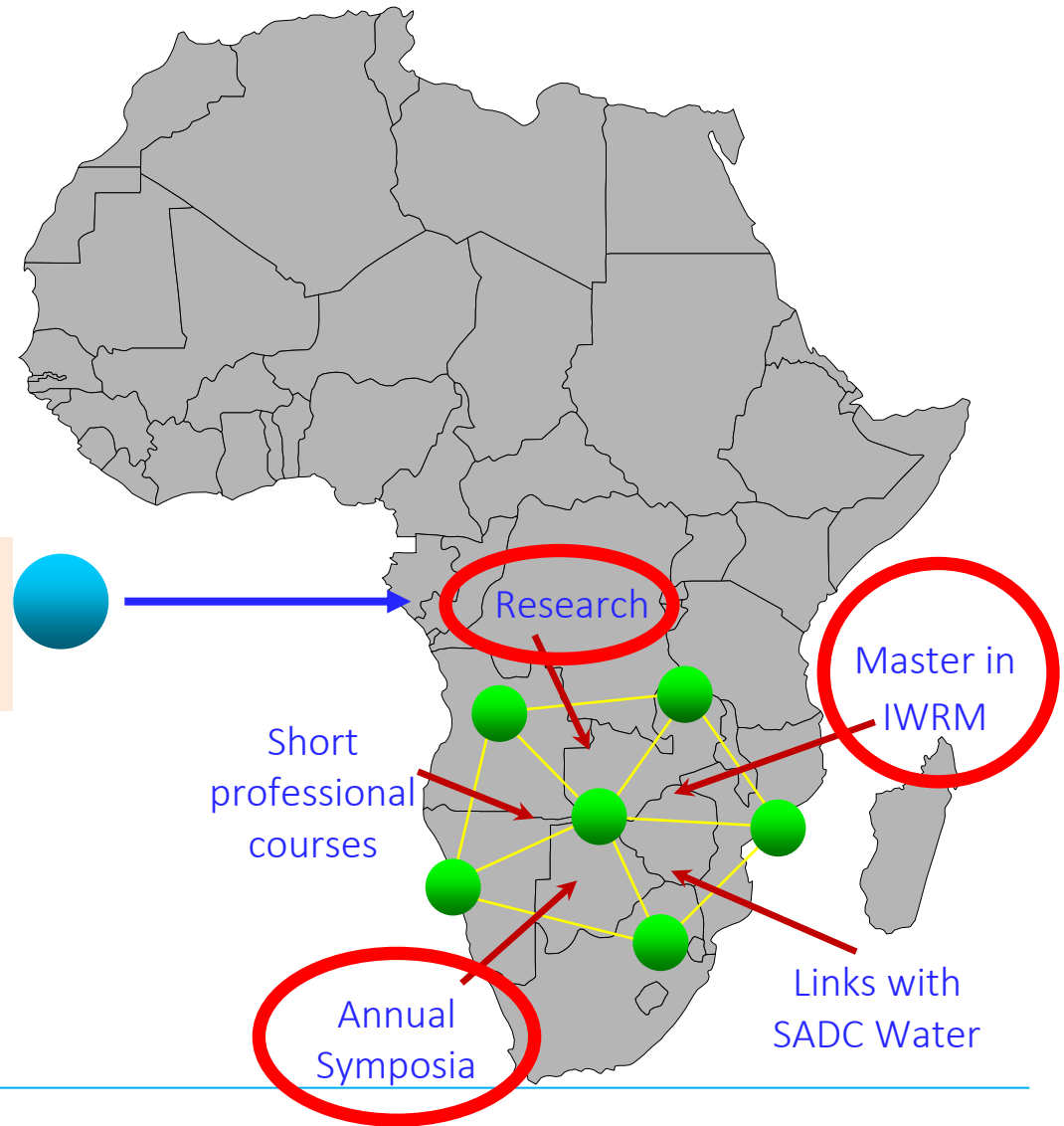
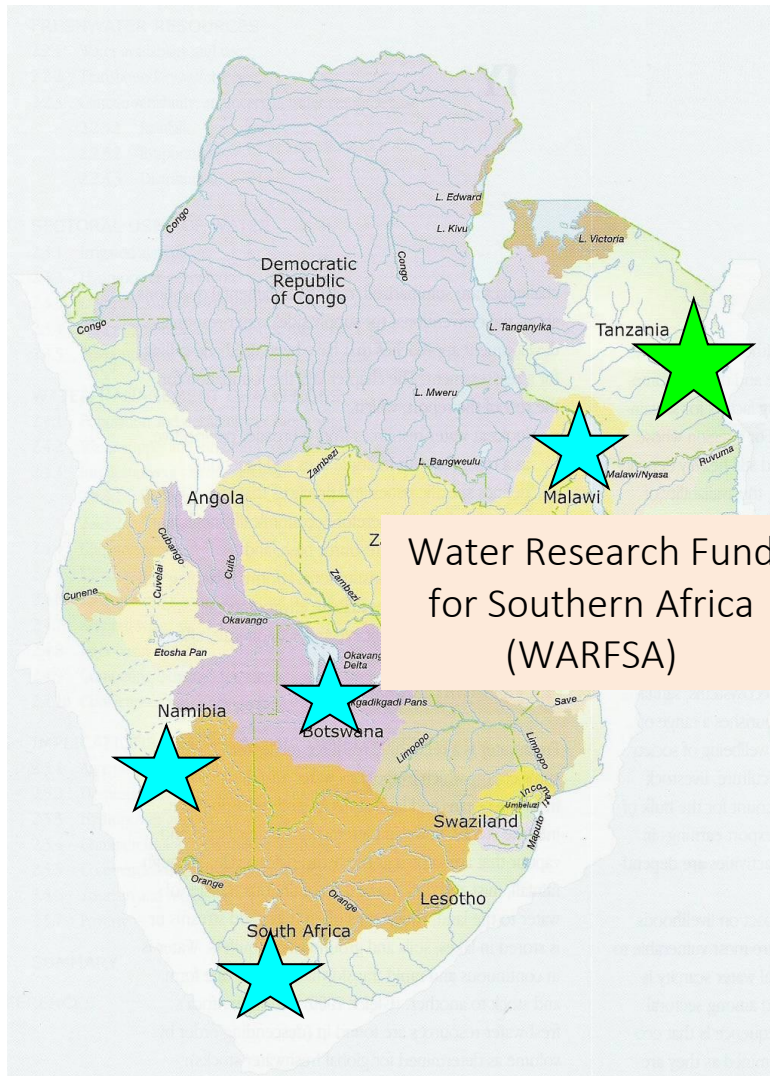
Regional Master in IWRM

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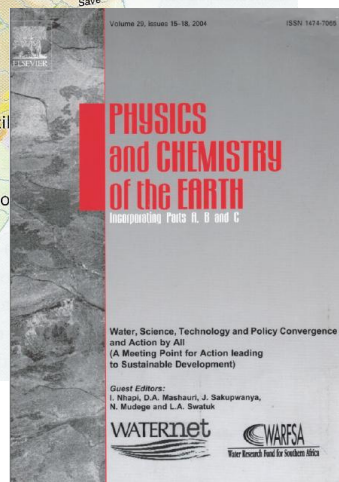
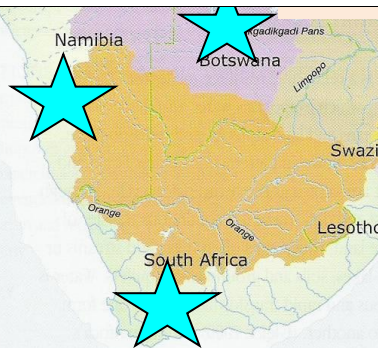
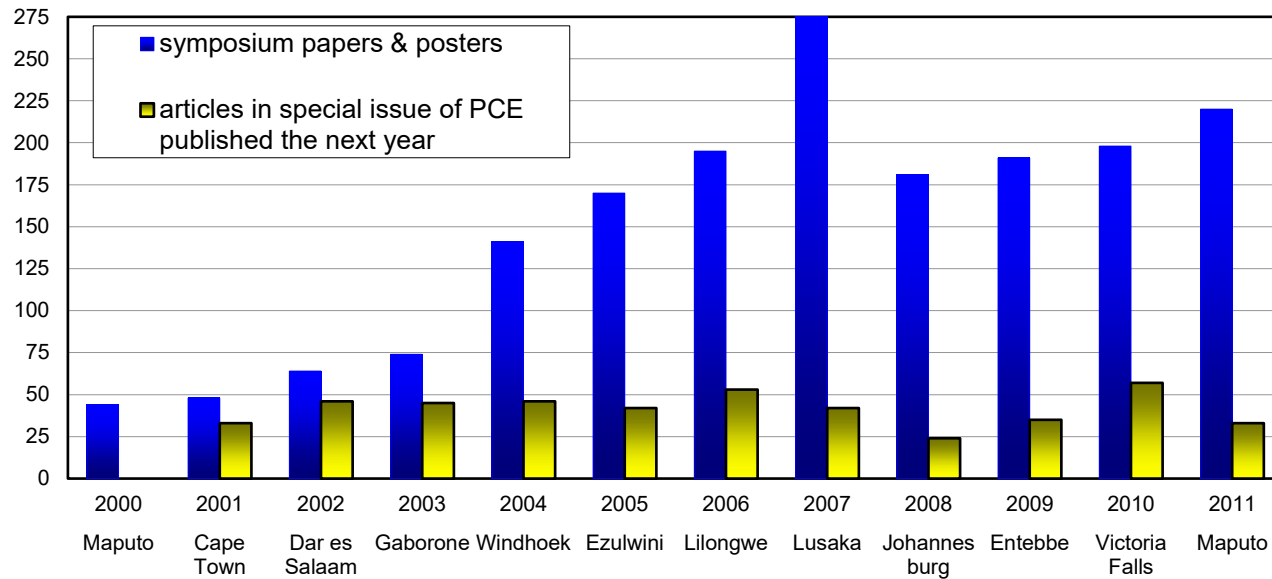
WaterNet Master in IWRM graduates 2001-2016



WaterNet



WaterNet



Short professional courses

Annual Symposia

Links with SADC Water

Master in IWRM

Research

WaterNet

Articles published in the WaterNet/WARFSA Special issues of *Physics and Chemistry of the Earth*, 2002-2011.

Special issue (year of publication)	No. of articles	Citations (January 2012)	Average citations per article
2002	33	304	9.2
2003	46	432	9.4
2004	45	363	8.1
2005	46	350	7.8
2006			6.1
2007			5.2
2008			3.9
2009	27	75	3.1
2010	35	32	0.9
2011	57	1	0.0
	423	2,261	5.3

Approximately 15% of all
scientific publications
on water resources in Africa!

Master in
IWRM

Annual
Symposia

Links with
SADC Water

Learning from a regional knowledge network

Some results of WaterNet:

- A generation of “New Water Managers” has been created
- Cooperation between disciplines
- Exposure of students from riparian countries to each others’ realities
- Common appreciation and understanding of concepts

→ *Important for transboundary issues and conflict prevention!*

Some success factors of WaterNet

- Regional network of knowledge centres that builds on comparative strengths
- Combining postgraduate education, research and outreach
- Formal recognition by regional political body
- Long-term commitment of donors to fund regional multidisciplinary education and research initiatives

Further reading

Jonker, L., P. van der Zaag, B. Gumbo, J. Rockström, D. Love and H.H.G. Savenije, 2012. A regional and multi-faceted approach to postgraduate water education – the WaterNet experience in Southern Africa. *Hydrol. Earth Syst. Sci.* 16, 4225–4232 [[doi:10.5194/hess-16-4225-2012](https://doi.org/10.5194/hess-16-4225-2012)]

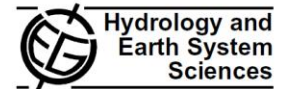
Thank you!

Contact: p.vanderzaag@un-ihe.org

Further information

<https://www.waternetonline.org/>

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www.hydrol-earth-syst-sci.net/16/4225/2012/
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A regional and multi-faceted approach to postgraduate water education – the WaterNet experience in Southern Africa

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Abstract. This paper reports the experience of a regional network of academic departments involved in water education that started as a project and evolved, over a period of 12 yr, into an independent network organisation. The paper pursues three objectives. First, it argues that it makes good sense to organise postgraduate education and research on

issues. Individually they do not command the broad field of water resources management. By pooling their expertise they are, however, able to cover the full range, from hydrology to aquatic ecology, and from water supply and sanitation technologies to economics and law (Wright et al., 2001). In the process the region moves away from concentrated expertise