

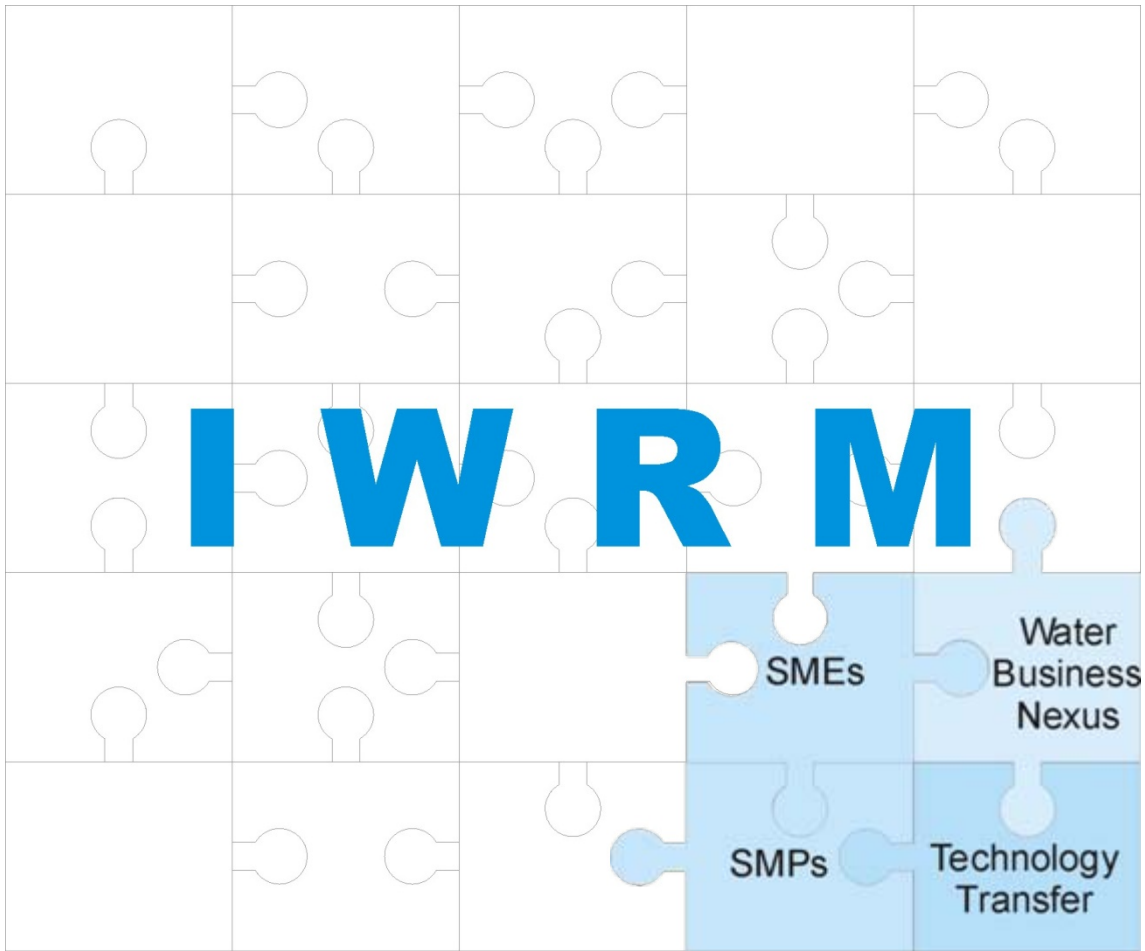
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A business driven approach for sustainable IWRM and local economic development

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IWRM is a complex instrument covering multidisciplinary aspects



How can business assist in IWRM?

The Water Business Nexus

- Water and the business sector are strongly intertwined
- Water and wastewater services are prerequisites for economic activities:
 - Past societies relied on water mainly for irrigation purposes
 - For today's business sectors, water is still an important input or process factor
 - In South Africa, every 1m m³ create
 - 106 jobs in the agricultural sector
 - 150 jobs in the mining sector
 - > 4,000 jobs in the industry sector

(source: Nieuwoudt et al., 2004)

- Private sector is (always) involved in water provision / wastewater treatment (PPP or divestiture is only one extreme, single services are common forms of PSP)

- Looking at the Millennium Development Goals, we are still far away from accomplishing the water related targets
- Further private sector buy-in will be needed to to meet these ambitious targets.
 - not because the private sector is inherently superior to public-sector service provision,
 - but because it is a crucial part of the solution to an otherwise intractable problem
- Proceed from charity to investment (UN Water): A business perspective is needed to effectively increase the number of people serviced
- The development of local skills and stimulation of SMEs to participate in the implementation of schemes is essential. Mentorship arrangements could be made with experienced partners
(Namibian Ministry of Agriculture, Water and Forestry, 2008, rephrased).

Technology Transfer – Definition and History

- Local SMEs need empowerment to develop necessary skills to support IWRM
- Technology transfer comprises the transfer of physical goods as well as of intangible assets (intellectual property, know-how)
- In the history of ODA, there were different strategies for technology transfer:
 - 1st Phase (until 1980s): limited technology transfer (only delivery of goods and machinery)
 - 2nd Phase (1980s until today): extended technology transfer to include operation and maintenance services
 - 3rd Phase (Mid 1990s until today): Management / O&M services and extended technology transfer

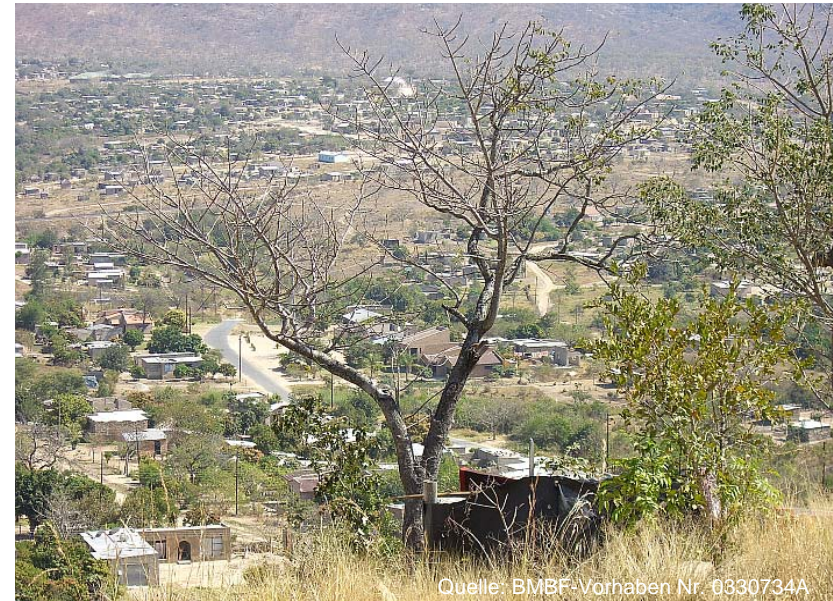
Technology Transfer – Barriers and Incentives

- To be effective, technology transfer requires both the owner and the recipient to fully transfer and use the know-how, respectively
- In the absence of adequate incentive schemes,
 - the know-how owner will limit the transfer to remain in control of his/her intellectual property
 - the recipient is reluctant to fully use new methods and technologies as long as benefits do not exceed the efforts
- Consequently, the transfer will not be as complex in scope as it could have been
- The concept of business format franchising presents a role model for how to set financial incentives that promote and sustain the transfer of know-how

- Global Water Franchise Agency, founded in 2008
- Platform for water services and management
- GWFA serves as technology provider ...
- ... to local SMEs
- Benefits for the company: access to markets with a small revenue base, hence closed to international service providers
- Benefits for local SMEs: empowerment to realise new projects (SMPs) in the field of water and sanitation

SMP Case Study from South Africa

- Small black community (former homeland) with about 10,000 customers
- Historically poor payment culture (form of political resistance, SA problem)
- Resulting high administrative water losses (around 90%): political order to supply water
- Franchise agreement with local SME to get better access to customers (better acquainted with local „culture“)
- Agreement covered the provision of „near to customer services“: meter reading and billing, reporting of illegal connections, new connections, in-house services ...
- SMP with significant impact: administrative water losses were reduced by 60% within first year



Quelle: BMBF-Vorhaben Nr. 0330734A

Final Remarks: Small and Medium Projects – Benefits and Challenges

- Public awareness: There are huge investments needs in the global water sector (estimates range from EUR 400bn to EUR 700bn – annually)
 - However, majority of projects are Small and Medium Projects (SMPs, size ranging from EUR 0.1m to EUR 2m)
 - Yet, size of SMPs does not suffice to cover lender's fix costs (typically EUR 5m to EUR 50m)
 - Further, lenders associate SMPs with high risk of default
 - To reduce this risk, lenders reduce maturity
 - But, reduced maturity impacts significantly on financial viability (cash flow does not suffice to cover debt service)
- There is a need to develop new financial products for SMPs

Thank you for your attention !



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