



# Sustainable Financing Mechanisms for Good Water Governance and Water Service Performance

Speaker: Prof. Dr. mult. Karl RUDOLPH  
[mail@uni-wh-ieem.de](mailto:mail@uni-wh-ieem.de)

SPONSORED BY THE



IEEM gGmbH  
Institute of Environmental Engineering  
and Management at the  
Witten/Herdecke University  
[mail@uni-wh-ieem.de](mailto:mail@uni-wh-ieem.de)  
[www.uni-wh-ieem.de](http://www.uni-wh-ieem.de)



Federal Ministry  
of Education  
and Research



**WISA 2020 Online Conference | 10.12.2020**

## What are the drivers of success, of failure in water and sanitation ?

2

UN reports highlight insufficient progress to achieve SDG6 in developing regions  
**What is the impact of investment financing mechanisms ?**



The photos above are from WWTPs in Africa, with operational default (left) and with operational success (right) built with sufficient financial investment budgets, but managed under different governance conditions.

## Basic Mechanism of DFI Loans and Grants (ODA)

In many developing and emerging (transition) countries, the public water sector can be described as a **DDM** - donor dominated market with other institutional framework and governance than the industrial water sector, which is a **CDM** (customer dominated market).

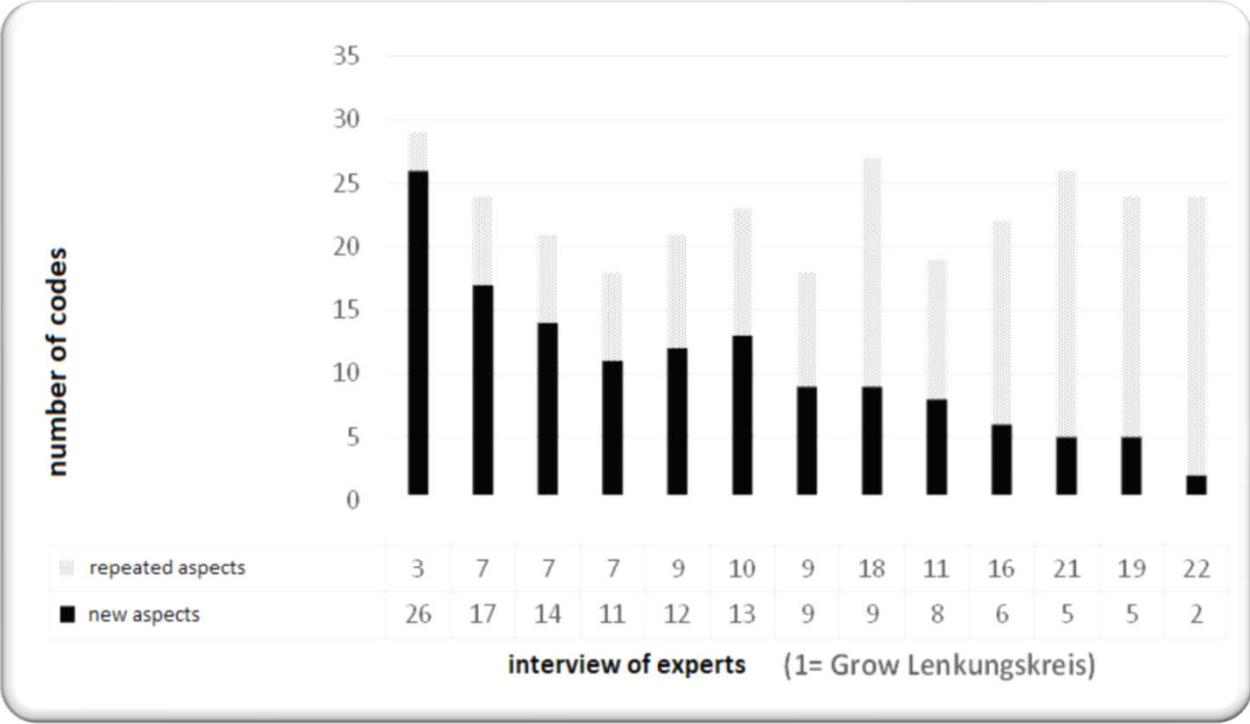
In a DDM, the governance is influenced by the **DFI** (Development Financing Institutions, donor banks), which provide **ODA** (Official Development Assistance).

+ DFI grants are for free, DFI loans cheap, mostly.

- DFI funds are usually based on a sovereign state guarantee of the beneficiary's country and disbursed exclusively to a public secured entity. Risk-relieved by such guarantees and acting under the umbrella of their home-state shareholders, ODA-banks are "*double cushioned*".
- **Consequently, neither the ODA-banks nor the owners, operators of water systems are financially accountable for successful O&M, service performance.** Unlike commercial banks, ODA-banks are not forced to make sure that water investments lead to sustainable water service performance, technically nor financially.

**Methodology**  
**Review** of case studies and publications about local water service performance.  
**Evaluation** of own project experiences and other case-specific data.  
 Target sampling oriented **interviews** with water utility professionals from various countries.  
 Additional information and **expert opinions** collected to counter-check results.

The figure indicates the number of codes, changing during the data analyses of interviews.  
 In general, the no. of new aspects decrease, whereas the no. of repetitions increase until saturation.



A final review and modification of the pre-final thesis paper was done in consultation with highly experienced experts from international development cooperation (*thanks to GIZ !*) and from the water industry (*thanks to AquaFed members !*) sponsored by BMBF

Overarching recommendations by researchers of the BMBF GRoW research programme

[https://bmbf-grow.de/sites/bmbf-grow.de/files/documents/seven\\_sins\\_against\\_local\\_water\\_management.pdf](https://bmbf-grow.de/sites/bmbf-grow.de/files/documents/seven_sins_against_local_water_management.pdf)

SPONSORED BY THE



Federal Ministry of Education and Research

- ## *Seven Sins*
- ### *against Local Water Management*
- I. Poor Incentives for Water Service Performance*
  - II. Insufficient Cost Transparency*
  - III. Neglected Demand Management*
  - IV. Consultants Instead of Water Service Providers*
  - V. Weak Local Water Business Development*
  - VI. No Impact of Investment Finance on O&M*
  - VII. Political Influence on Executive Operations*

### VI. Impact of Investment Finance on O&M

*WHY?* For good reason, donor banks are risk-protected under state guarantees and the umbrella of their governmental shareholder(s). Commercial banks are bearing financial risks and suffer if their borrower does not generate revenues for debt repayment as planned. Therefore, commercial banks are committed to make things work, from design and construction to operation and water services. Subsidized investment finance without risk on side of the lending banks is a fertile ground for insufficient O&M and sunk investments in the water sector.

*Subsidies are like drugs: Live saving if you need them, but drugs can kill if side-effects are neglected for too long.*

*HOW?* **Blended finance**, or (how the authors would prefer to say) **hybrid finance** with a certain component of private risk finance contributed by commercial banks can be a reasonable solution, provided the technical risks of project development and execution are not socialized generating hidden risk guarantees to the disadvantage of taxpayers respectively water consumers. Wherever possible, lenders should prefer loans from financing institutions with a commercial component and collect competing offers from various, different banks.

### IV. Employment of Consultants instead of Liable Water Service Providers

*WHY?* Consultants can be of great help for water utilities. Independent advice without conflict of interest to select between competing technologies or services may come from consultants, not from companies selling this. However, to purchase water technologies or operational services is a different issue. Contractual compliance with water standards can be delivered by liable providers of goods and services.

*If you pay per hours & papers, you will get hours & papers. If you pay for m<sup>3</sup> serviced, you will get m<sup>3</sup> serviced.*

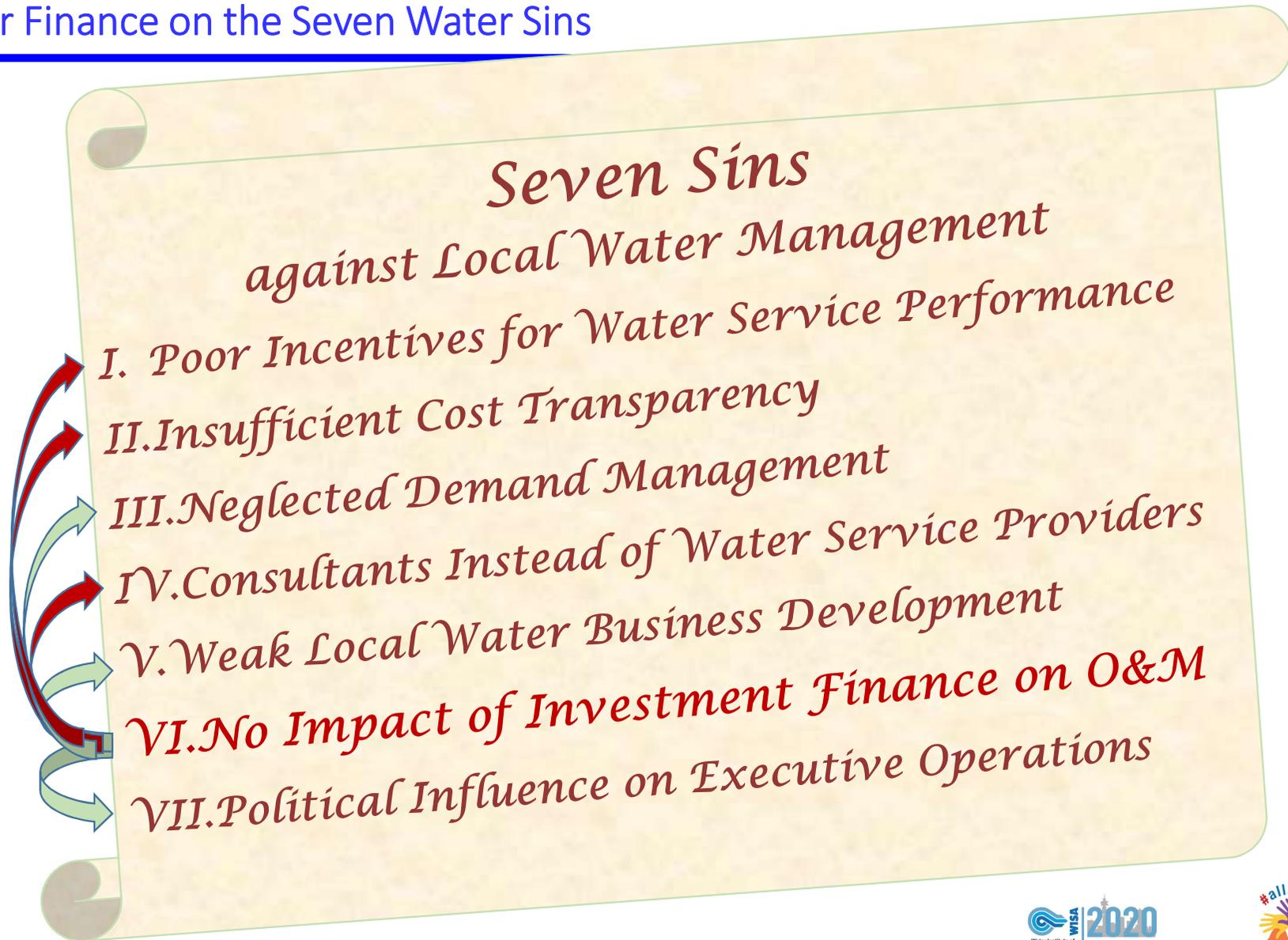
*HOW?* In most developing countries and emerging markets, there are very often very many consultants involved. Use consultants, municipal twinning, water operator partnerships and others to train local staff, prepare procurement and supervise liable providers of goods and services. But **do not substitute liable technology and service providers with consultants** paid per hour, even if others pay.

**red arrows:**

ODA financing mechanisms bear responsibility

**green arrows:**

ODA financing mechanisms could (and sometimes do) help or try to establish Good Water Governance, eradicate water sins



SPONSORED BY THE



Federal Ministry of Education and Research

### Sustainable Financing Mechanisms must be structured to support Good Water Governance with impact on the operational performance of local water facilities & utilities

Consequently, water finance must incorporate a fair risk on side of the borrower and incentivise the lender to make sure that water facilities, utilities are operated, successfully.

In general, sustainable water finance should prevent the Seven Water Sins and therefore

- may well include a major grant component for Technical Assistance, Project Development and „viability-gap-funding“ under valid development goals
- but does include a significant output-based loan component (>15%, as successfully experienced with forfeiting) re-financed through tariff revenues and land-value increases.
- “Blended Finance“ as discussed under GIZ, OECD is good, but useless if more than political risks and *force majeure* are socialized. Technical and entrepreneurial risks must remain with the responsible public or private owners and operators of the financed water facilities
- be implemented through a ring-fenced municipal SPV entity or PPP (sins II and VII)
- be supported by a professional performance O&M-warranty from a professional service provider.



Insight

In developing countries, **improved** increased financing for water utilities is the only way to achieve SDG 6

May 30, 2018 IWA Journal „The Source“



Money same as Water:  
More Efficiency, not just more budget, will solve the problem.

# Thank you for your attention!

KU Rudolph



IEEM gGmbH@Witten/Herdecke University  
[mail@uni-wh-ieem.de](mailto:mail@uni-wh-ieem.de)

SPONSORED BY THE



Federal Ministry  
of Education  
and Research