

GRoW Cross Cutting Topic No. 1: Incentive Mechanisms in the Context of Governance

Seven Sins against Local Water Management

Seven Starting Points to Secure Water Services Stop Sunk Investments

by KU Rudolph and Jens Hilbig
mail@uni-wh-ieem.de

SPONSORED BY THE



Federal Ministry
of Education
and Research



An Initiative of the Federal Ministry of
Education and Research

GRoW
WATER AS A GLOBAL RESOURCE



Presented at the GRoW Final Conference on 20 October 2020, Berlin, Germany

7 Water Sins: 1. Motivation and Background

The following key words indicate some of the most important lessons learned under the GROW cross-cutting topic 1 „Incentive Mechanisms in the Context of Governance“:

- Lack of water resources ↔ Lack of water management
- Good water governance = Effective water governance
- Water service performance (SDG6) ↔ Local utility management.

Accomplishing the focus of water education/training & research in the context of governance, the reasons and drivers of success and failures for water services on the local level („micro governance“, “water utility governance”) have been researched.

7 Water Sins: 1. Motivation and Background (continued)



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

7 Water Sins: 2. Methodological Approach & Work Activities

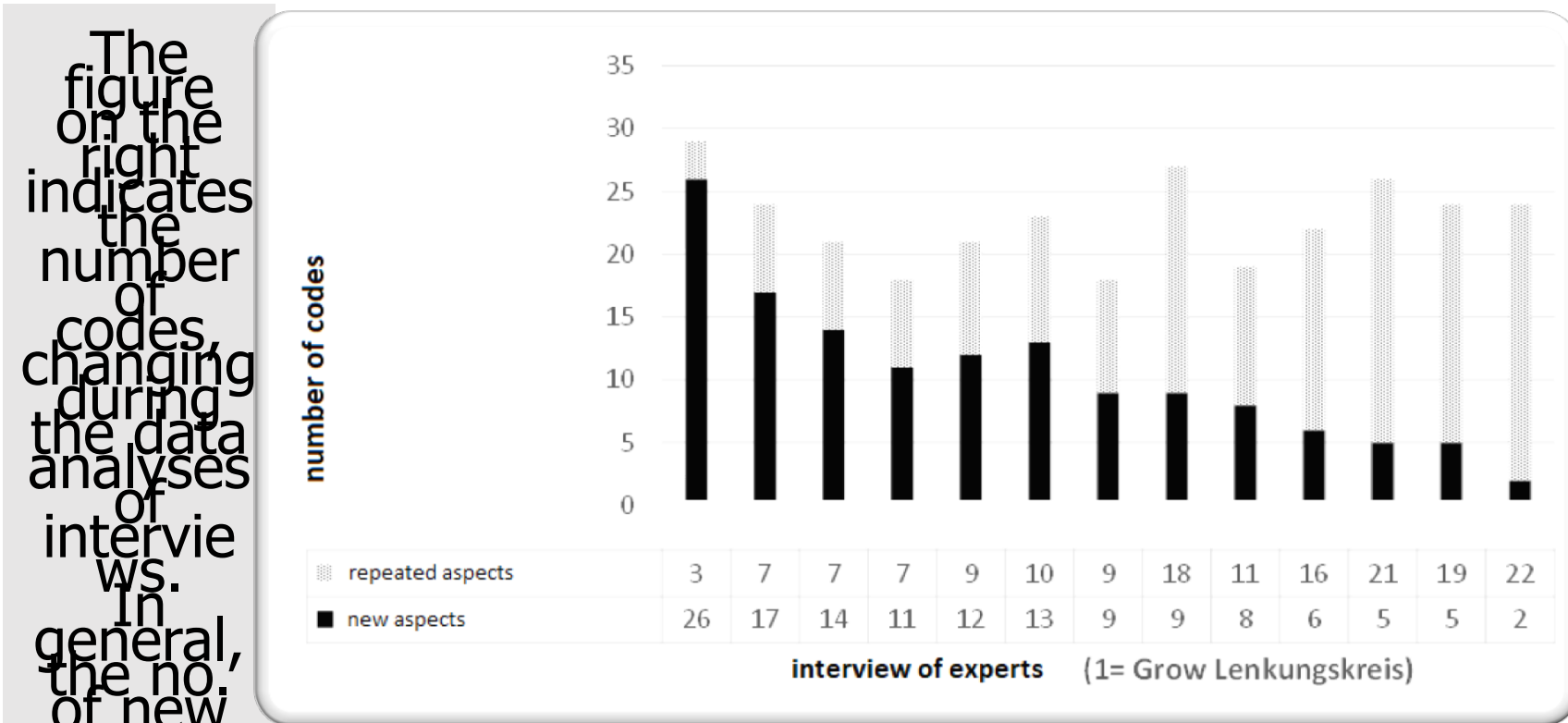
The starting platform was a due review of case studies and publications (own and others). Case specific data, information and opinions were collected, after presentation of the “brief paper” and ongoing research before colleagues e. g. from the GRoW Community, the IWA (WWD Brisbane), WISA (AWC Cape town), for UN Water Efficiency and GIZ (WLR workshops in Ouagadougou, Sofia ...), at the 50th DPR anniversary event Windhoek and in Lis Boa, following a Water Regulators Group meeting.

- A draft thesis paper on the 7 water sins (including input from members of the GRoW working group on “Incentives in the Context of Water Governance”) was presented and discussed with the GROW Steering Committee on 7 Nov, 2019.
- The decision was to go forward and further detail, verify, improve the thesis paper.

The research method was empirical, interview-based, with an encoded list of Q&A related to the 7-sins draft. The work procedure was

- ▶ a) Select and acquire **experts for interviews**
here: local water utility managers or shareholders with professional qualifications from AT, AU, DE, FR, GB, IN, JO, JP, KE, NA, NI, PE, RU, US, UZ, ZA
- ▶ b) Carry out interviews with „**target oriented sampling**“ of topics, views and digest reasons, factors for success or failure, digitalised with encoded criteria.
- ▶ c) Scout for **additional topics, views...** („codes“)
- d) After „data saturation“ **end the interviews**,
because more experts and interviews are unlikely to bring in new aspects (codes)
- e) Elaborate the **pre-final draft of the „7 sins“ paper**.
[for the methodological approach see Glaser, 1992; Saunders, 2005; Stroemer, 2020]

7 Water Sins: 2. Methodological Approach & Work Activities (continued)



The figure on the right 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.

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 !)

7 Water Sins: The Seven Sins, here No. I and II

I. Poor Incentives For Water Service Performance

WHY? Without incentivising the ones responsible for water management on the local level, it is unlikely that water facilities are well-functioning. Public services are seldom structured to pay different salaries for different work performance. Neglected staff and equipment for O&M (operation and maintenance) is a major bottleneck of success in service performance and often the first expenditure which treasurers cut in times of financial difficulties.

Unless all team members are angels, water utilities need financial incentives to motivate its productive people.

How? The **introduction of penalties and rewards** (monetary and others) among the different staff levels is important. This might also help to reduce the current difficulties in attracting and keeping motivated qualified personnel. For PPP-contracts with private service operators performance-based incentives are quite common and can serve as a good role-model for municipal decision-makers to be considered.

II. Insufficient Cost Transparency

WHY? Without knowledge about real costs, no city council or utility leader can take rational decisions, be it about alternative technologies, different managerial options, tariff strategies or water business planning, in general. Currently, too many decisions are made in an information vacuum, navigating without transparent financial data.

As airplanes need geographic navigation, water utilities cannot work without financial navigation.

HOW? **Establish financial modelling**, as far as possible, focused on the needs of local water utilities and adapted to the structure of the utilities' bookkeeping with common tables and lists.

7 Water Sins: The Seven Sins, here No. III and IV

III. Neglected Demand Management

WHY? “Day Zero” is a famous label which did raise awareness during the latest drought in Cape Town. To raise awareness is inevitable but of little value without reliable commitment. Low, subsidized tariffs, flat-rate tariffs, poor collection rates, legal barriers to cut or limit water supply can ruin all efforts for reasonable water demand management and finally the quality of water services.

Without water demand management it is unlikely that water is saved & used, instead of being wasted & lost.

HOW? **Realize water demand management** targeted as one element of water efficiency, in combination with water loss reduction programs addressing physical losses (leakages) as well as administrative losses (water theft, unbilled or unpaid water consumption). Digitized water metering, leakage and pressure control is much easier than it was in the past. A lot of progress has been achieved, but much more is needed, still.

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 m³ serviced, you will get m³ 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.

7 Water Sins: The Seven Sins, here No. V and VI

V. Weak Local Water Business Development

WHY? Water and environmental services support the development of the local economy significantly. Local contracting will enhance political acceptance and willingness to charge respectively to pay for good water and sanitation services, in line with the SDG targets (Social Development Goals of the UN as adopted by many countries, like Germany).

“Jobs per drops” with local contractors can improve political acceptance.

HOW? **Lean design tender docs** with work packages designed in a way that certain lots become attractive for local entrepreneurs, in terms of risk share and obligations (request skills which are available in the local provider market). For ambitious works, make sure that international technology and service providers are not chased away but incentivized to partner with local companies in a way that the local market can develop further.

VI. No 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.

7 Water Sins: The Seven Sins, here No. VII

VII. Political Influence on Executive Operations

– the “Mother Of Sins” in Water Management

WHY? Public entities and municipal water utilities are under political governance. This is justified for political decision-making and supervision, but not for the operational execution of what has been decided. However, and far too often in certain countries, water utilities are misused for self-catering. Execution fails without executives empowered to act according to managerial, technical, entrepreneurial needs disregarding political interferences.

Water utilities cannot perform without protection against political interferences in day-to-day business.

HOW? **Ring-fenced utilities** (not necessarily established as autonomous legal entities, but committed to act as a commercial company (with the council as shareholders, the utility leader as CEO) can be a good way to make sure that the different political and executive roles and players are clearly defined and strictly separated. Ring-fencing could be protected under binding contracts as pre-condition of donations under international law.

7 Water Sins: Epilogue

As the German chancellor Dr. Angela Merkel is holding the **7-Social Sins** written 1925 by Mahatma Gandhi which she had received from preminister Narendra Modi during her mission to India in 2020.



The speaker would hope that the **7-Water-Sins** will be held up by water leaders and influencers, contributing to **good water governance for good local water management with good water services** in compliance with the SDG's and the objectives of our sponsor, the BMBF.

Thank you for listening to this presentation,
Stay healthy, wherever you are !

That's it.

We, as part of the
GRoW community, are
thankful to have had the
opportunity for
research focused on
science based facts
without the obligation to
pursue direct political
and individual interests.

*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*

SPONSORED BY THE



Federal Ministry
of Education
and Research