

Addressing integrity risks in wastewater management: good and bad practices

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Water Integrity Network



Alarming facts...

- **80% wastewater released untreated** into natural water bodies (WWAP, 2017)
- **1.5 billion people globally connected to sewage system without treatment facilities** (Baum et al., 2013)
- In 2012, **800,000 people died worldwide due to exposure to contaminated water** (WWAP, 2017)
- **Water quality will deteriorate further in the next decades**, particularly in low-income countries and water-scarce regions (IFPRI, 2015)
- Along the Chinese coastline, **68 percent of discharge points for release of industrial wastewater into the sea have been reported as sites of illegal dumping** (Greenpeace, 2014)
- In Ghana, **fewer than 10 out of 70 wastewater treatment plants were operating effectively** (Murray & Drechsel, 2011)

A photograph showing two large, white, cylindrical pipes discharging a thick, dark blue liquid, likely wastewater, into a body of water. The pipes are secured with a dark strap. The surrounding area is a concrete structure with some bricks and debris. The water in the pool below is dark and turbulent.

“Corruption is fundamentally linked to water pollution in many instances.”

(Harrington, 2011)

Integrity Risks in Wastewater Management

Pollution & Corruption

Key elements

- **Infrastructure investments**
- **Licenses and permits**
- **Enforcement**
- **Monitoring & reporting**
- **Corruption as an environmental crime**



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Pollution & Corruption - Drivers

Large economic interest:

- Economic development
- Employment
- Costs of wastewater treatment



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Bonaire

Inflated Sewage Treatment Plant Construction Costs

- Development of sewerage system identified as way to protect the coral from wastewater contamination
- In 2000s, funding from the European Union (EU) for construction of a sewage and wastewater treatment system requested
- Whistleblower: ***“I had to leave in 2011 because I did not cooperate in the fraud. I always had to pay more than the contractor was permitted under the construction agreement. The amount rose to €250,000”*** (Dohmen, 2013)
- By 2013, the EU halted all financing of development projects for Bonaire on suspicion of fraud

Bangladesh

Dysfunctional Effluent Treatment Plants in Garments Industry

Inadequate monitoring and inconsistent enforcement

- **40-80% of factories have ETPs, yet many not designed according to standards** and/or not operated in an appropriate and responsible manner.
- **Lack of monitoring systems.**
- **Lack of accountability mechanisms:** inspections are not carried out properly, including **inspection officers not getting (immediate) access to factories.**
- **Indications of bribery and extortion.**



Use and Effectiveness of Effluent Treatment Plants (ETPs) in the Garments Industry of Bangladesh: a Water Sector Integrity Perspective

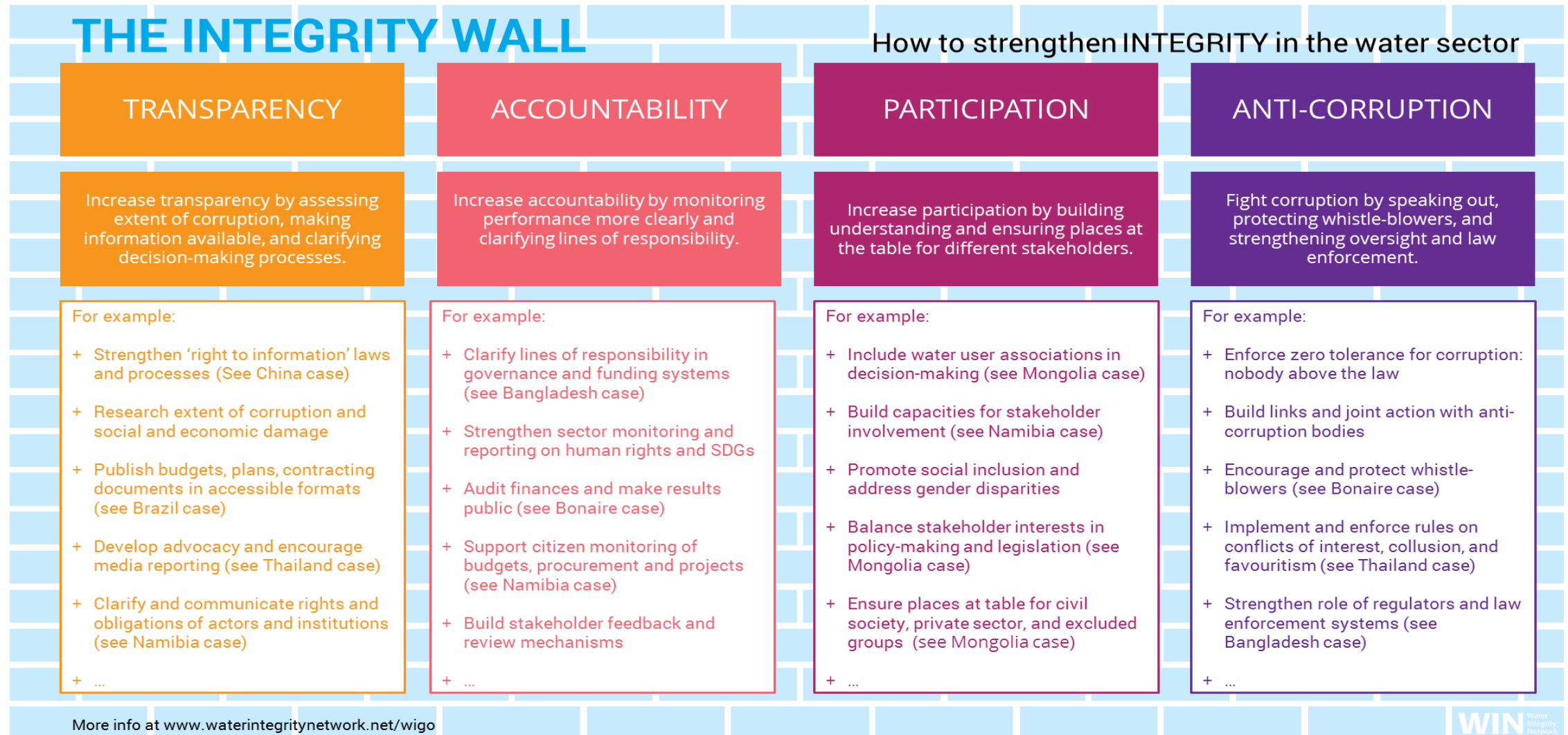
Rakibul Haque
and
ENRAC team





Integrity in Wastewater Governance: Better Practices

Framework for Action



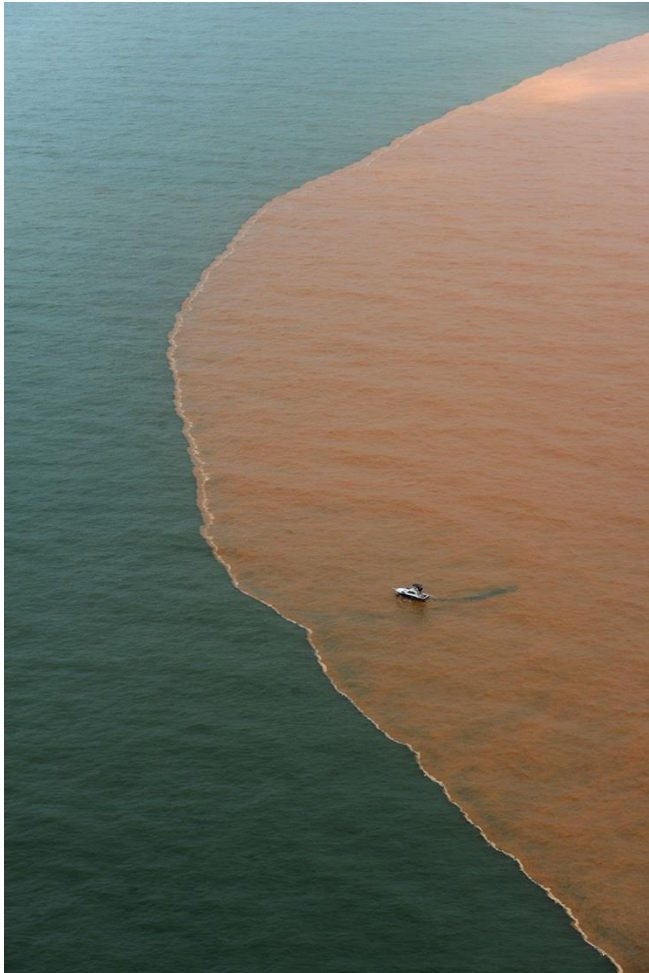
Adapted from the Water Integrity Global Outlook (WIN, 2016)

Positive cases



- Successful action of rural communities in Mongolia against polluting gold mining
- Multi-stakeholder oversight of local sanitation plans (Laos)
- Transparency and pro-active communication on wastewater treatment and re-use (Windhoek, Namibia)

Strengthening the Role of Regulators (1)



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- Institute strong and independent **licencing** agency at central level
- Institute strong and independent **enforcement** agency at central level
- **Transparency** is a powerful tool!
- Proper **whistleblower** arrangements

Strengthening the Role of Regulators (2)



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- **Ensuring the autonomy of regulators** and **developing strong monitoring frameworks** and minimum standards (e.g. for water quality)
- **Water sector regulators must collaborate with other regulatory and public oversight institutions**, such as anti-corruption commission, parliament, public procurement authority
- **Need to strengthen consumer feedback and analysing media reports** as sources of information for assessing service quality and utility governance

The Role of Citizen Monitoring

- Citizens are key to monitoring and reporting on issues of pollution and dumping of illegal waste
- Citizens can indicate when services are not functioning according to standards and push for greater accountability
- Participatory monitoring works best when officials, users, and citizens engage with each other (WIN, 2016) and when the participatory process is seriously and transparently handled



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Thank you