# Addressing integrity risks in wastewater management: good and bad practices

Frank van der Valk, Binayak Das, Elske Koelman, Claire Grandadam, Grit Martinez

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 lowincome 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)



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

### THE INTEGRITY WALL How to strengthen INTEGRITY in the water sector TRANSPARENCY **ACCOUNTABILITY PARTICIPATION ANTI-CORRUPTION** Increase accountability by monitoring Fight corruption by speaking out, Increase participation by building performance more clearly and protecting whistle-blowers, and understanding and ensuring places at clarifying lines of responsibility. strengthening oversight and law the table for different stakeholders. decision-making processes. enforcement. For example: For example: For example: For example: + Strengthen 'right to information' laws + Clarify lines of responsibility in + Include water user associations in + Enforce zero tolerance for corruption: and processes (See China case) governance and funding systems decision-making (see Mongolia case) nobody above the law (see Bangladesh case) + Research extent of corruption and Build capacities for stakeholder + Build links and joint action with antisocial and economic damage + Strengthen sector monitoring and involvement (see Namibia case) corruption bodies reporting on human rights and SDGs + Publish budgets, plans, contracting Promote social inclusion and + Encourage and protect whistledocuments in accessible formats + Audit finances and make results address gender disparities blowers (see Bonaire case) (see Brazil case) public (see Bonaire case) Balance stakeholder interests in + Implement and enforce rules on + Develop advocacy and encourage + Support citizen monitoring of policy-making and legislation (see conflicts of interest, collusion, and media reporting (see Thailand case) budgets, procurement and projects favouritism (see Thailand case) Mongolia case) (see Namibia case) + Clarify and communicate rights and Ensure places at table for civil Strengthen role of regulators and law obligations of actors and institutions Build stakeholder feedback and society, private sector, and excluded enforcement systems (see groups (see Mongolia case) Bangladesh case) (see Namibia case) review mechanisms More info at www.waterintegritynetwork.net/wigo

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

# Positive cases



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- 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