

Balancing competing interests and harnessing opportunities for better wastewater governance

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Agenda

9:00: Welcome and setting the scene: major challenges for wastewater governance (Alejandro Jiménez, SIWI)

9:10 Overview of the cases (Meera Mehta, CEPT)

9:20 Marketplace of cases (facilitated by Alejandro Jiménez, SIWI)

10:00 Reflections from case presenters and discussion with audience

10:25 Concluding remarks (Marianne Kjellén, UNDP)



Marketplace cases

- Win-win agreements between municipalities and farmers on wastewater reuse. The case of Cliza Bolivia (Gustavo Heredia, AguaTuya, Bolivia)
- Decentralized treatment of waste water, a municipality perspective Söder (Karl-Axel Reimer, Södertälje Municipality, Sweden)
- Experiences of Innovative governance models for wastewater in Durban, South Africa (Jay Bhagwan -Water Research Commission)
- New scalable business models for citywide sanitation (Dinesh Mehta and Meera Mehta; CEPT University, India)
- Reuse of treated wastewater in Jordan; from silence to outspoken success (Sameer Abdel-Jabbar, GIZ, Jordan)



Introduction: Setting the scene

Alejandro Jiménez, SIWI

Definition

“Wastewater is regarded as a combination of one or more of: domestic effluent consisting of blackwater (excreta, urine and faecal sludge) and greywater (used water from washing and bathing); water from commercial establishments and institutions, including hospitals; industrial effluent, stormwater and other urban runoff; and agricultural, horticultural and aquaculture runoff (Raschid-Sally and Jayakody, 2008).”

Global overview: FACTS

- Globally, over 80% of all wastewater is discharged without treatment. In low income countries, only 8% is treated.
- 1 USD spent on sanitation brings 5.5 USD for society
- 60% of people connected to sewer system. Over a billion people served by onsite sanitation technologies.
- 65% (35.9 Mha) of downstream irrigated croplands depending on urban wastewater flows.
- By 2030, global demand for energy and water is expected to grow by 40% and 50%, respectively.



TRANSFORMING OUR
WORLD:
THE 2030 AGENDA FOR
SUSTAINABLE
DEVELOPMENT

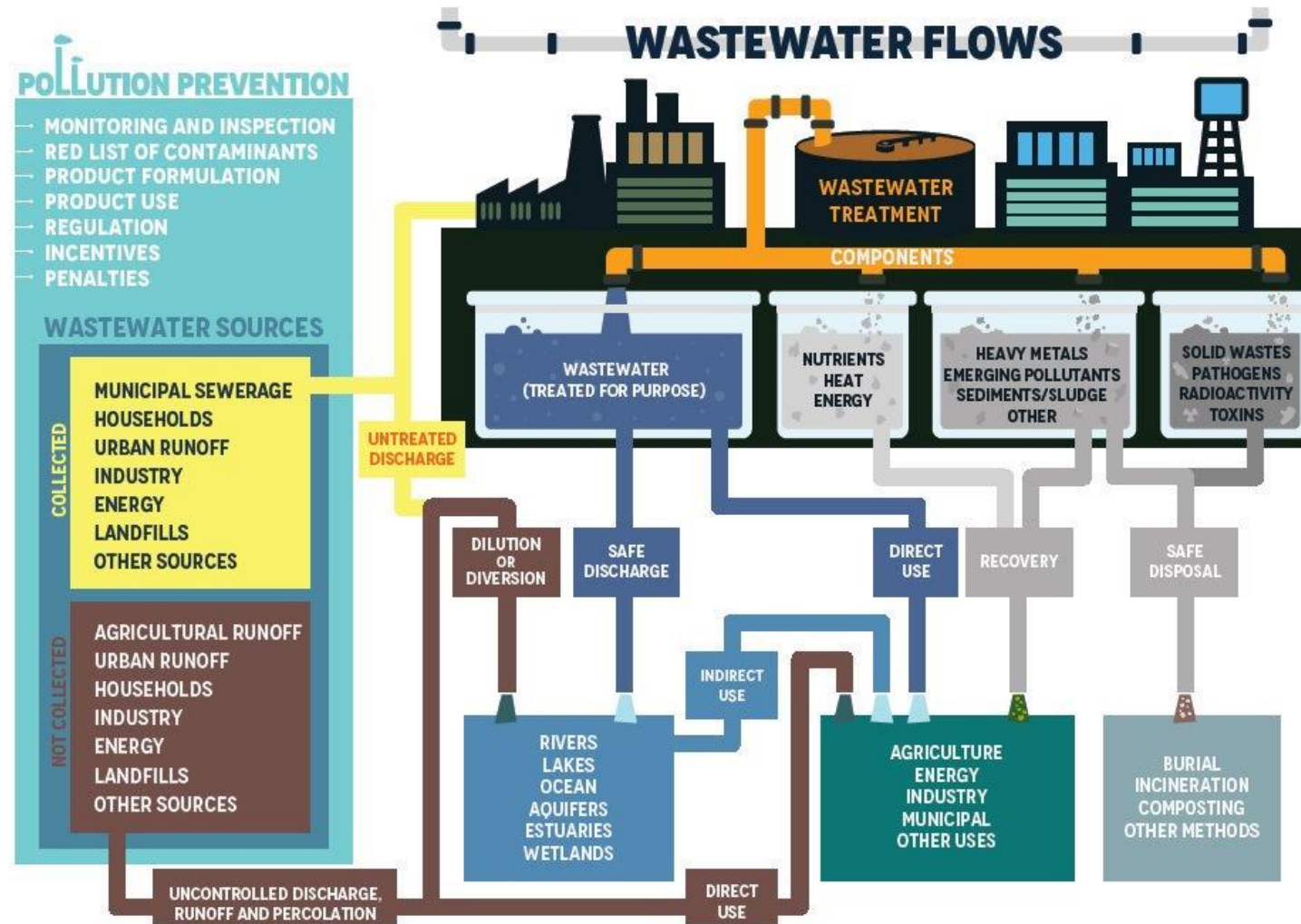
6 CLEAN WATER
AND SANITATION



SDG 6: Ensure availability and sustainable management of water and sanitation for all

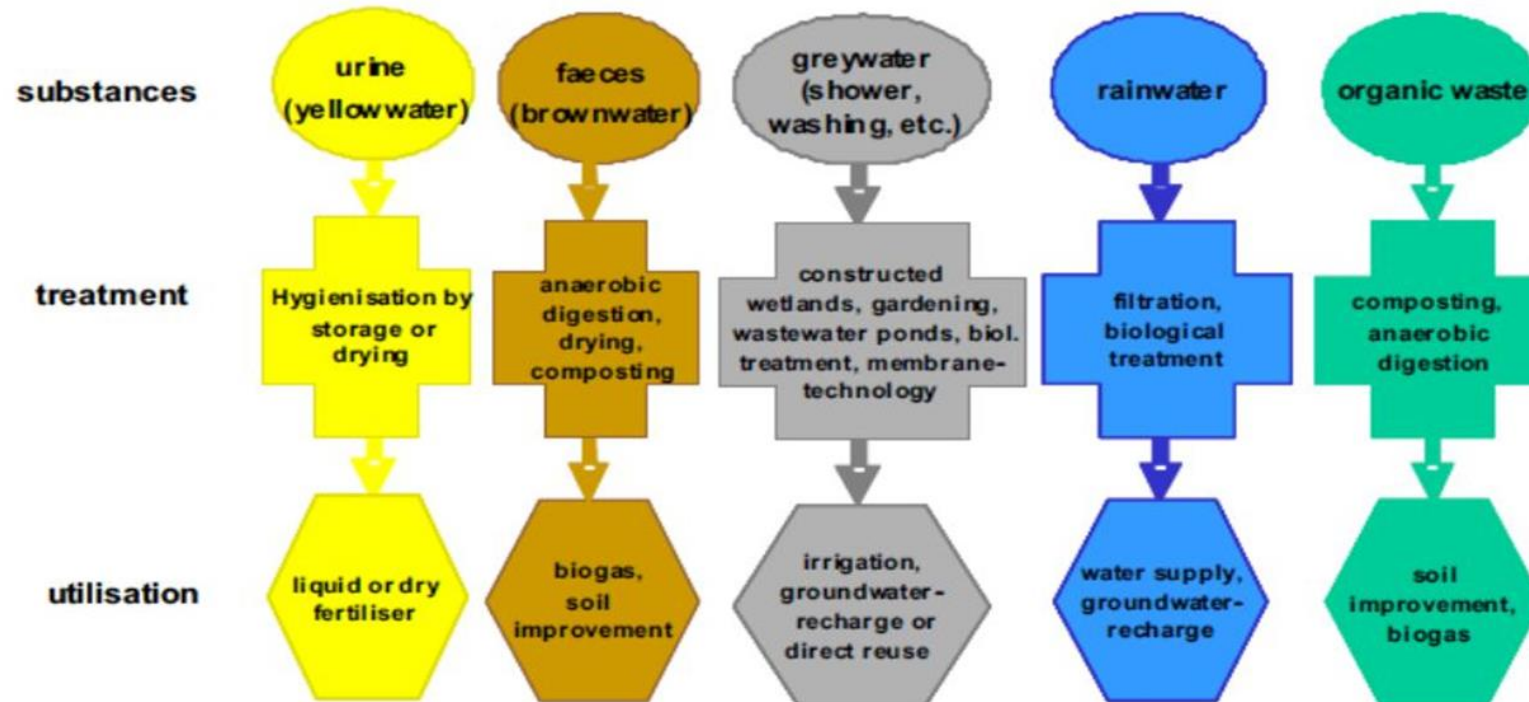
Target 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Wastewater in the SDGs



Source: WWAP

Conflicting interests with managing and using wastewater



Source: UNESCO/IHP & GTZ, 2006

Wastewater as a resource

Governance challenges

- Coordination of actors with different interests across sectors, and systems with multiple technologies.
- Improved regulatory oversight required from controlling source pollution, treatment standards, quality of by-products, etc.
- Financing: reluctance to assign direct resources to sanitation and wastewater and users reluctance to pay for wastewater.
- Corruption prone sector due to monopoly and high up front investment.

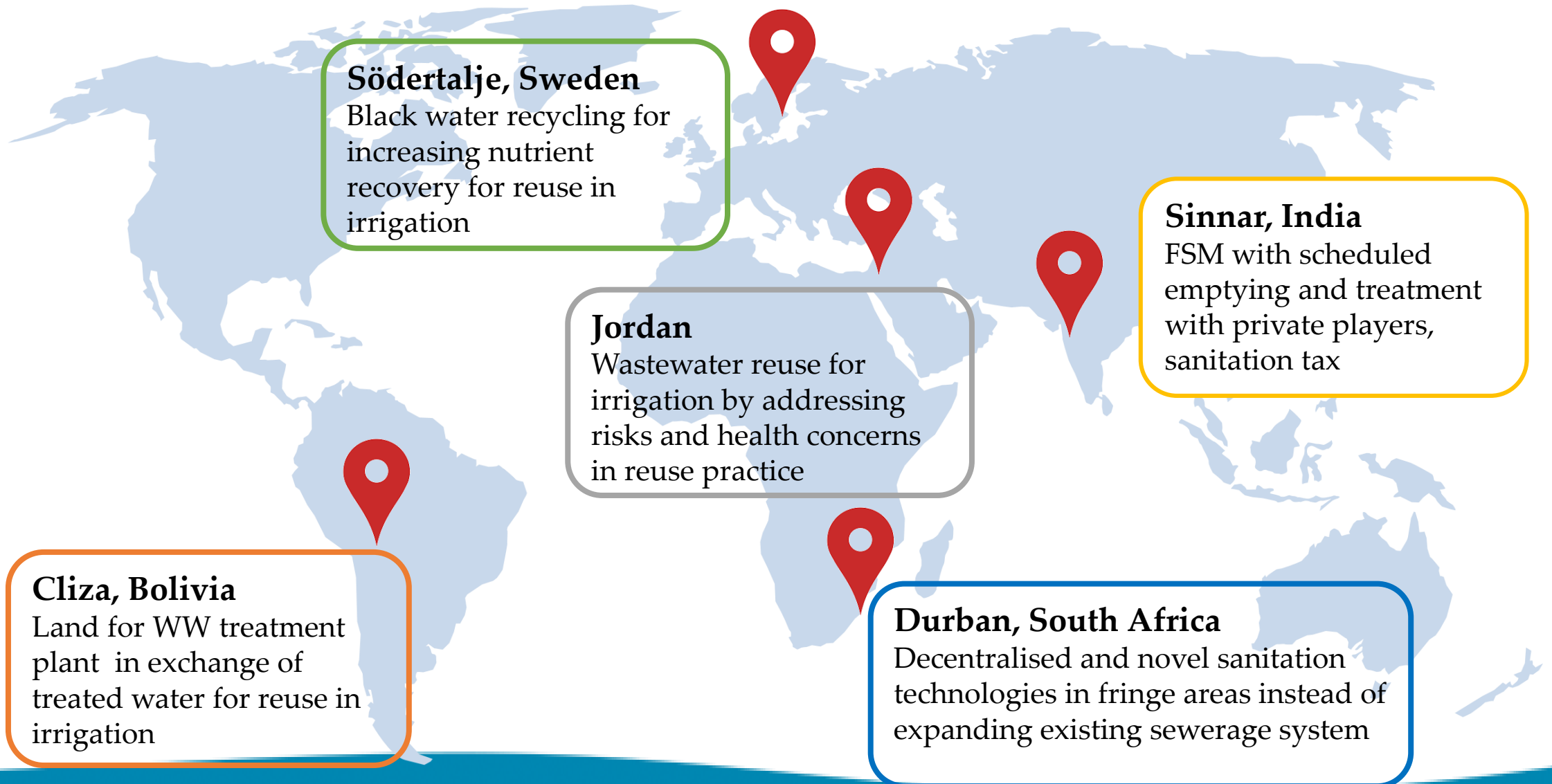


Introduction to the case studies

Meera Metha, CEPT University



Case studies from across the globe



Södertälje, Sweden

Black water recycling for increasing nutrient recovery for reuse in irrigation

Jordan

Wastewater reuse for irrigation by addressing risks and health concerns in reuse practice

Sinner, India

FSM with scheduled emptying and treatment with private players, sanitation tax

Cliza, Bolivia

Land for WW treatment plant in exchange of treated water for reuse in irrigation

Durban, South Africa

Decentralised and novel sanitation technologies in fringe areas instead of expanding existing sewerage system

The Five Cases in the Market Place



Cliza, Bolivia

Södertälje, Sweden

Jordan

Durban, South Africa

Sinnar, India

Across sanitation service chain


	Government	End-users/ Farmers	Households	Business/ Entrepreneurs
Bolivia	✓	✓		
Sweden	✓	✓		
Jordan	✓	✓		
South Africa	✓	✓	✓	
India	✓	✓	✓	✓

Across different stakeholder

		Bolivia	Sweden	South Africa	India	Jordan
SDG 6	6.2 Access to sanitation and hygiene for all and end open defecation			✓	✓	
	6.3 Improve water quality by increasing recycling and safe reuse globally	✓	✓	✓	✓	✓
	6.a Capacity-building support in water and sanitation related activities including wastewater treatment, recycling and reuse technologies	✓	✓	✓	✓	✓
	6.b Participation of local communities in improving water and sanitation management	✓		✓	✓	✓
SDG 3	3.9 Reduce the number of deaths and illnesses from unsafe water, unsafe sanitation and lack of hygiene	✓			✓	✓

Across Sustainable Development Goals (SDG)

Key highlights

- Different contexts, different challenges and different solutions - for one goal **harnessing opportunities** arising from improved wastewater management.
 - Key is the importance of **governance for sustainable solutions**.
 - Solutions need to be address **benefits for all key stakeholders** - farmers, city governments, households, private sector and regulators.
 - Case studies highlight paradigm shifts in sanitation sector to **citywide sanitation** and from wastewater **treatment to reuse and resource recovery**.
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- Experiences of Innovative governance models for wastewater in **Durban, South Africa** (Jay Bhagwan -Water Research Commission, South Africa)
- New scalable business models for citywide sanitation **Sinnar, India** (Dinesh Mehta and Meera Mehta; CEPT University, India)
- Reuse of treated wastewater in **Jordan**; from silence to outspoken success (Sameer Abdel-Jabbar, GIZ, Jordan)

Reflections from case presenters and discussion with audience



Concluding remarks

Marianne Kjellén,
Senior Water Advisor, UNDP

Thank you!

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