Use of wastewater in Latin America and the Caribbean:

Status and capacity needs

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RESEARCH PROGRAM ON Water, Land and Ecosystems

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The context

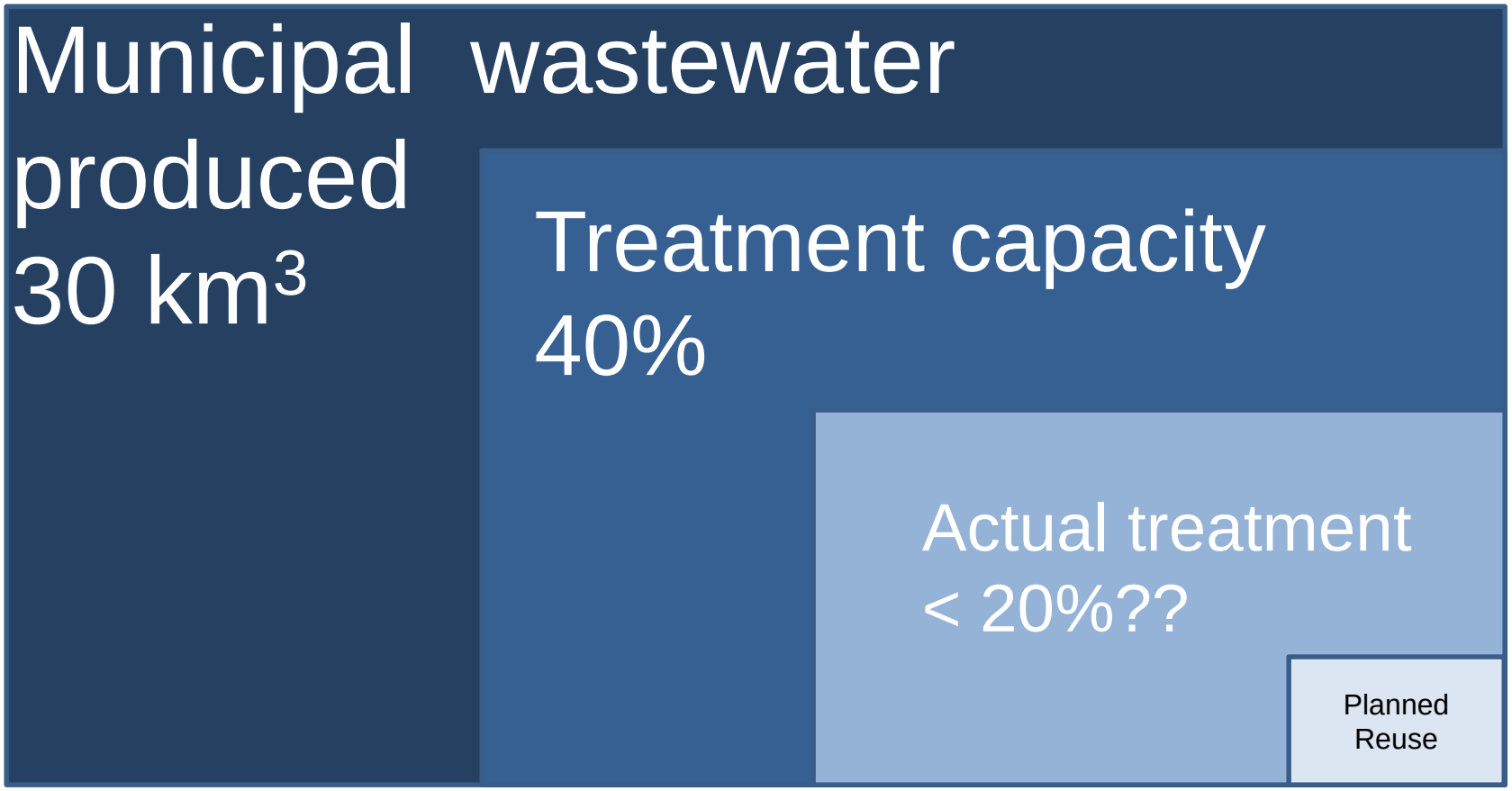
Urbanization

Water pollution

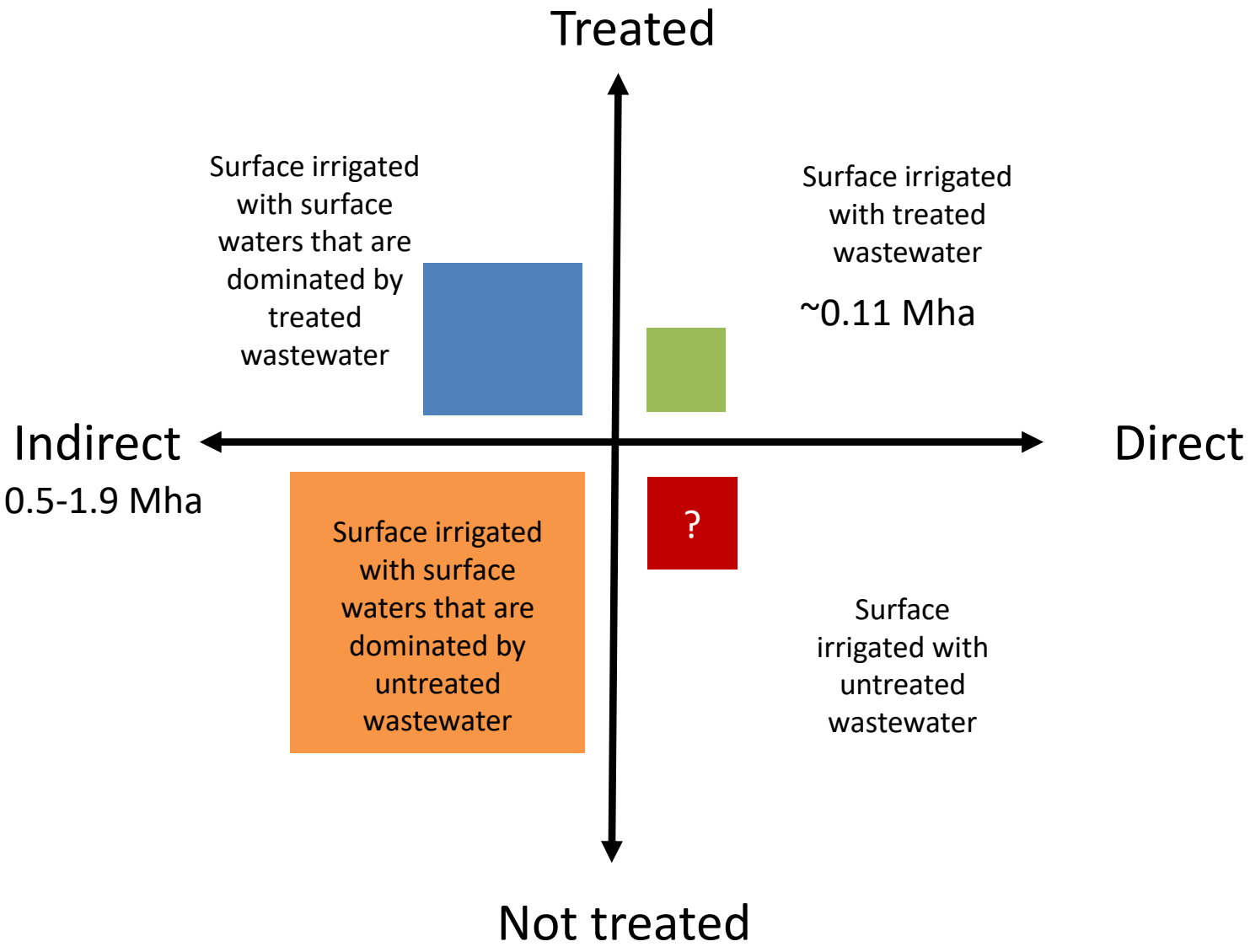
Water scarcity

Irrigated agriculture

Wastewater production and treatment in LAC



Extent of different types of reuse in LAC



The case of Mexico

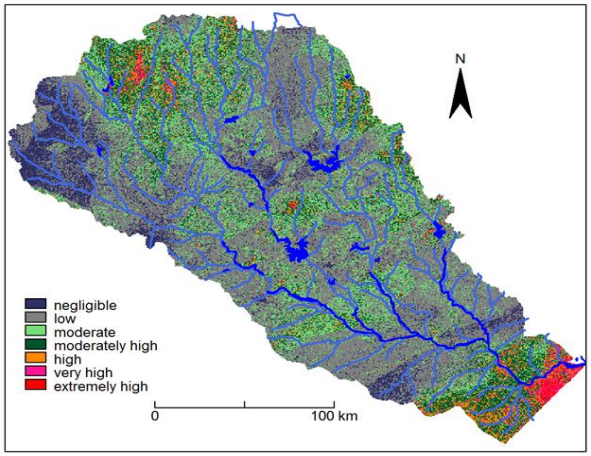
Wastewater treatment capacity (% of generated wastewater)	Irrigated land downstream urban areas			
		Influenced* by wastewater (Modelled Thebo et al 2017)	Heavily influenced@ by wastewater (Modelled Thebo et al 2017)	Irrigated with diluted wastewater (Literature: multiple sources)
50%	1.8 Mha	1.5 Mha	0.4 Mha	0.2-0.4 Mha

* >20% of the flow is wastewater

@ >80% of the flow is wastewater

Capacity needs

Risk assessment and monitoring



Risk mitigation and the use of the WHO 2006 guidelines and SSP

Capacity needs

Institutional coordination and policy integration

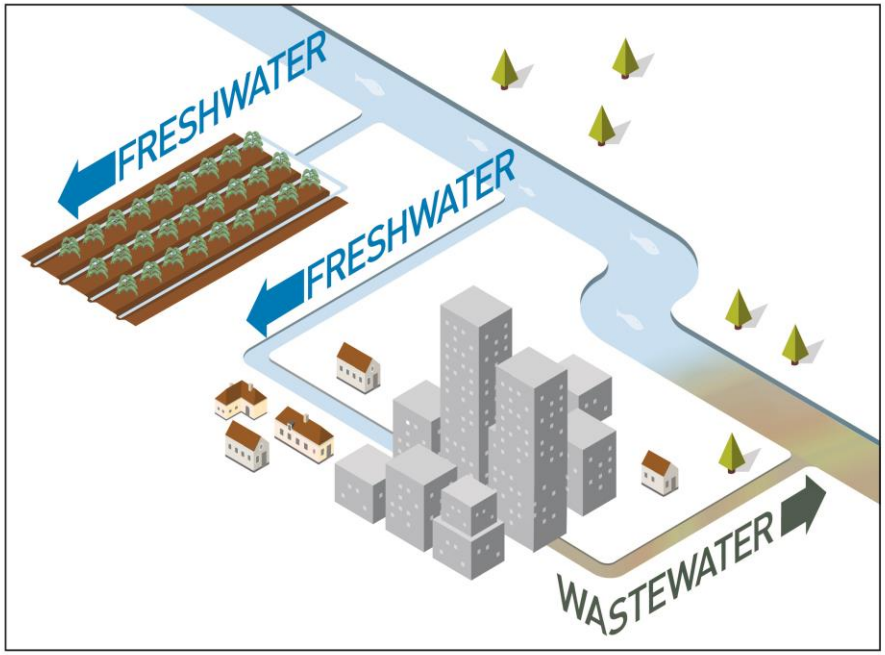
Economics of resource recovery and reuse

Awareness raising and communication

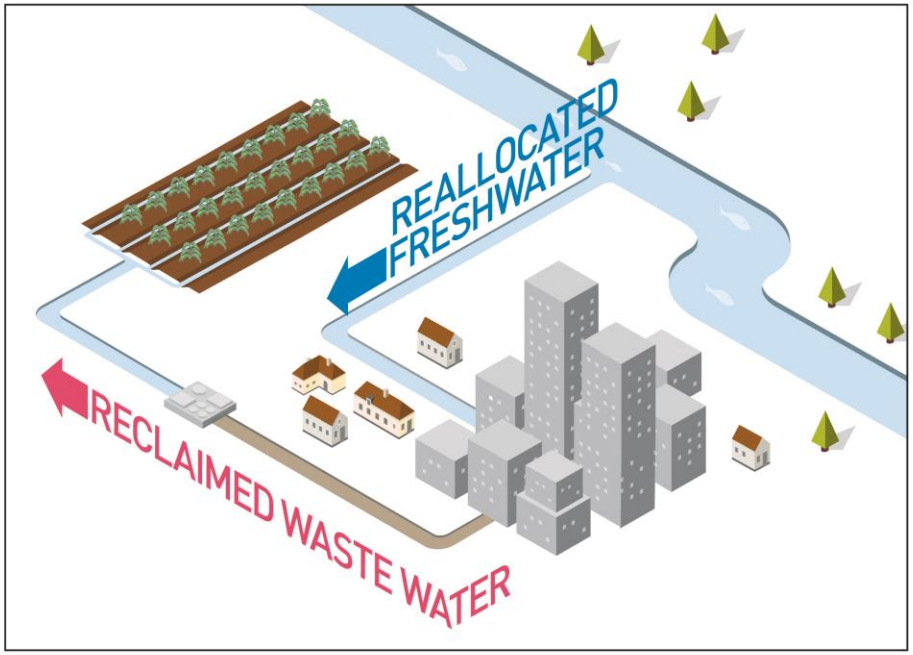
Bright examples: Mexico

Win-win with water reuse and exchange in San Luis Potosí, México

STANDARD WATER USE.
Enough conventional water resources to meet water demands

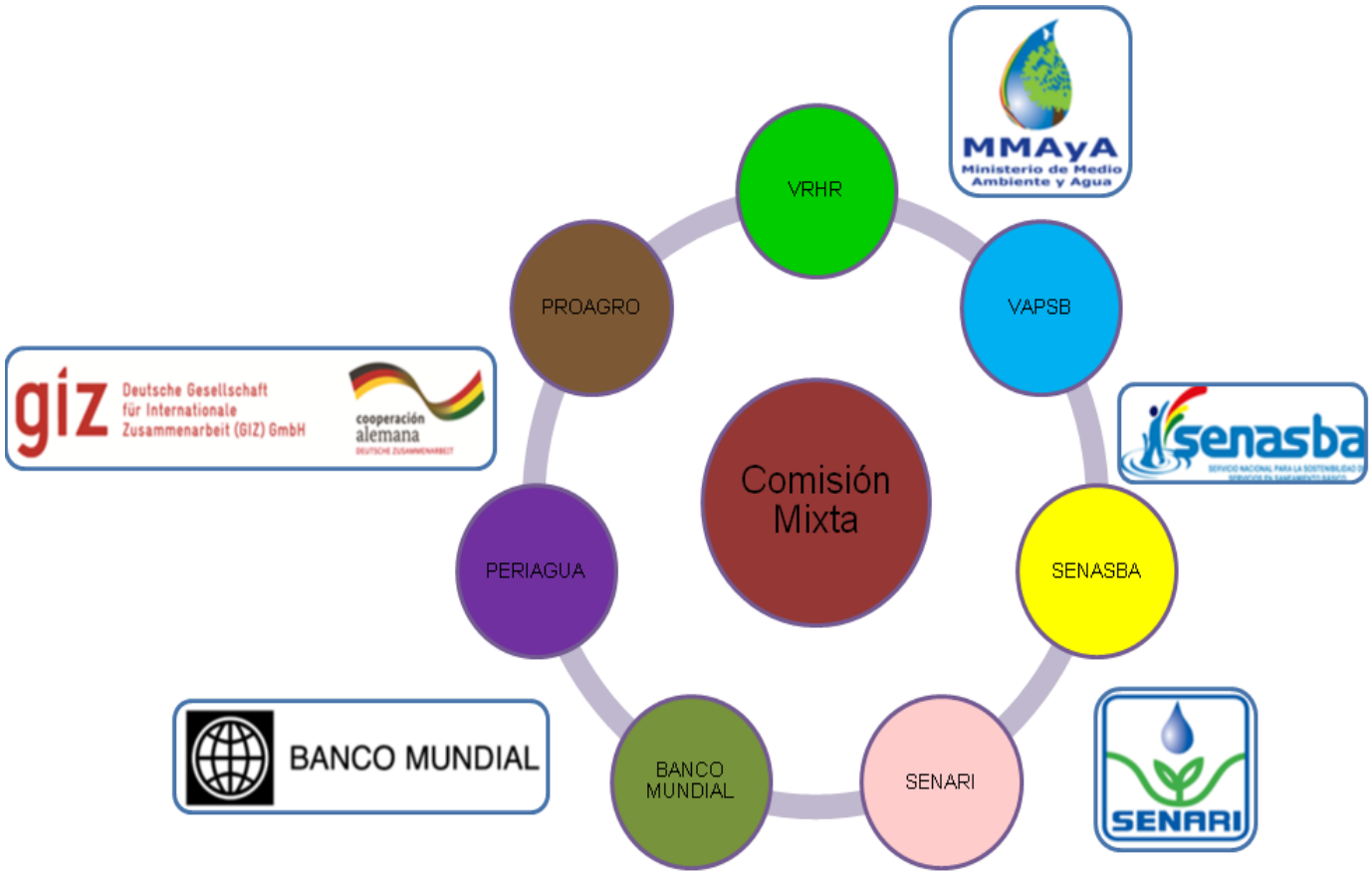


WATER EXCHANGE BETWEEN CITIES AND AGRICULTURE UNDER WATER SCARCITY.
Less conventional water resources and constant demands



Bright examples: Bolivia

Inter-sectoral platform for water reuse diagnosis and planning in Bolivia



Bright examples: Peru

Low cost ponds for safe vegetables and aquaculture production in Lima, Peru

Conclusions

Status:

30Km^3 of municipal wastewater produced in ALC with missed opportunities for resource recovery and planned reuse

Up to 1.9 Mha at potential risk

Capacity needs for:

Better risk assessments at national and local level

Implementation of feasible risk mitigation option from farm to fork

Bright examples:

with potential for replication and with opportunities for cross-learning in the region

Thank you!

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