



# Water governance as infrastructure

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The critical importance of good water governance in driving investment and financial sustainability

## **AGENDA**

Global, regional and local water security challenge

Australia's water reform journey

Water security definition and framework

Insights from our project experience in policy and regulatory design in Asia

# Ricardo supports clients across the entire water value chain



Skills and services in	
	Policy, strategy and governance
	Asset management and operational support
	Economics, regulation and pricing
	Environmental and ecological assessment
	Water quality and catchment management
	Infrastructure design and development
	Climate resilience and adaptation

Work with	
	Government and public sector
	Infrastructure investors
	Corporate sector
	Water regulators
	Not-for-profit organisations
	Financial institutions

Across the world	
	UK/EU
	Australia
	Middle East
	Asia-Pacific
	North America

# Malaysia faces existential crisis, must act fast to prevent possible water supply catastrophe in coming years

Pearl Lee  
13 December 2023 · 5-min read

Malay Mail

## SPAN chief rings alarm on Malaysia's water security with seven dams in critical condition due to ageing structures

SPAN chairman Charles Santiago said 16 out of 55 dams in peninsular Malaysia that are used for water consumption are more than 50 years old.

23 Oct 2023

China Daily

## Water shortage threatens food security in Malaysia

The heat wave that has scorched Asia over the past few weeks has hit Malaysia hard, with a water shortage threatening national food security and hurting key...

13 Aug 2024



# Penang activates crisis plan after 7,400 homes hit by water issues

FMT Reporters · 26 Jul 2024, 01:10 PM

Abnormally low rainfall is causing lower water supply to eight areas, including George Town, Bayan Lepas and Tanjung Bungah.

MALAYSIA

# No water crisis in Sabah, only shortage



## Much ado about Malaysia's water woes

By DATIN DARIA MATHEW and NORLAILI ISMAIL



NATION

Tuesday, 02 May 2023

MALAYSIA

# Johor MB: Ranhill SAJ ordered to prepare for water shortage issue in several districts



South China Morning Post

## Water, water everywhere? Not necessarily in rain-ridden Malaysia

Malaysia expert says climate change, poor management, excessive demand, subsidised bills are not helping

29 Jan 2023

The Edge Malaysia

## The State Of The Nation: Water supply imbalance among states an obstacle to development

THE water supply imbalance in Malaysia — where some states are in a dire situation while others are doing much better — exacerbates the...

15 July 2024



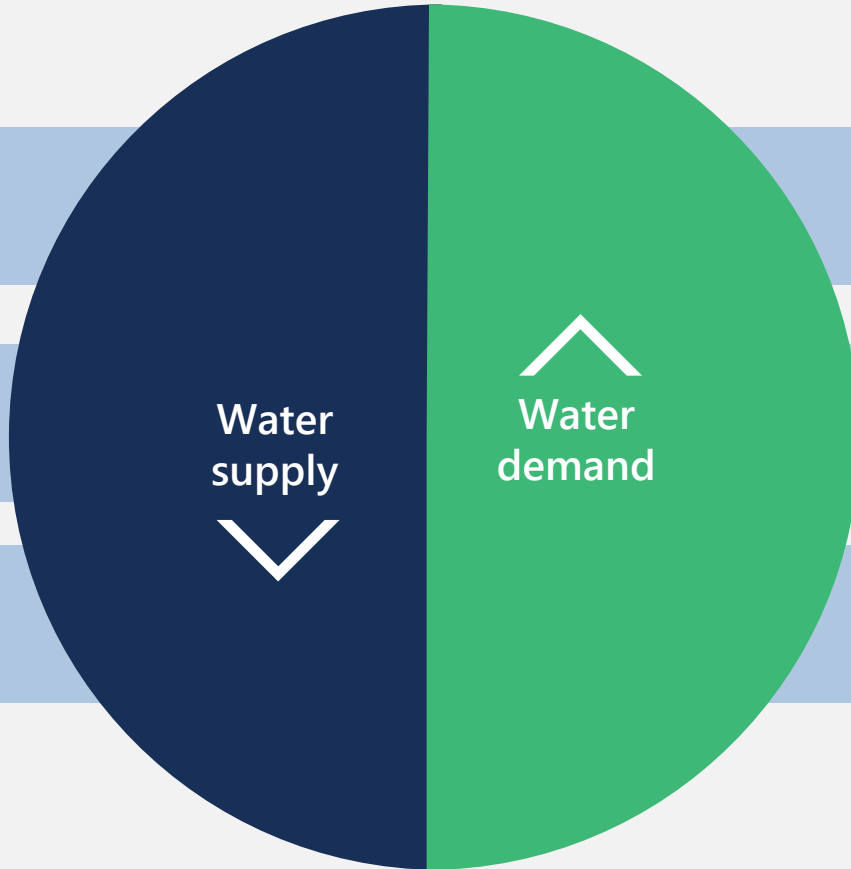
Pollution



Climate change



Infrastructure gaps




Population growth



Socio-economic development



Consumption patterns



*Progress towards internationally agreed water-related goals and targets, including SDG 6, is alarmingly off-track.*

- SDG 6 United Nations Synthesis Report on Water and Sanitation (2023)

Poor progress in improving and maintaining water security results from:



Unclear direction and strategy



Fragmented and complex institutional arrangements



A lack of incentives and settings for infrastructure





We know we need water infrastructure,  
but infrastructure without governance  
reform will fail to achieve genuine water  
security







Australia's experience responding to water insecurity through governance reforms and improvements to infrastructure investment and use is relevant to other countries

## Impact of Australia's water reform journey

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**Improved utility performance** (financial, health, environmental, customer satisfaction etc.), which is routinely benchmarked and communicated

**Confidence and certainty for shareholders** through clear institutional roles and responsibilities, and transparent and equitably applied regulation

**Improved financial viability** of service delivery through the introduction of cost reflective pricing



## Key drivers of Australia's initial success

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Having clear objectives and an agreed pathway, and committing to track and report on this



Recognising the interdependency between improved governance and improved infrastructure



Building capability and capacity for next generation water management



## But with water security, the job is never finished...

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Despite improvements, Australia needs to hold its nerve and continuously adapt to maintain water security.

A clear and agreed definition of water security and diagnostic tool for assessing water security at the city level was needed to:



Clarify objectives for water security



Support effective dialogue with stakeholders



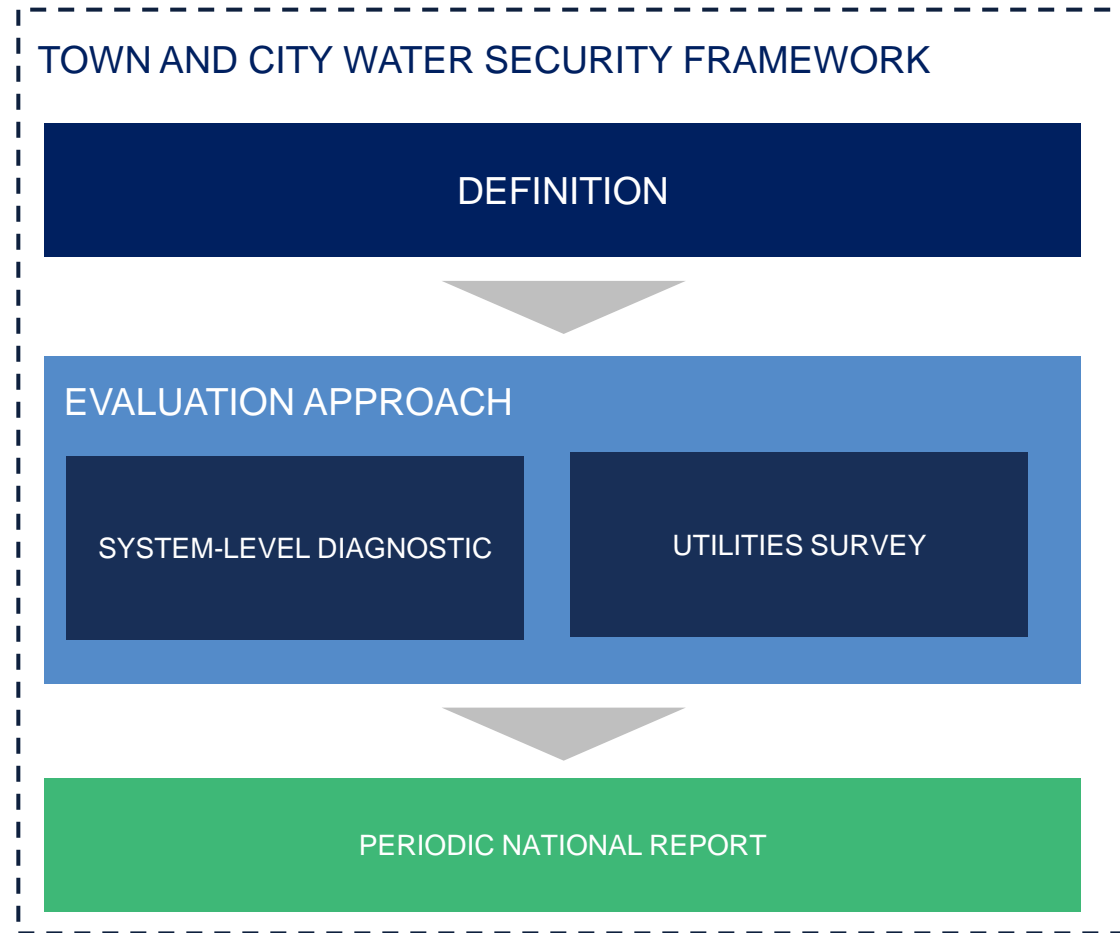
Enable meaningful monitoring and improvement



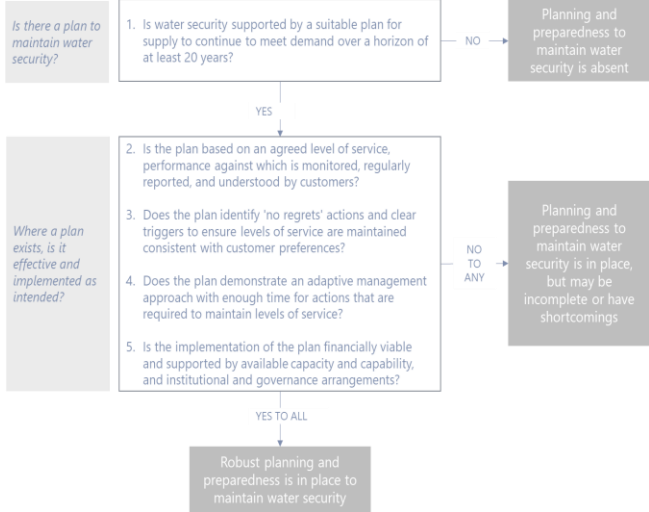
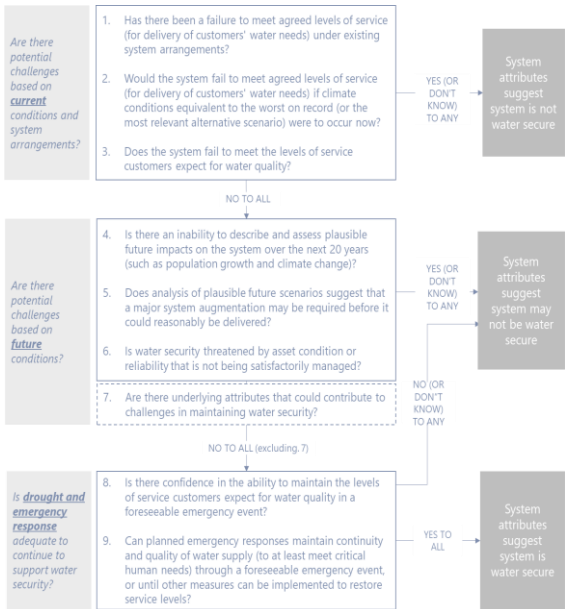
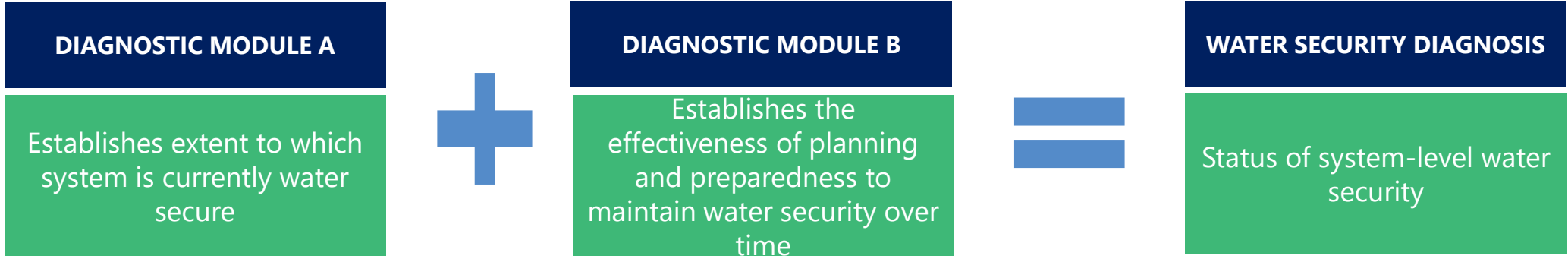
## A tool to identify emerging water security issues and opportunities for improved outcomes

Developed a framework that consists of:

- agreed water security definition
- two-part evaluation approach
- a periodic reporting process that shares the data and results from implementing the evaluation approach.



# System-level diagnostic – understand water security in any system, of any size, in any context



		PLANNING AND PREPAREDNESS		
WATER SECURITY DIAGNOSIS OUTCOME		Robust planning and preparedness is in place to maintain water security	Planning and preparedness to maintain water security is in place, but may be incomplete or have shortcomings	Planning and preparedness to maintain water security is absent
SYSTEM ATTRIBUTES	System attributes suggest system is water secure	System attributes and robust planning support water security	System attributes support water security despite some planning shortcomings	System attributes support water security but a lack of planning could impair this in the future
	System attributes suggest system may not be water secure	System shortcomings are mitigated by robust planning to support water security	Water security is impaired because planning may be inadequate to address system shortcomings	Water security is impaired by a lack of planning to mitigate potential system limitations
	System attributes suggest system is not water secure	Water security is supported by robust planning, but may be limited by underlying system attributes	Water security could be impaired because shortcomings in planning don't address system limitations	System is not water secure and there is no plan in place to improve it



## Viet Nam's Law on Water Resources and approach to irrigation services pricing

Supporting the Government of Viet Nam to amend its Law on Water Resources to address challenges and safeguard water security, and to progress development of an approach to charging for irrigation services.

- + Identification of policy needs and solutions (in drought management, water economics, water allocation etc.) to be enabled by law reform; water reform capacity building
- + Design and delivery of a study visit to Australia to exchange experience with regulators, legislators and parliamentarians
- + Preparation of advice to ADB and the Ministry of Finance on an approach for levying charges for irrigation services
- + Implementation roadmap for legislative revisions; gender and disability assessment of revised Law; donor activities scan

## Pakistan urban water security roadmaps

Assisting Pakistani decision makers to identify and effectively implement priority actions for improving urban water security.

- + Pakistan's Ministry of Water Resources selected urban water as a focus area for attention under an MoU with the Australian Department of Foreign Affairs and Trade
- + Preparation of diagnostic reports that identify and assess urban water management challenges and opportunities in Karachi and Lahore
- + Engagement with key Pakistani stakeholders to inform a roadmap document for each city, outlining priority action areas for improving water security
- + Development of supplementary implementation plans for specific actions





## Focusing on the 'how'

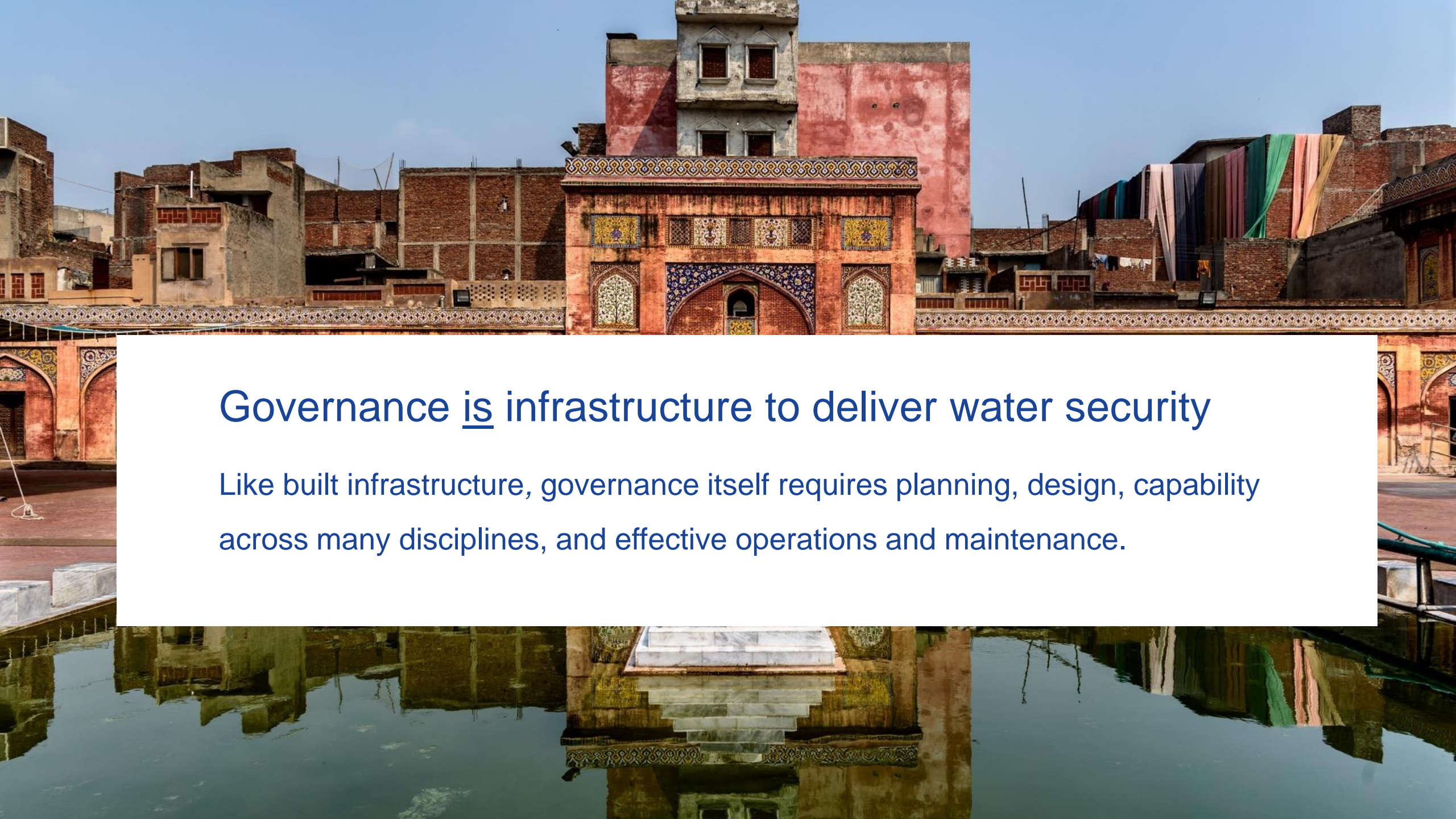
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- An array of planning, regulatory, technical and incentive-based responses to water insecurity have been tested and proven in diverse contexts
- Raises the question: why are we not seeing more action?
- Countries report they are struggling with the “how” rather than the “what”
  - how to engage with the full spectrum of water management stakeholders in a meaningful way that drives progress
  - how to encourage water users to think about the value of water, including to inform understanding about trade-offs and the consequences of different decisions
  - how to build and maintain political will and support for action
  - how to collect useful water information and use it to identify where reforms are required
  - how to develop a compelling narrative in support of reforms

## Reflections

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- The need for improved water policy and governance is well recognised, but capability and funding/finance lags
- Options for improving water-related investment, management and use are available and keenly sought after
- Challenge is in designing pragmatic ways in which to overcome constraints (information, social, political, financial, capacity)
- Structured engagement provides opportunity for engagement with diverse stakeholders, invites discussion of challenges, weaknesses and priorities in water management, and enables sharing of experiences
- Repeatable methods of diagnosing governance issues and opportunities and developing governance improvement roadmaps can inform benchmarking, investment mapping, and integration of efforts across projects and teams



## Governance is infrastructure to deliver water security

Like built infrastructure, governance itself requires planning, design, capability across many disciplines, and effective operations and maintenance.



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