



**KGID
2025**

**Green Growth:
The Path to
Sustainable Jobs**

World Bank Digital Water Program and its Cases

Jean-Martin Brault

Senior Water Supply and Sanitation Specialist

World Bank

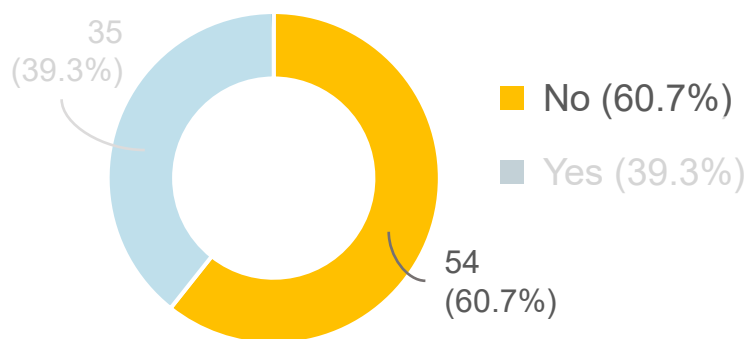




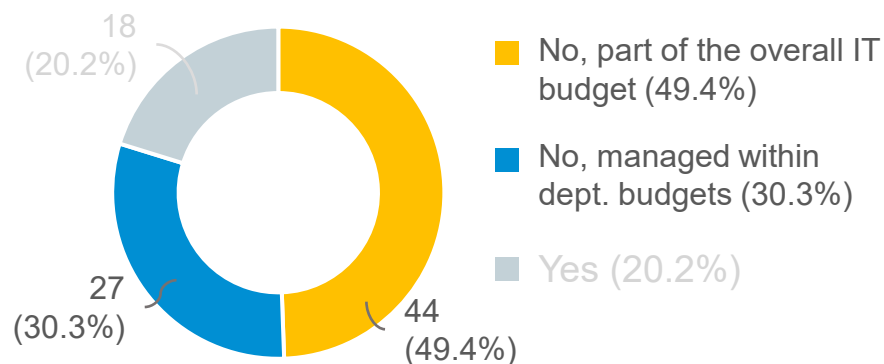
Current State

Most utilities are still in early stages of digitalization

Have you clearly defined your company's digital vision and documented the digital strategy?



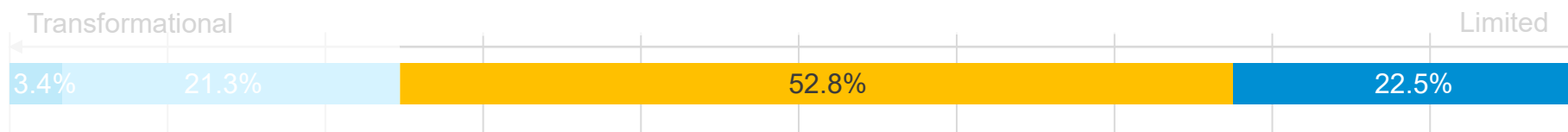
Do you have a separate budget specifically for digital initiatives?



Key message 1

The majority of WSS utilities in LMICs have yet to formalize their digital strategies and allocate dedicated budgets

What is the current level of digitalization in your business process?



- Transformational (3.4%): Fully digitalized; advanced analytics and automation support decision-making
- Systematized (21.3%): Most processes are digitalized with minimal manual work;
- Tactical (52.8%): Some processes are digitalized; digital tools (e.g. SCADA) and IoT are being integrated
- Limited (22.5%): Most processes are still manual, with heavy reliance on paperwork

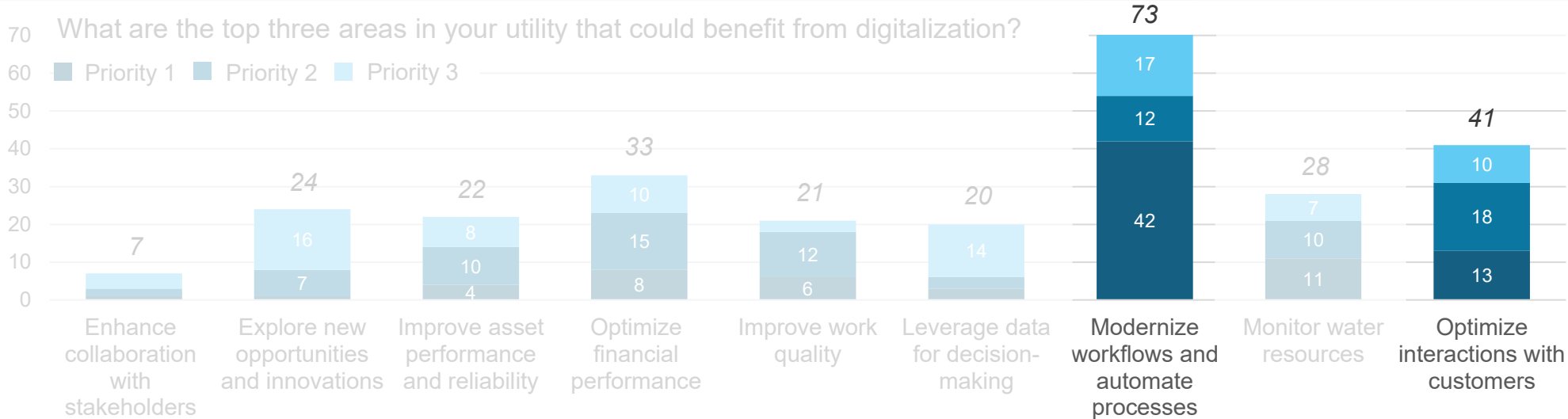
Key message 2

Nearly three-quarters of WSS utilities are at either the tactical or limited stages of digitalization, with only a few achieving full integration

*This data comes from the World Bank Digital Water team's 2022 Global Digital Maturity Survey, conducted among 89 water supply and sanitation utilities worldwide — primarily in low- and middle-income countries (LMICs), with the inclusion of five high-income countries in Europe.

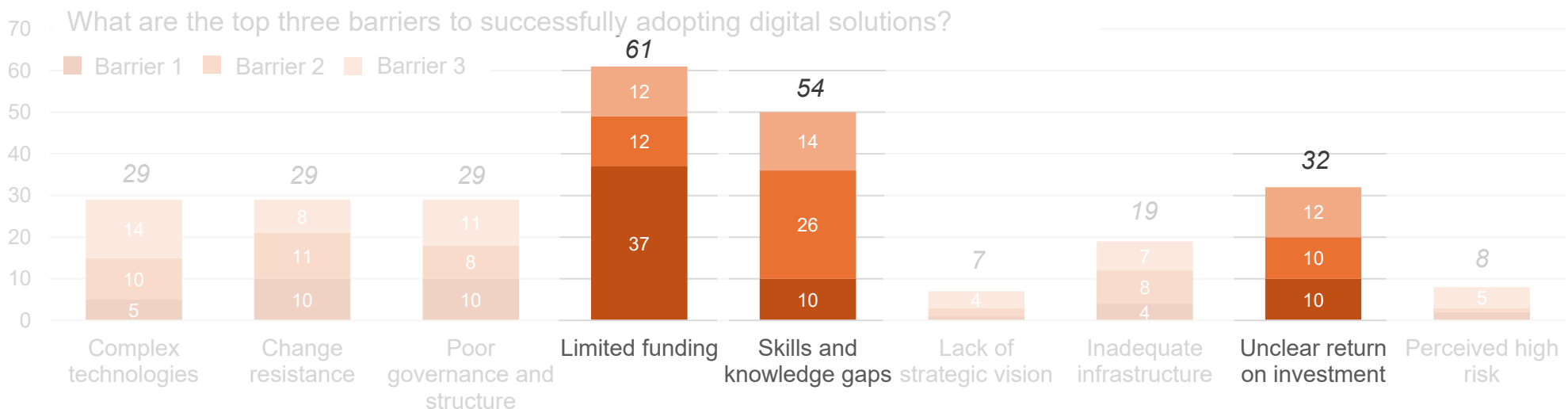
Benefits and Challenges

Most utilities are still in early stages of digitalization



Key message 3

Modernizing workflows and customer interactions are the highest-priority areas for digital investment



Key message 4

Limited funding, skills gaps, and unclear ROI are the leading obstacles to successful digital transformation

Digital Water Journey: WB's structured support for LMIC utilities on the path to digital maturity



Global Panorama Benchmarking

Digital Maturity Survey

15-minute survey and a brief benchmarking report to identify starting points for digital transformation



Engaging with the Clients

Digital Initiator

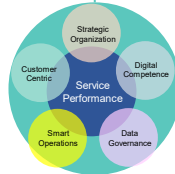
3-hour assessment to identify digital sub-dimensions for roadmap development using Digital Maturity-Deep Dive tool



Digital Roadmap

Digital Maturity Deep Dive

Customized roadmap for digital transformation based on pre-identified sub-dimensions, which includes priority activities, budget and timeline



Digital Water Training

1-Week Training

In-person 1-week training among the utilities that completed the Digital Initiator, joined by digitally advanced partner utilities

Digital Solutions Applied

Digital Recipes

Digital recipes (guidance notes) for current and future challenges (e.g. NRW) using best practices and solutions



Capacity Building Essential for Strengthened Project Support *(including K-water collaboration)*



Training in Valencia, **Spain** (May 2024)

Participating utilities

AySA (Argentina), CORAAMOCA (Dominican Republic), ANDA (El Salvador), SEDAPAR and OTASS (Peru), REGIDESO (Burundi), REGIDESO (DRC), SEG (Guinea) and Kafubu Water and Sanitation Co. (Zambia).



Training in Daejeon, **South Korea** (Dec 2024)

Participating utilities

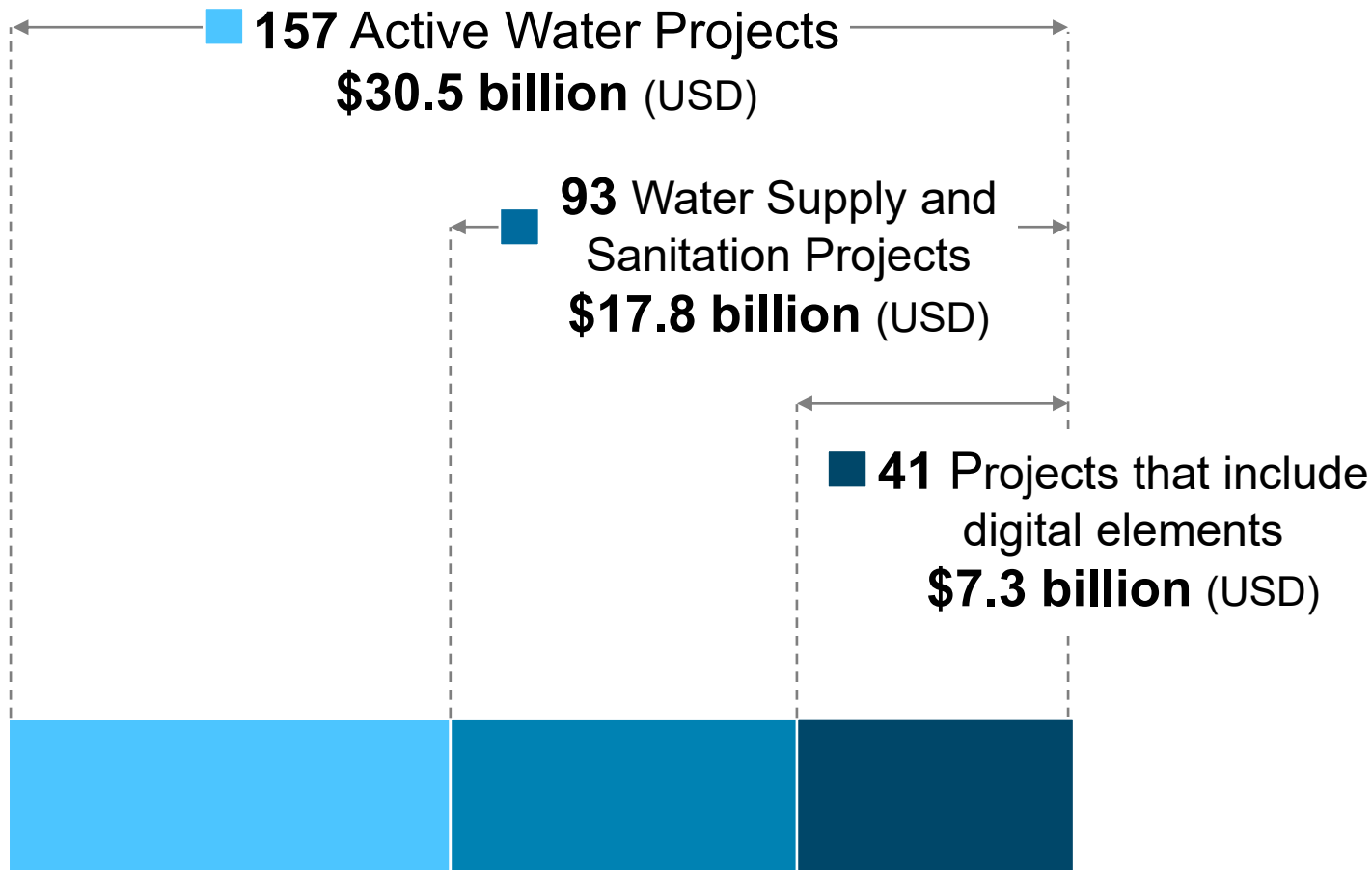
MAWASCO (Kenya), SODECI (Côte d'Ivoire), UKT (Albania), BWSA (Cambodia), Solomon Islands Water Authority (Solomon Islands) and the National Water Supply and Drainage Board (Sri Lanka), Ludhiana (India)

What we've built so far

Operational Insights from World Bank Water



As of May 23, 2025

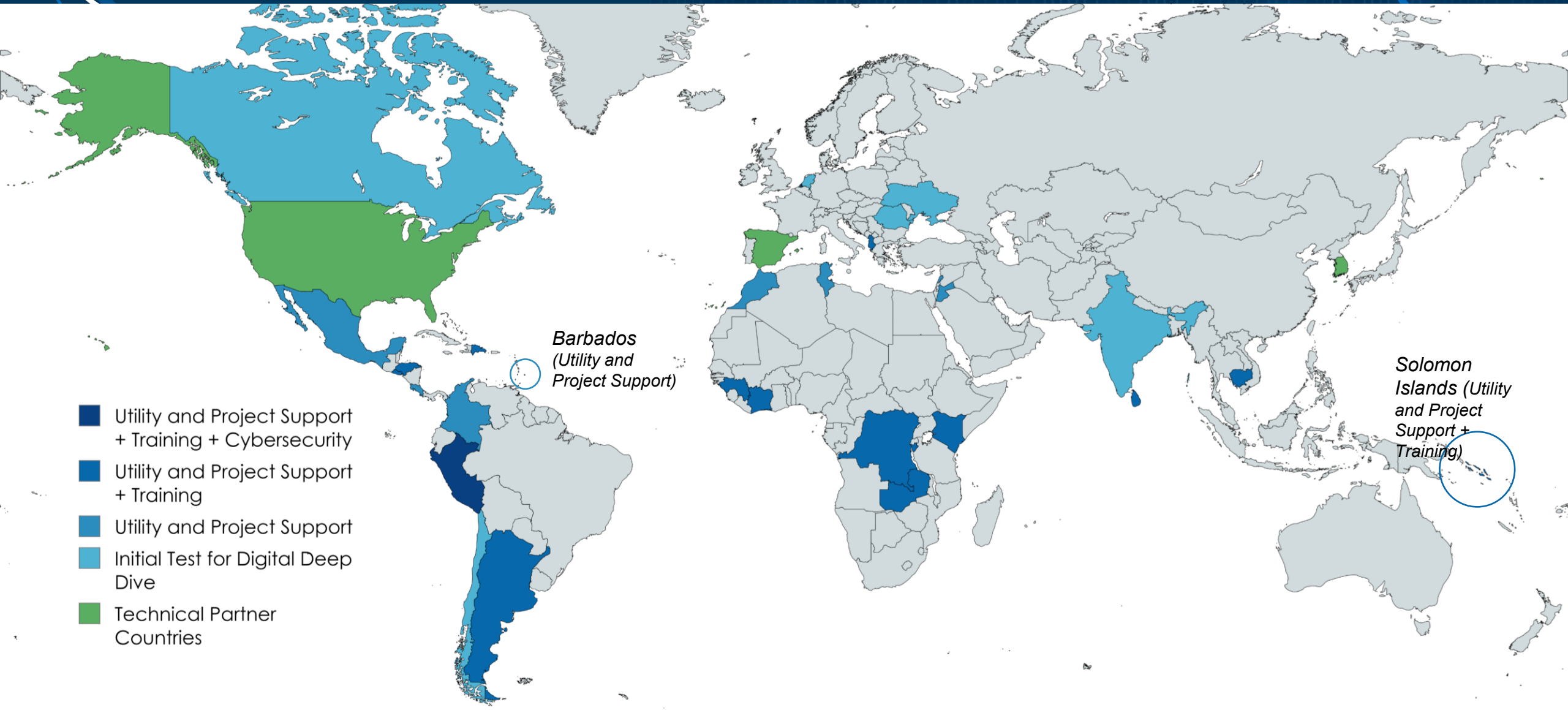


Out of 157 active World Bank water projects, about 41 include digital components for water supply and sanitation, most of which focus on SCADA and GIS upgrades. **The Digital Water Program emphasizes building integrated digital infrastructure and governance**, covering data management and governance, institutional and legal frameworks, workforce and capacity development, customer engagement, and automated operations and maintenance.

**Note: The total commitments shown above reflect the full project amounts, not just the portions related to WSS or digital components. Data are based on internal estimates.*

Integrated Operational Support under the Digital Water Program



Overview



Integrated Operational Support under the Digital Water Program

Examples 1





Country	Project	Scalable Solution	Details of Engagement
Peru 	Modernization of Water Supply and Sanitation Services project (P157043)	Scaling Digital Strategies Nationwide through Multi-Level Engagement with Utilities and National Entities <i>(Regulators, ministries, etc.)</i>	<ul style="list-style-type: none"> The support began by helping Cusco's utility (SEDACUSCO) in developing its first Digital Strategy, which led to successful engagement with three additional utilities and Peru's technical regulator, OTASS. OTASS was trained to replicate this approach nationwide and played a key role in scaling the digital strategy across the country. Additionally, collaboration with the Ministry of Housing, Construction, and Sanitation (MVCS) is underway to implement the first Water Sectoral Cybersecurity Maturity Model (SCMM).
Guinea 	Guinea Water and Sanitation Project (P179017)	Digital master plan/roadmap implementation, revenue management, mobile-based payments	<u>SEG participated in the digital training in Spain</u> <ul style="list-style-type: none"> The project implements a comprehensive digital transformation for SEG (national water utility in Guinea), including smart meters, SCADA/remote monitoring, NRW reduction, data-driven operations, and digital corporate tools. It also strengthens mobile payments, digital customer platforms, staff capacity, digital governance, and stakeholder communication to enhance service delivery and transparency.

Integrated Operational Support under the Digital Water Program

Examples 2



Country	Project	Potential Solution	Details of Engagement
Solomon Islands 	Solomon Islands Urban Water Supply and Sanitation Sector Project (P165872)	Digital solutions for NRW covering technical losses, commercial inefficiencies, and data-driven improvements	<p>SIWA participated in the digital training in <u>Korea training program</u></p> <ul style="list-style-type: none"> The program guides SIWA (Solomon Islands Water Authority) in applying a structured digital “recipe” for NRW management, covering GIS and hydraulic models, pressure and leak monitoring, network sensorization, DMA/PMA management, and remote control systems. The program also supports staff training, strengthens digital governance, centralizes operational data, and facilitates stakeholder collaboration to improve service delivery and reduce water losses.
Tanzania 	Sustainable Rural Water Supply and Sanitation AF (P177128) and Phase II (P508698)	Centralized data governance solution for water supply and sanitation sector operations and decision-making	Support to the Government of Tanzania in developing and managing a centralized Data Monitoring and Visualization (DMV) tool that integrates nationwide data on rural water and sanitation services across households, schools, and health facilities to monitor PforR targets, performance, and impact, while strengthening data governance, security, stewardship, and analytical capacity across RUWASA, MoW, MoH, PO-RALG, and MoEST for sustainable tool management and sector decision-making.

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Thank you!

