



FOURTH MEETING

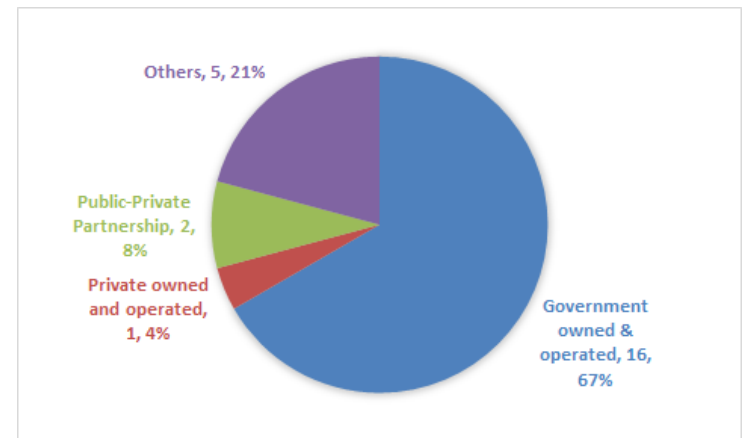
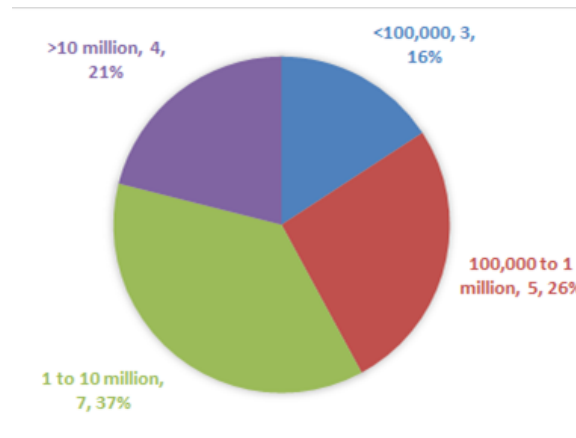
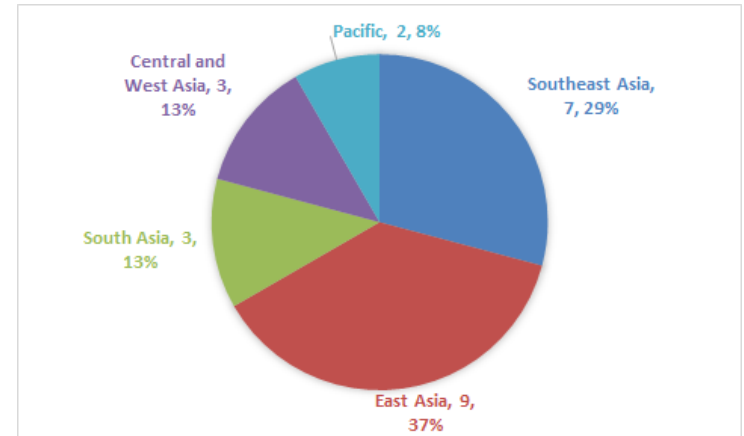
# GMS Urban Development Working Group

17 December 2020 • via Zoom

**Emerging Lessons for Water Utilities from the COVID-19  
Pandemic in Asia Pacific**

# Overview of ADB Survey

Services Provided	N = 24 as of 30th Oct.	
Water supply	79.17%	19
Sewerage and/or wastewater treatment	37.50%	9
Sanitation and fecal sludge management	16.67%	4
Solid waste	12.50%	3
Water resources / River basin management	12.50%	3
Irrigation / Agricultural drainage	8.33%	2
Stormwater management / Drainage	8.33%	2
Hydrology monitoring	4.17%	1



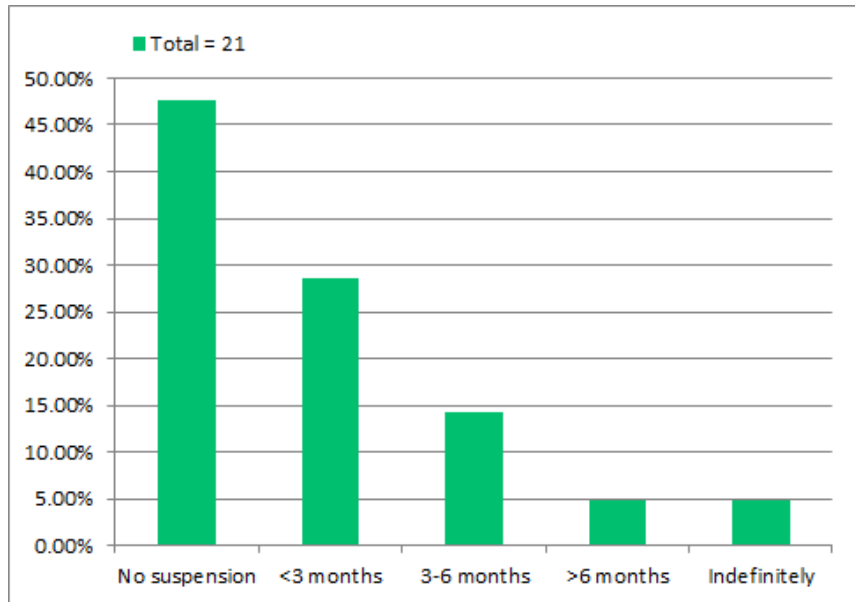
FOURTH MEETING

**GMS** Urban Development Working Group

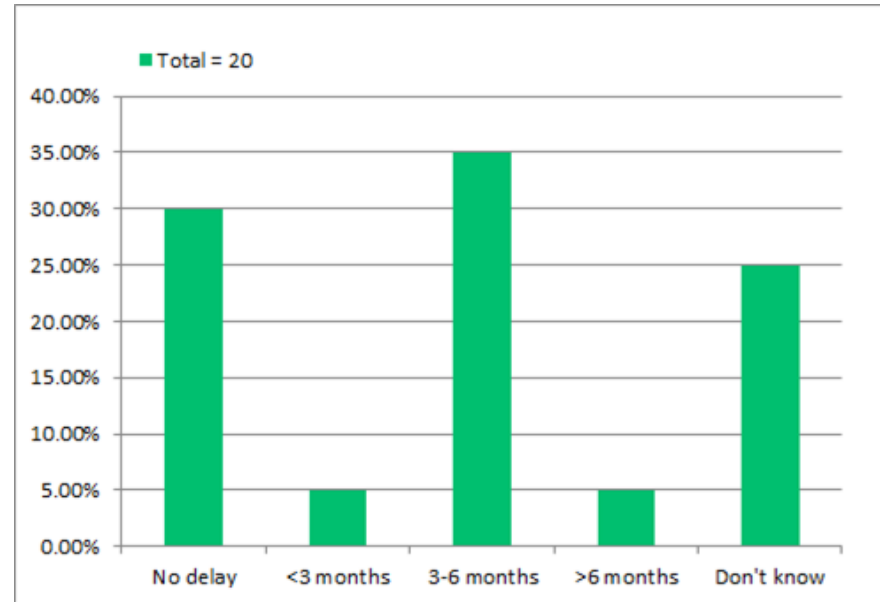
17 December 2020 • via Zoom

# Technical Operations: Ongoing construction

How long have ongoing construction been suspended?



How much delay do you anticipate in construction completion?



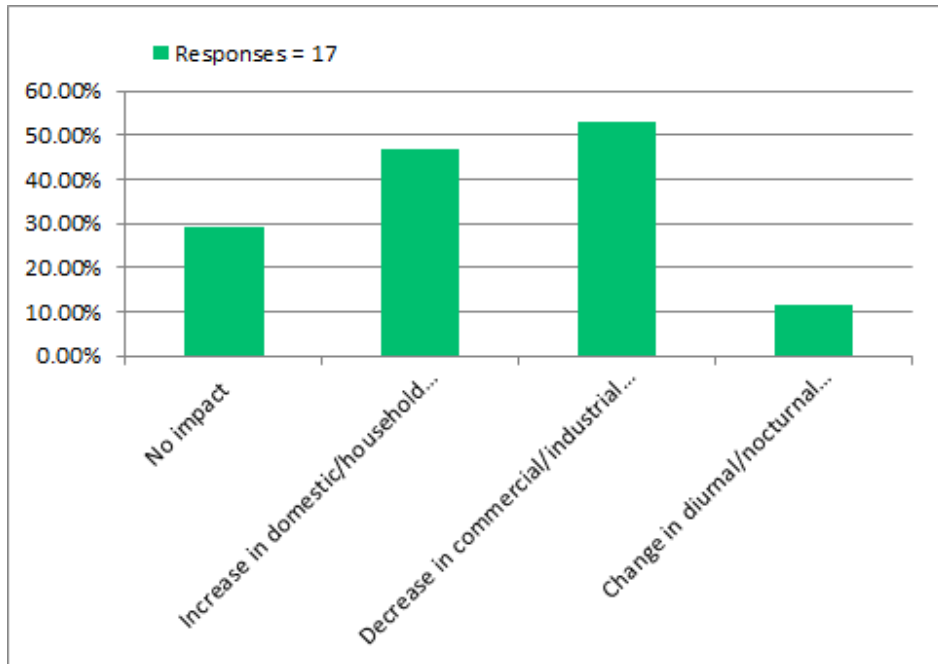
# Technical Operations: Asset management

Which measures have you implemented in asset management operations, specifically because of COVID-19?

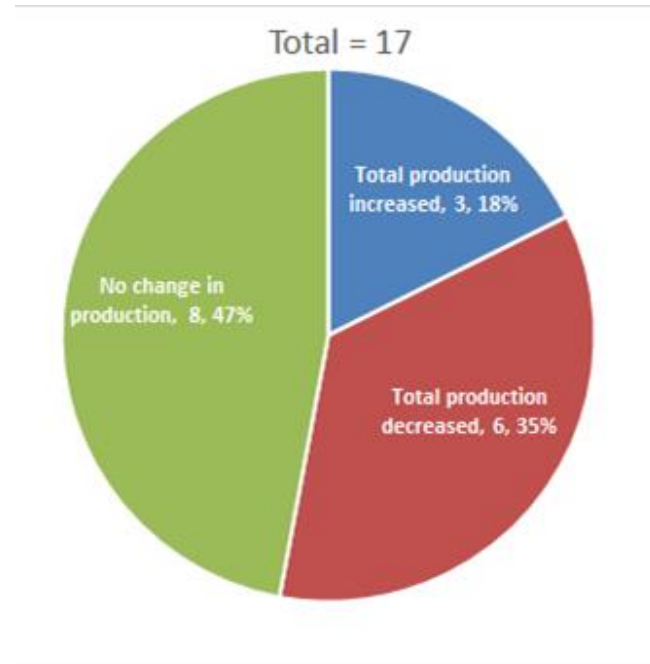
Answer Choices	Responses = 20	
Ongoing and/or planned maintenance works have been postponed	30.00%	6
Changes made to the regime/methodology for asset condition & performance monitoring	35.00%	7
Changes made to the regime/methodology for product quality testing	20.00%	4
Digital solutions have been implemented/planned	40.00%	8
Proactive asset management measures have been implemented	25.00%	5
Other changes	20.00%	4

# Technical Operations: Water demand

Which impacts have you experienced or observed with respect to customers' water demand profile?



Which measures have you implemented in water production level, specifically because of COVID-19?



FOURTH MEETING

**GMS** Urban Development  
Working Group

17 December 2020 • via Zoom

# Technical Operations: Distribution operations

Which measures have you implemented in distribution operations, specifically because of COVID-19?

Answer Choices	Responses = 14	
Changed pressure management operations	35.71%	5
Changed storage levels of tanks, impounding facilities, or reservoirs	14.29%	2
Shutdown of specific facilities	0.00%	0
Implemented service interruptions to cope with water demand changes	21.43%	3
Digital solutions have been implemented/planned	21.43%	3
Other changes	14.29%	2

# Technical Operations: Water treatment & water quality testing

Which measures have you implemented in water treatment operations, specifically because of COVID-19?

Answer Choices	Responses = 16	
Change in chemical dosage	43.75%	7
Change in operator shifting schedule	31.25%	5
Digital solutions have been implemented/planned	31.25%	5
Others	6.25%	1

*About 30% of respondents also increased both (i) the frequency of water quality testing and (ii) the number of testing locations.*

# Commercial Operations: Billing

Which measures have you implemented in the customer billing process/system, specifically because of COVID-19?

Answer Choices	Responses = 15	
Meter reading has been suspended	33.33%	5
Billing amount has been based on estimates	40.00%	6
Invoicing has been suspended	40.00%	6
Invoice has been sent electronically (mobile or e-mail)	26.67%	4
Digital solutions have been implemented/planned	26.67%	4
Other changes	13.33%	2

*Meter reading and invoicing were suspended for <3 months for about a third of the respondents.*



# Commercial Operations: Payment collections

Which measures have you implemented in your payment collection process/system, specifically because of COVID-19?

Answer Choices	Responses = 17	
All collections have been waived (water provided for free)	0.00%	0
Deferred payment schemes have been implemented	41.18%	7
New electronic payment channels (mobile/online payment) have been created	35.29%	6
Existing electronic payment channels have been improved	23.53%	4
Digital solutions (e.g prepaid cards for kiosk) have been implemented/planned	11.76%	2
Other changes	11.76%	2

*Suspension of payments lasted up to six months for only 7 respondents.*

FOURTH MEETING

**GMS** Urban Development  
Working Group

17 December 2020 • via Zoom

# Commercial Operations: Service connections and disconnections

What measures have you implemented on service connections and disconnections, specifically because of COVID-19?

Answer Choices	Responses = 15	
New service connections have been increased/fast-tracked	53.3%	8
Disconnection has been suspended	60.0%	9

# Human Resources: Staff safety measures implemented

Which additional measures have you implemented to ensure staff safety?

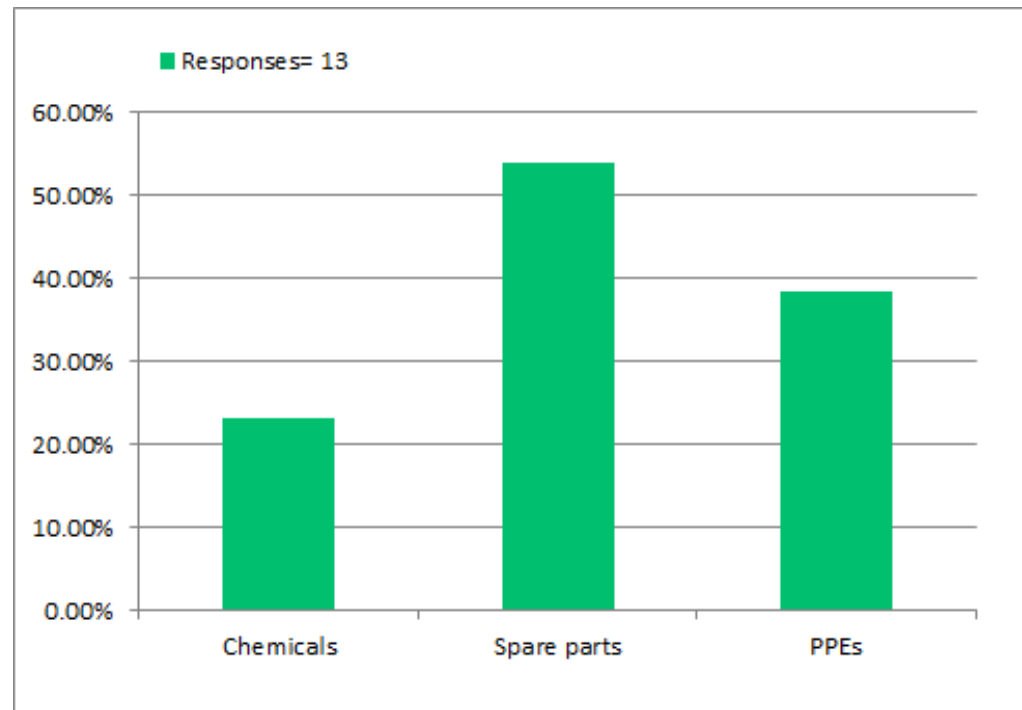
*Respondents reported that employees raised concerns about safety in the office/site (80%), constraints on commuting to and from work (60%), physical and mental well-being (60%), and ability to accomplish tasks given the new working set-up (25%).*

Answer Choices	Responses = 21	
Work-from-home arrangement for staff not required on-site	71.43%	15
Provide PPE and/or hygiene supplies	85.71%	18
Reminders (posters, emails) for handwashing and social distancing	95.24%	20
Staggered shifts to reduce number of people on-site/office	66.67%	14
Contact tracing for staff, customers, and visitors	57.14%	12
COVID-19 awareness training	57.14%	12
Limited travel or field work	71.43%	15
Digital solutions (e.g. online meetings)	47.62%	10
Other changes	4.76%	1

# Supply Chain: Critical items and procurement

Which items which have you experienced a delay in delivery?

*26% of respondents simplified, shortened or streamlined their procurement process to cope with supply chain issues. 63% implemented or plan to implement digital solutions such as e-procurement and online meetings.*



# Crisis Preparedness: Preparedness plans

Which plans, guidelines or protocols do you have in place prior to the pandemic?

<b>Answer Choices</b>	<b>Responses = 17</b>	
Water safety plan	64.71%	11
Crisis management plan	58.82%	10
Disaster risk management plan	47.06%	8
Sanitation safety plan	64.71%	11
Others	23.53%	4

# Crisis Preparedness: Lockdown and quarantine

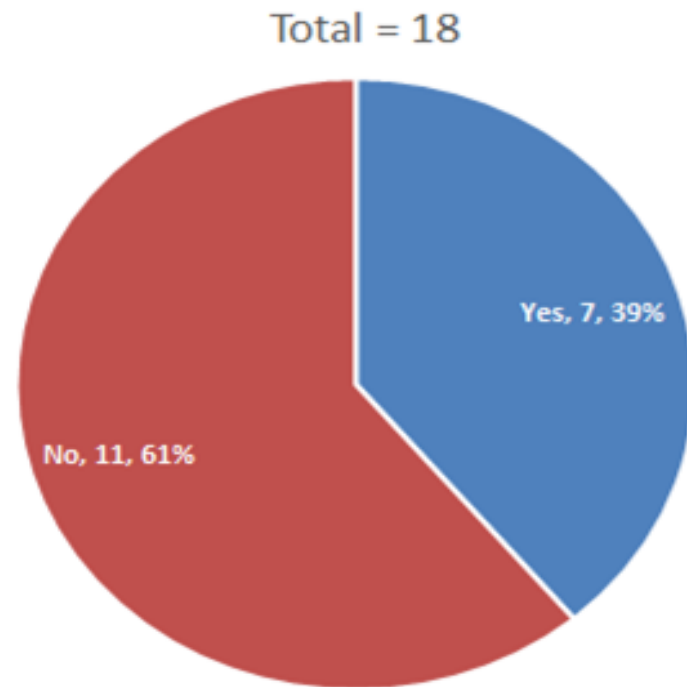
Which challenges have you experienced with respect to complying with lockdown/quarantine measures in your area/s of operation?

*Even with easing of lockdown restrictions, respondents are still experiencing challenges in ensuring staff safety (69%) and billing/collection (62%).*

Answer Choices	Responses = 19	
Challenges in preparing staff to work from home	84.21%	16
Challenges in the mobility of staff, workers or laborers	73.68%	14
Challenges in implementing social distancing among staff in the office or plant	73.68%	14
Challenges in sourcing PPE	47.37%	9

# Crisis Preparedness: Response coordination

Are you involved in or have you engaged in multi-sectoral COVID-19 Response?



# Recovery: New normal

Which COVID-19 response measures do you plan to institutionalize as part of your post-pandemic "new normal"?

Answer Choices	Responses = 14	
Pricing/payment schemes	42.86%	6
Use of digital technologies	50.00%	7
Flexible working arrangements	50.00%	7
Improve/diversify/localize supply chains	7.14%	1
CSR: Additional support to vulnerable people	21.43%	3
Others	14.29%	2



# Future: post-pandemic water sector (1)

- Enhance resilience to shocks and stress
- Improve water sector crisis preparedness
- Develop utility response management (across all operational functions)
- Wastewater-based epidemiology
- Integrate WASH into public health policy

## Future: post-pandemic water sector (2)

- Capacity and sector development
- Industry-wide knowledge sharing
- Smart water management
- Digital technologies
- Remote working and decentralization

*Ensure sustainability of quality water services*

# Thank You

Alan Baird

Principal Urban Development Specialist

Southeast Asia Department

Asian Development Bank

[abaird@adb.org](mailto:abaird@adb.org)

FOURTH MEETING

**GMS** Urban Development  
Working Group

17 December 2020 • via Zoom