ADB Online Sanitation Dialogue Webinar 2021

Asian Water Development Outlook 2020.

Implications for sanitation

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Summary

- Snapshot of Urban Water
 Security with focus on sanitation
- Current stats on sanitation across Asia and the Pacific
- Urban challenges and opportunities
- Drawn from AWDO 2020 (Link), and Methodology Report (UQ 2020)

ASIAN WATER DEVELOPMENT OUTLOOK 2020

ADVANCING WATER SECURITY ACROSS ASIA AND THE PACIFIC

DECEMBER 2020

ASIAN DEVELOPMENT BANK







Urban Water Security (KD3) – what is it?

BACKGROUND:

- Urban water security means sustainably meeting the community's water needs now and in the future and meeting the SDGs.
- DEFINITION: Urban water security assesses the extent to which countries are providing safely managed and affordable water and sanitation services for their urban communities to sustainably achieve desired outcomes.

NOTE – SDG (6.2) Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation. (also SDG 6.1, 11.5, 11.6)

KEY DIMENSION 3 Access to Water Supply (5points) Access to Sanitation (5 points) Affordability (5 points) Drainage/floods (1 point) Environment (1 point from KD4)





Urban Water Security (KD3) – key findings

RESULTS:

Population weighted average results

- 7 "Nascent" countries (Marshall Islands, Federated states of Micronesia, Kiribati, Nauru, Papua New Guinea, Timor-Leste), 1. 9 million people.
- 18 "Engaged" which is also at insufficient security level (790 urban million people).
- Investment is improving security, but urban population growth means the overall proportion with water security is increasing slowly.

17 Countries ranked "1", 15 ranked "2" and 10 countries ranked "5" (eg Australia, China, Hong Kong, Japan, New Zealand and Singapore) suggesting wide disparity.

Consistent with SDG 6.2, the target for sanitation management is "safely managed". Safely managed sanitation is defined as the "use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite" (JMP, 2019).





Urban Water Sanitation –Level 1 (KD3) – and method

2020 Breakdown: Example										
Sanitation Level		At Level	At Level or Better	Multiplier	Indicator Sco	ore				
Safely Managed		0.00	0.00	4	0.00					
Basic		62.26	62.26	3	1.87					
Limited			21.39	83.65	1	0.21				
Unimproved			16.35	100.00	0	0.00	0.00		Indicator Score Bands	
Open defecation		0.00	100.00	0	0.00	Index Scor	e Lo	w	High	
					Indicator Score	2.08	5	3.5	0	4.00
					Index Score	1.00	4	3.2	5	3.50
					Data Quality Score	М	3	3.0	0	3.25
							2	2.7	5	3.00
KD3 Index	Indicator Score		Description of urban water security in Index bands							
5	16.0 - ≤ 17	A very high proportion of the urban population are receiving affordable, safely managed water and sanitation services, with low economic impacts of floods and storms, and high environmental water security.					1	0.0	0	2.75

KD3 Index	Indicator Score	Description of urban water security in Index bands
5	16.0 - ≤ 17	A very high proportion of the urban population are receiving affordable, safely managed water and sanitation services, with low economic impacts of floods and storms, and high environmental water security.
4	14.3 - < 16.0	A high proportion of the urban population are receiving affordable, safely managed water and sanitation services, with low economic impacts of floods and storms, and high environmental water security.
3	12.0 - < 14.3	A moderate proportion of the urban population are receiving affordable, safely managed water and sanitation services, with acceptable economic impacts of floods and storms, and acceptable environmental water security.
2	6.4 - < 12.0	A low proportion of the urban population are receiving affordable, safely managed water and sanitation services, with potentially high economic impacts of floods and storms, and low environmental water security.
1	3.0 - < 6.4	A very low proportion of the urban population are receiving affordable, safely managed water and sanitation services, with potentially high economic impacts of floods and storms, and low environmental water security.

Source: UQ 2020 Urban Water Security Report for the Asian Development Bank.





Urban Water Sanitation –Level 1 (KD3) – and method

	Raw data used (2017 Data [JMP, 2019])							Data Quality
Country	Safely managed	Basic	At least basic	Limited (shared)	Unimproved	Open defecation	2019	2019
Afghanistan	$\sim \sim$	62.26	62.26	21.39	16.35	0.00	2.08	М
Bangladesh		50.69	50.69	31.77	17.54	0.00	1.84	М
Bhutan		72.59	72.59	14.89	12.52	0.00	2.33	М
India		72.01	72.01	21.65	1.58	4.75	2.38	М
Indonesia		80.25	80.25	12.27	3.60	3.88	2.53	М
Kiribati		47.80	47.80	13.30	10.45	28.45	1.57	L
Micronesia, Federated States of		88.31	88.31	0.00	11.69		2.65	L
Mongolia		66.33	66.33	30.04	2.52	1.12	2.29	М
Myanmar		76.00	76.00	11.62	11.09	1.29	2.40	М
Nauru		65.60	65.60	30.73	1.09	2.59	2.28	М
Nepal		67.26	67.26	24.43	0.97	7.34	2.26	М
Pakistan		76.62	76.62	5.87	17.51	0.00	2.36	М
Papua New Guinea		47.84	47.84	7.67	43.70	0.78	1.51	М
Solomon Islands	$-\sqrt{-1}$	77.91	77.91	17.73	0.00	4.36	2.51	М
Timor-Leste		75.93	75.93	15.02	9.05	0.00	2.43	М
Tuvalu	4.18	78.57	82.76	9.02	2.38	5.84	2.61	Н
Vanuatu		48.29	48.29	43.31	7.95	0.45	1.88	М

A major issue is very little current performance at "safely managed" as reported to JMP.

Source: UQ 2020 Urban Water Security Report for the Asian Development Bank.



THE UNIVERSITY OF QUEENSLAND AUSTRALIA



Urban Water Security (KD3) - policy

Investment in suitable solutions to provide cost-effective access to improved wastewater collection, treatment and recycling, and inclusive sanitation.

Needed broadly throughout the regions of South East Asia, Central and West, South and the Pacific. Not just infrastructure but also strengthened monitoring, data availability, governance and management.

May be opportunities to solve some water and sanitation problems simultaneously. E.g. investment in wastewater recycling to offset demand for potable water.

Many improvements possible including clearer definitions, stronger risk basis and future outlook, and sub-national assessments.

Further development of the sanitation index is warranted and tracking through time.

