

2015
UPDATE

A SNAPSHOT OF WATER SUPPLY IN EAST ASIA AND THE PACIFIC 2015 REGIONAL ANALYSIS AND UPDATE



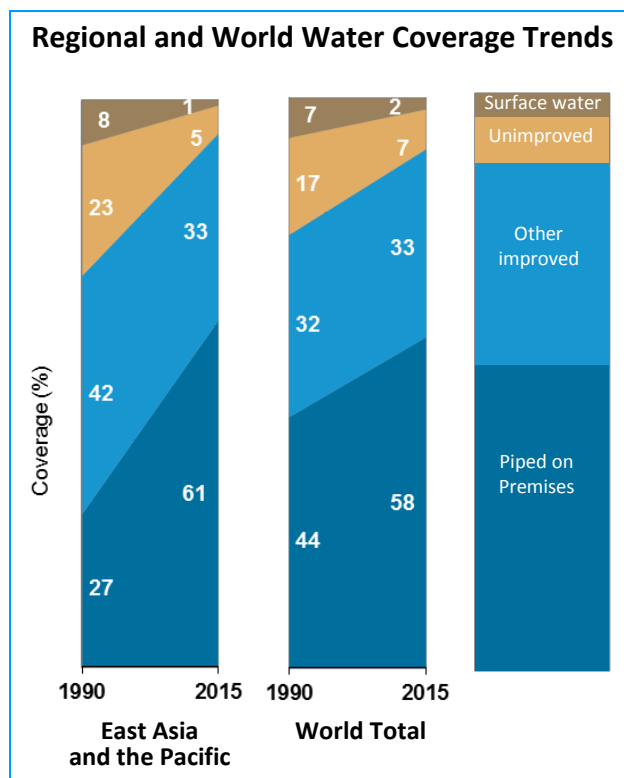
Overview

The East Asia and Pacific Region has made good progress in drinking water supply over the last 25 years:

- The proportion of people using improved water supplies increased by 25 per cent between 1990 and 2015, a greater rate than in most other regions
- Sixty per cent of the region’s 2.1 billion people now have access to piped water on the premises
- 817 million more people use improved drinking water than 25 years ago, the majority of them in China
- The majority of people in the region use appropriate household water treatment to improve their drinking water quality

However, challenges remain:

- 130 million people still do not have access to improved water supply in East Asia and the Pacific
- Coverage disparities are pronounced in the region: national coverage levels range from as low as 40 per cent (in Papua New Guinea) to over 95 per cent (in Thailand, Malaysia, Fiji and other countries)
- Access to water is inequitable within countries: urban dwellers are more likely to have access to improved water supplies than rural households
- Poverty levels are also an important factor influencing the use of improved drinking water: poorer households are much less likely to have access than richer households
- Service levels are low: outside of China, the proportion of people with piped water on the premises (38%) is much lower than the world average (58%)
- The Pacific sub-region is lagging behind: coverage levels for improved drinking water is only 52 per cent, lower than any region in the world and far behind the world average of 91 per cent in 2015



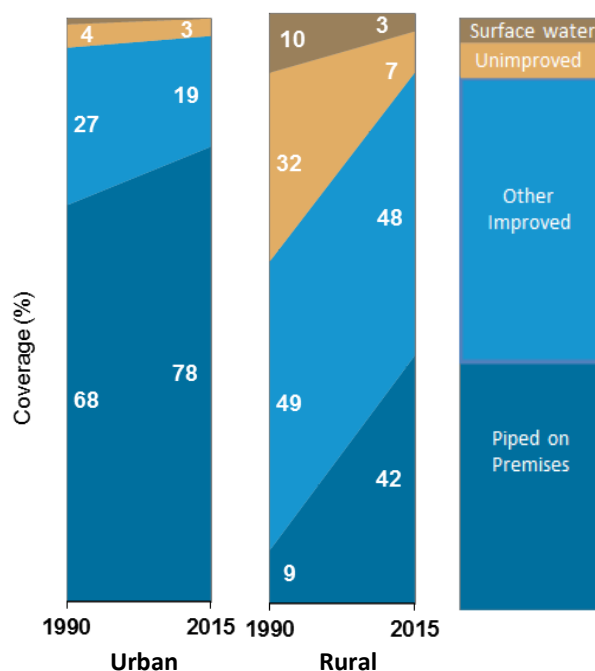
Information about this Snapshot

- This snapshot is produced by the UNICEF Regional Office for East Asia and the Pacific
- The UNICEF East Asia and Pacific Region encompasses 27 countries; 12 in East Asia and 15 in the Pacific (see last page for listing)
- Unless otherwise indicated, data in this snapshot is from the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation 2015 dataset, the latest available
- See page 7 for full citations and credits

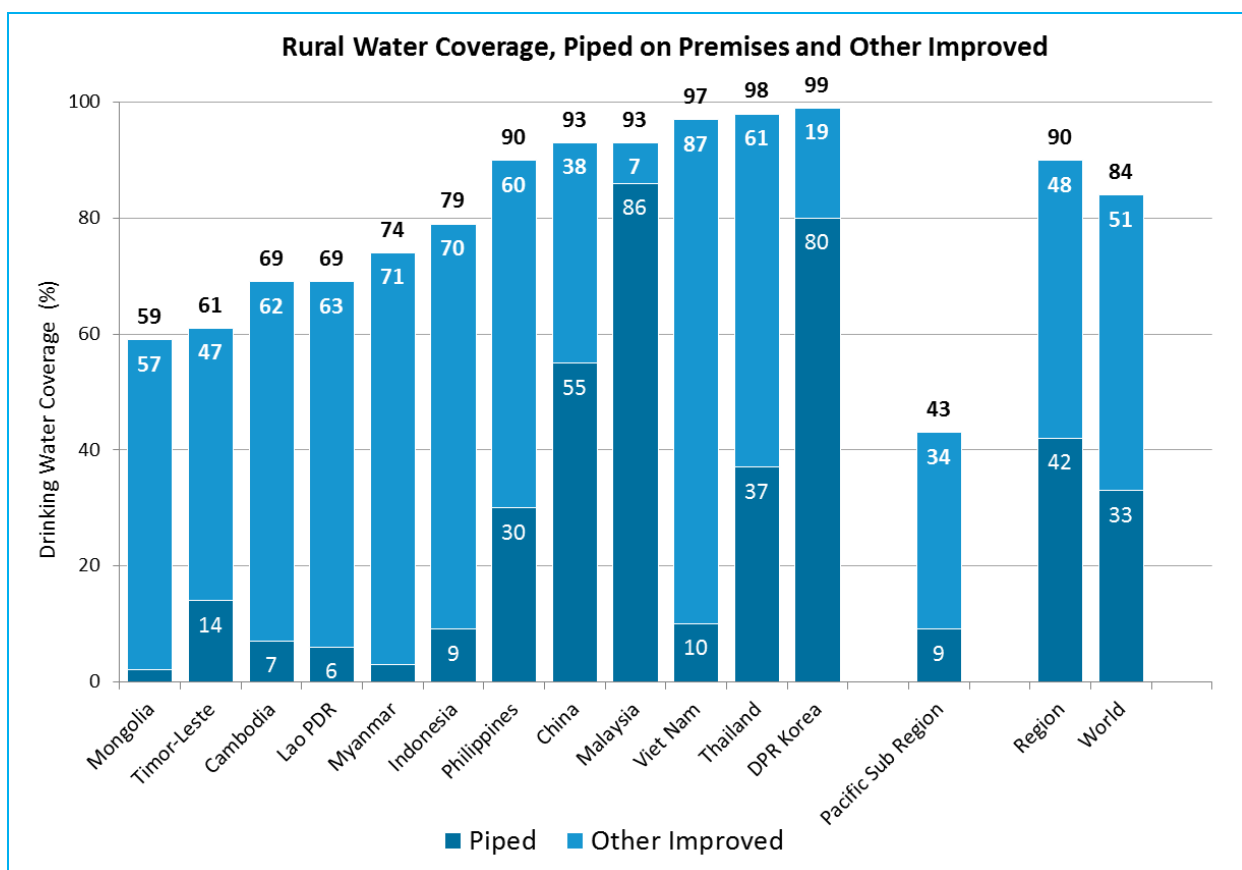
Drinking Water Inequities

Urban-rural coverage disparity still exists, but the gap is narrowing

- The East Asia and Pacific Region urban-rural drinking water gap has shrunk from 37 percentage points in 1990 to just 7 points in 2015
- However, there are still significant urban-rural gaps in some countries, notably in Papua New Guinea (55 percentage points between urban and rural), Kiribati (36 points), Timor-Leste (34 points) and Cambodia (31 points)
- In the Pacific sub-region, the urban-rural gap (50%) is higher than anywhere else in the world and has only improved marginally (by 5%) since 1990.



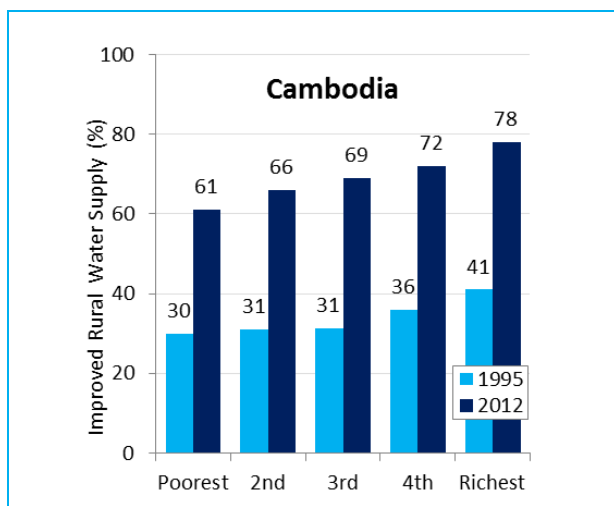
Few people have access to piped water in rural areas



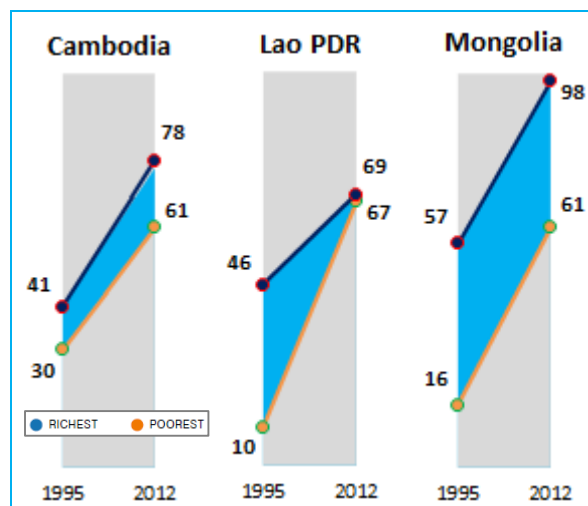
Use of improved drinking water in rural areas in East Asia and Pacific countries, compared to regional and world totals, 2015, per cent.

Poor households continue to have lower rural water coverage levels in the region

- Good progress has been made in rural water supply in the region, but disparities between richer and poorer household continue to be significant (e.g. Cambodia)
- The region has mixed progress in addressing these disparities: in some countries the gap has decreased significantly (e.g. Lao PDR) or decreased slightly (Mongolia), but in others the gap has actually increased (Cambodia)



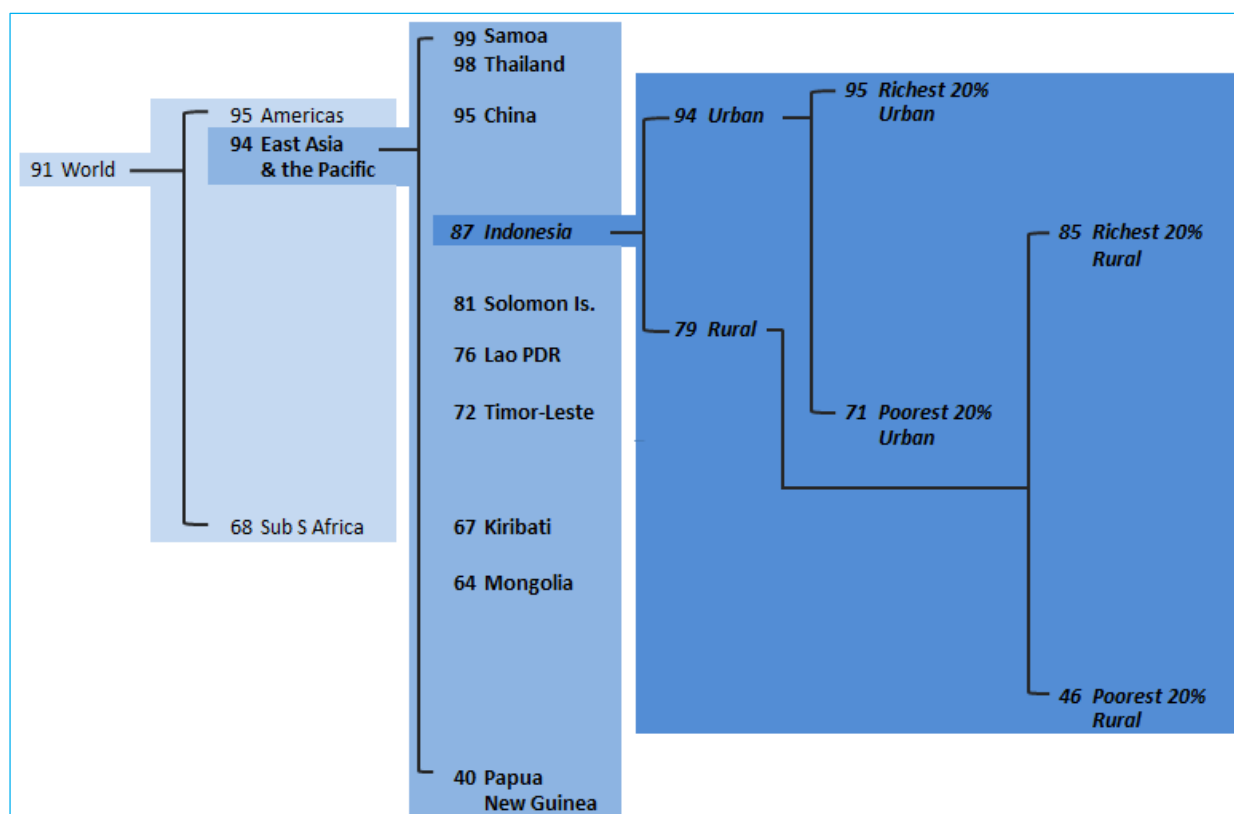
Improved water by wealth quintile, rural, 1995 and 2012. Source: JMP multi-survey tabulation, 2015.



Gap between poorest and richest rural households, 1995 to 2012. Source: JMP multi-survey tabulation.

Regional and country averages mask large disparities within countries

- This 'equity tree' example from Indonesia shows that the poorest households in rural areas have much lower coverage levels even than in sub-Saharan Africa



Improved water coverage in Indonesia, per cent. Sources: JMP 2015 and Indonesia DHS, 2007

Water Quality and Household Water Treatment

Water Quality

- Comprehensive data on drinking water quality is not available, however individual studies suggest that both bacteriological and chemical contamination of drinking water supplies is a serious problem in the region
- Substantial levels of arsenic contamination of water supplies has been found in Cambodia, China, Myanmar and Viet Nam, while in other countries less widespread occurrences have been documented or are probable (see *Statistical modeling of global geogenic arsenic contamination in groundwater*. Amini et al. 2008. Environmental Science and Technology 42(10), 3669-3675)

Household water treatment is widespread in the region

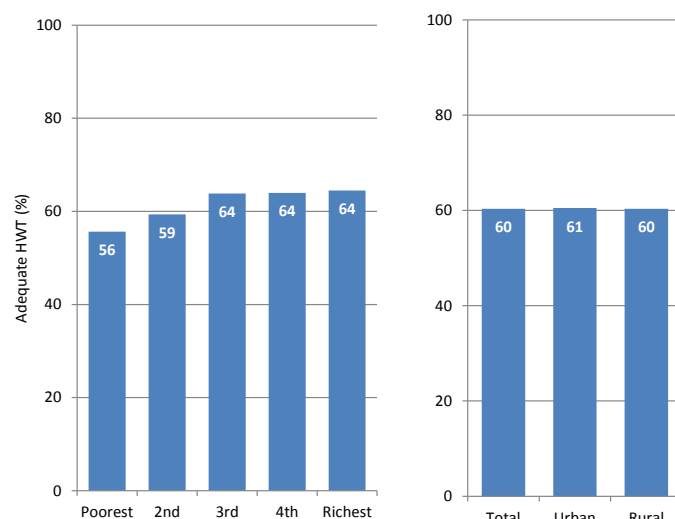
- In the seven countries where data is available, the majority of households use appropriate household water treatment methods to improve their drinking water; treatment levels are relatively constant across wealth quintiles, and among rural and urban households

Household Water Treatment in East Asia

Population in households reporting the use of appropriate* water treatment methods, per cent (non-weighted average from 7 countries).

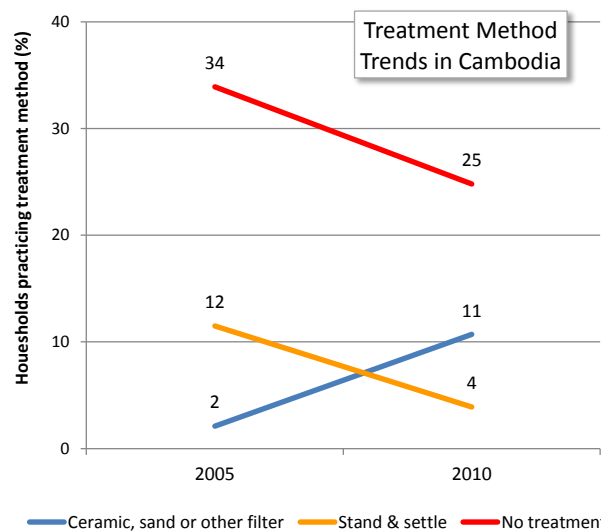
* Appropriate treatment methods include boiling, bleaching/chlorinating, filtering, and solar disinfecting

Sources: MICS and DHS from Indonesia 2012, Thailand 2005-2006, Cambodia 2005, Mongolia 2005, Philippines 2003, Viet Nam 2006, Lao PDR 2012. No data available from Pacific countries.



Filter Use Trends Example

- Boiling is still the most common method for treating water in the region, but an increasing number of households are opting for ceramic, sand or other appropriate filters
- The number of households using non-appropriate methods (such as just allowing water to settle) or not using any treatment method at all is falling in some countries
- The example from Cambodia illustrates this trend, which is due in part to national filter use promotional programmes



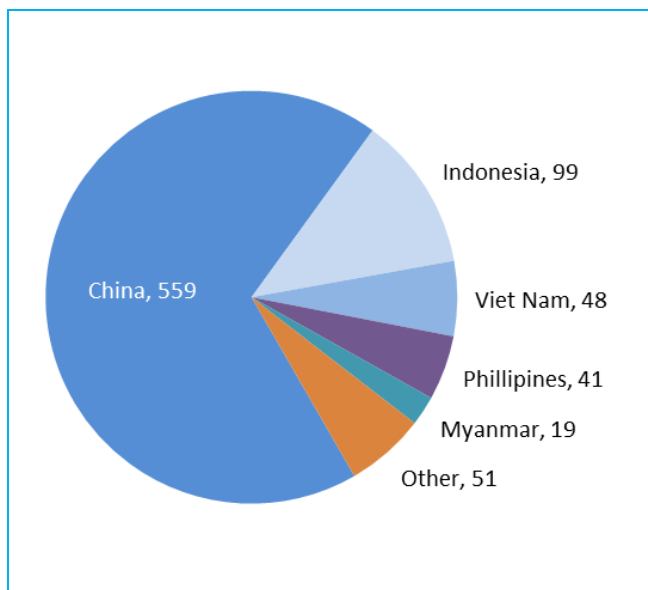
Trends in selected household water treatment methods in Cambodia (boiling—not shown—remains the most common method). Sources: DHS 2005 and 2010.

Sub-Regional Analysis

Outside of China: Lower access to piped water on premises

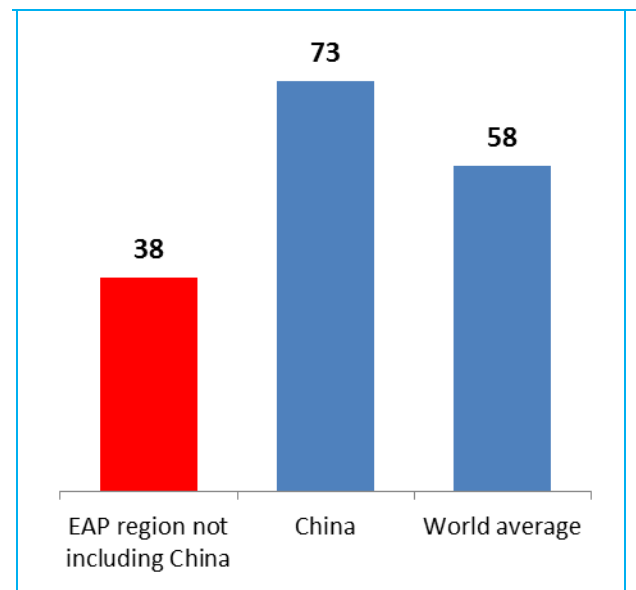
- China accounts for more than two-thirds (68%) of the population of the East Asia and Pacific region, and thus trends in China have a significant impact on WASH averages in the region as a whole
- When taken separately, certain key WASH indicators are quite different in the region outside of China than in China, notably in the area of access to piped water on premises

Most new regional water users since 1990 are in China



Number of people who gained access to improved drinking water from 1990 to 2015, national, millions

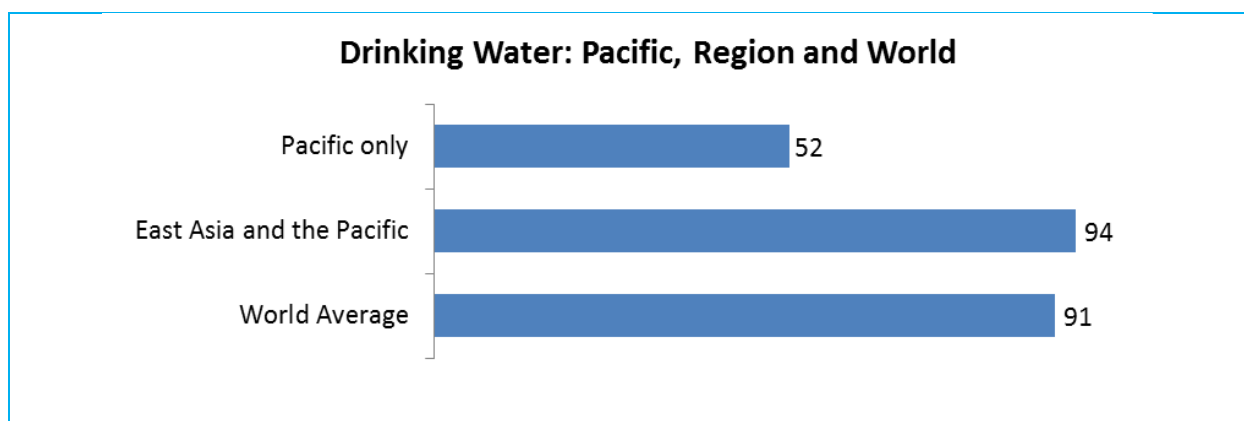
Outside of China, access to piped water on household premises is low



Proportion of population with access to piped water on premises (in house or yard), national, 2015

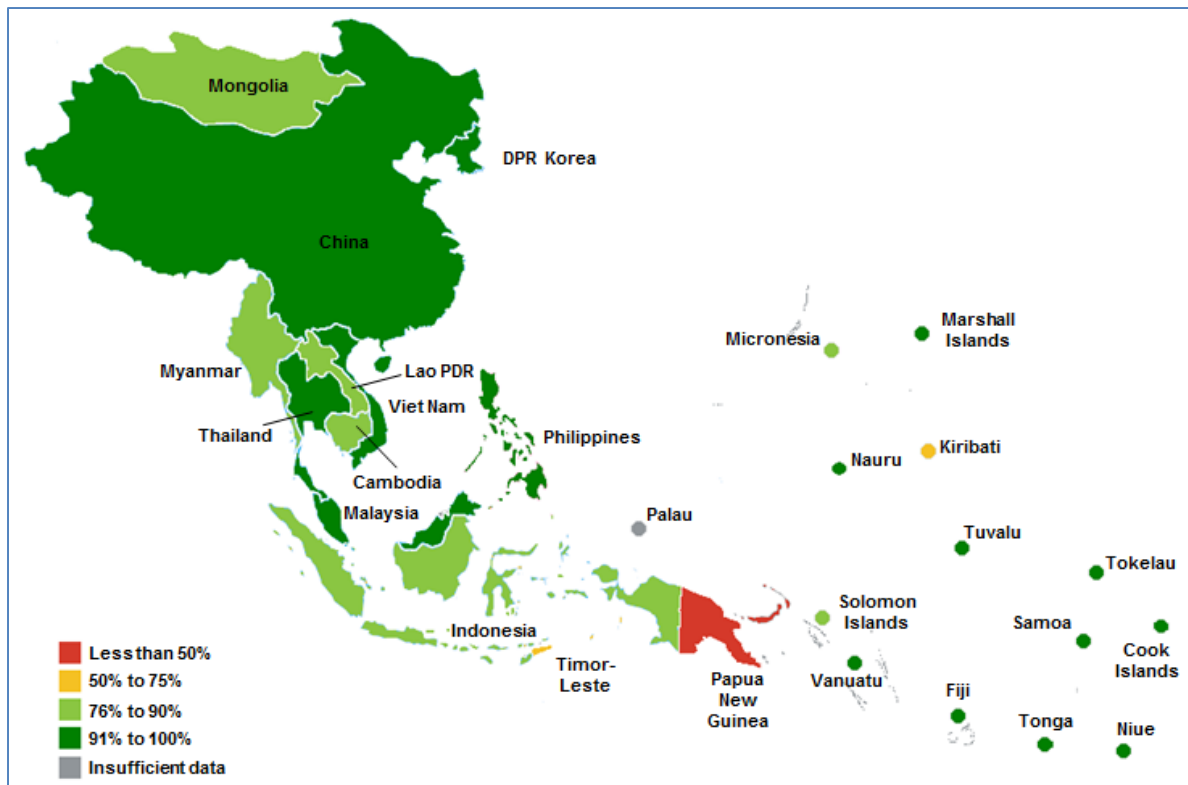
Pacific Sub-Region: Low Coverage, Slow Progress, Off-Track

- Water coverage in the Pacific sub-region (14 Small Island Nations and Papua New Guinea) is low, and increased by just seven per cent from 1990 to 2015
- The Pacific sub-region did not meet the MDG water target



Drinking water coverage, percent, 2015 in the Pacific sub-region, the EAP region and the world

Drinking Water Coverage in East Asia and the Pacific



Improved water supply coverage in East Asia and Pacific countries, 2015, national. Only countries in the UNICEF East Asia and Pacific region are shown. This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

Sources and Notes

This document is the 2015 annual update of the original 2012 snapshot.

Main water supply dataset: from Progress on Drinking Water and Sanitation: 2015 Update (with supplemental data from wssinfo.org), from WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation

Country-specific DHS data: from published Demographic and Household Surveys available at measuredhs.com, from USAID and national statistics bureaus

Country-specific MICS data: from published Multiple Indicator Cluster Surveys available at childinfo.org, from UNICEF, other UN agencies and national statistics bureaus

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Drinking Water Coverage Data

Country estimates by type of drinking water source 1990, 2015

Country	Year	Total Population	Urban					Rural					National				
			Improved (%)			Unimproved (%)		Improved (%)			Unimproved (%)		Improved (%)			Unimproved (%)	
			Total Improved	Piped on Premises	Other Improved	Other Unimproved	Surface Water	Total Improved	Piped on Premises	Other Improved	Other Unimproved	Surface Water	Total Improved	Piped on Premises	Other Improved	Other Unimproved	Surface Water
Cambodia	1990	9,057	34	15	19	40	26	22	0	22	42	36	23	2	21	42	35
	2015	15,677	100	75	25	0	0	69	7	62	16	15	76	21	55	12	12
China	1990	1,165,429	97	78	19	2	1	56	11	45	35	9	67	28	39	26	7
	2015	1,401,587	98	87	11	2	0	93	55	38	5	2	95	73	22	4	1
Cook Islands	1990	18	-	-	-	-	-	-	-	-	-	-	100	-	-	0	0
	2015	21	-	-	-	-	-	-	-	-	-	-	100	77	23	0	0
DPR Korea	1990	20,194	100	-	-	0	0	100	-	-	0	0	100	-	-	0	0
	2015	25,155	100	94	6	0	0	99	80	19	1	0	100	89	11	0	0
Fiji	1990	728	94	92	2	6	0	80	32	48	15	5	86	57	29	11	3
	2015	893	100	96	4	0	0	91	36	55	5	4	96	68	28	2	2
Indonesia	1990	178,633	89	25	64	10	1	61	2	59	31	8	69	9	60	25	6
	2015	255,709	94	33	61	6	0	79	9	70	18	3	87	22	65	11	2
Kiribati	1990	71	74	43	31	26	-	36	16	20	64	-	50	26	24	50	-
	2015	106	87	67	20	13	-	51	9	42	49	-	67	35	32	33	-
Lao PDR	1990	4,245	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
	2015	7,020	86	64	22	14	0	69	6	63	24	7	76	28	48	20	4
Malaysia	1990	18,211	95	88	7	5	0	86	65	21	12	2	90	76	14	9	1
	2015	30,651	100	100	0	0	0	93	86	7	5	2	98	96	2	1	1
Marshall Islands	1990	47	91	4	87	9	-	94	0	94	6	-	92	3	89	8	-
	2015	59	94	4	90	6	-	98	0	98	2	-	95	3	92	5	-
Micronesia (Fed. States of)	1990	96	94	-	-	3	3	90	-	-	2	8	91	-	-	2	7
	2015	104	95	42	53	2	3	87	36	51	5	8	89	37	52	4	7
Mongolia	1990	2,184	77	44	33	18	5	22	2	20	23	55	53	26	27	20	27
	2015	2,923	66	33	33	34	0	59	2	57	25	16	64	24	40	32	4
Myanmar	1990	42,123	80	17	63	8	12	51	1	50	18	31	58	5	53	15	27
	2015	54,164	93	19	74	7	0	74	3	71	18	8	81	8	73	14	5
Nauru	1990	9	-	-	-	-	-	NA	NA	NA	NA	NA	-	-	-	-	-
	2015	11	97	68	29	3	-	NA	NA	NA	NA	NA	97	68	29	3	-
Niue	1990	2	-	-	-	-	-	-	-	-	-	-	99	98	1	1	-
	2015	1	-	-	-	-	-	-	-	-	-	-	99	98	1	1	-
Palau	1990	15	98	98	0	2	-	72	72	0	28	-	90	90	0	10	-
	2015	21	97	97	0	3	-	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	1990	4,158	87	61	26	7	6	24	4	20	27	49	34	12	22	23	43
	2015	7,632	88	55	33	9	3	33	3	30	19	48	40	9	31	18	42
Philippines	1990	61,949	91	43	48	7	2	77	9	68	16	7	84	25	59	12	4
	2015	101,803	94	59	35	6	0	90	30	60	6	4	92	43	49	5	3
Samoa	1990	163	97	82	15	3	0	87	72	15	13	0	89	74	15	11	0
	2015	193	97	91	6	2	1	99	84	15	0	1	99	85	14	0	1
Solomon Islands	1990	312	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	584	93	61	32	6	1	77	16	61	14	9	81	26	55	12	7
Thailand	1990	56,583	96	74	22	4	0	84	10	74	14	2	87	29	58	11	2
	2015	67,401	98	76	22	2	0	98	37	61	2	0	98	57	41	2	0
Timor-Leste	1990	751	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2015	1,173	95	47	48	4	1	61	14	47	28	11	72	25	47	20	8
Tokelau	1990	2	NA	NA	NA	NA	NA	-	-	-	-	-	90	-	-	10	-
	2015	1	NA	NA	NA	NA	NA	-	-	-	-	-	100	-	-	0	0
Tonga	1990	95	97	-	-	3	-	99	-	-	1	-	99	-	-	1	-
	2015	106	100	73	27	0	0	100	80	20	0	0	100	78	22	0	0
Tuvalu	1990	9	92	92	0	8	-	89	89	0	11	-	90	90	0	10	-
	2015	10	98	97	1	2	-	97	97	0	3	-	98	97	1	2	-
Vanuatu	1990	147	94	49	45	6	0	55	11	44	37	8	62	18	44	31	7
	2015	264	99	61	38	1	0	93	25	68	0	7	94	35	59	1	5
Viet Nam	1990	68,910	90	43	47	4	6	56	0	56	26	18	63	9	54	21	16
	2015	93,387	99	61	38	1	0	97	10	87	2	1	98	27	71	1	1
Total	1990	1,634,142	95	68	27	4	1	58	9	49	32	10	69	27	42	23	8
	2015	2,066,655	97	78	19	3	0	90	42	48	7	3	94	61	33	5	1

Source: Source: *Progress on Drinking Water and Sanitation: 2015 Update* (with supplemental data from wssinfo.org), from the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation

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