WHO/UNICEF JMP global monitoring of drinking water, sanitation and hygiene

WASH in Households in odd years

WASH in Schools and Health Care Facilities in even years

EPFL, 19 October 2023

Rick Johnston (johnstonr@who.int)

washdata.org

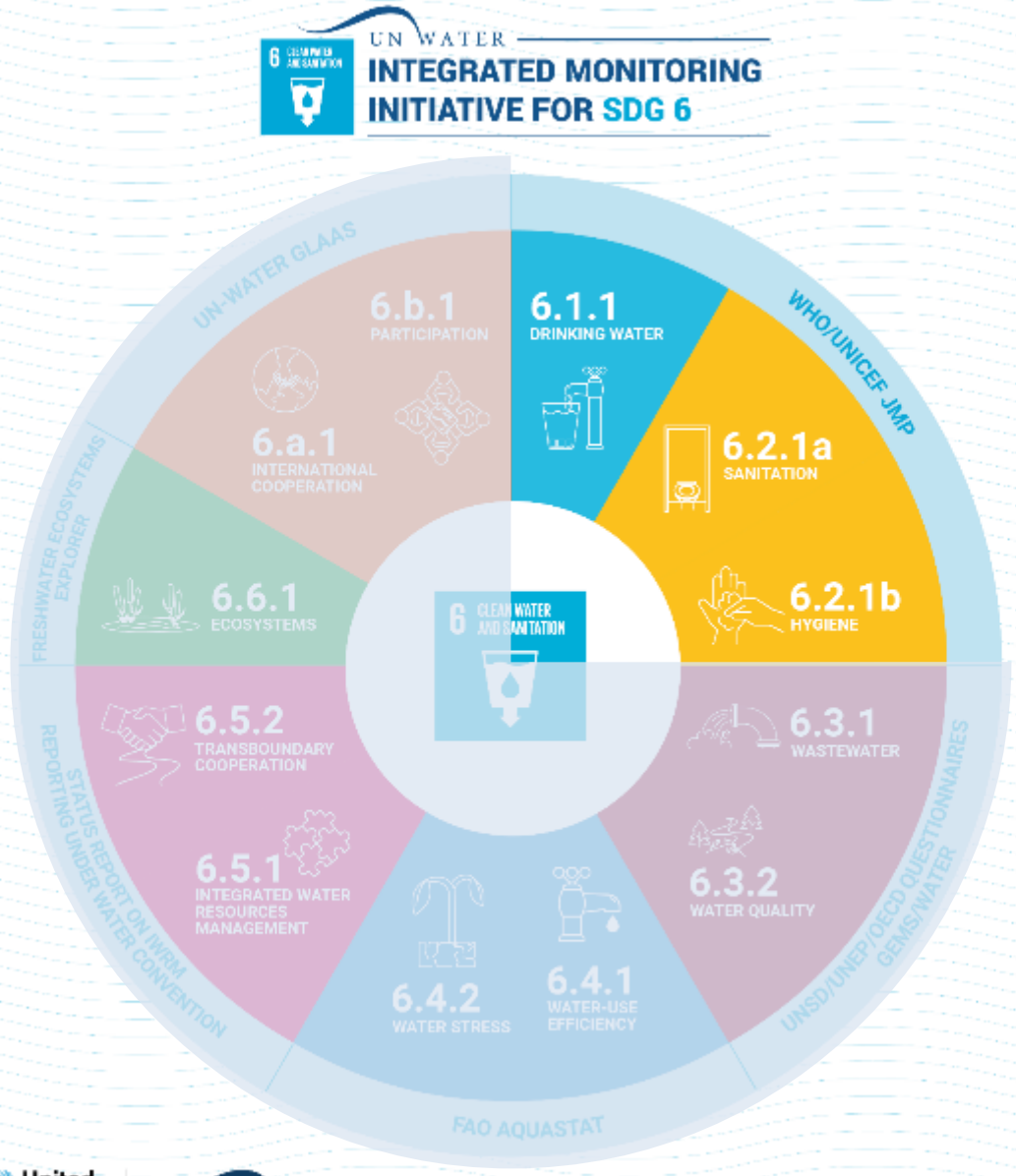
Schedule

- 10:15 Introduction
- 10:20 – 10:50 Drinking water quality
  - Exercise: JMP Country files
- 10:50 – 11:20 Sanitation
  - Exercise: JMP Website
- 11:20 – 11:50 Hygiene, menstrual health
  - Exercise: JMP Inequalities files

Global SDG targets and indicators related to WASH

SDG global targets	SDG global indicators
6.1 By 2030, achieve **universal and equitable** access to safe and affordable drinking water **for all**	6.1.1 Proportion of population using **safely managed drinking water services**
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene **for all** and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using (a) **safely managed sanitation services** and (b) a **hand-washing facility with soap and water** Additional indicator for SDG 6.2: **Proportion of population practising open defecation**
1.4 By 2030, ensure **all men and women**, in particular the poor and vulnerable, have equal rights to economic resources as well as access to basic services…	1.4.1 Proportion of population living in households with access to basic services (including access to **basic drinking water, basic sanitation and basic handwashing facilities**)
4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments **for all**	4.a.1 Proportion of **schools** with access to…. (e) **basic drinking water**, (f) **single-sex basic sanitation facilities**, and (g) **basic handwashing facilities**
3.8 Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality and affordable essential medicines and vaccines **for all**	[Proportion of **health care facilities with basic WASH services**]

UN Water Integrated Monitoring Initiative for SDG 6

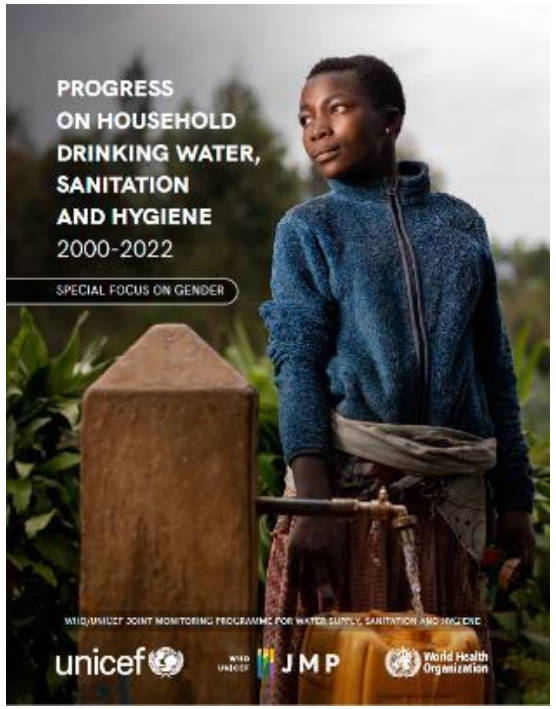


INDICATORS	CUSTODIANS
6.1.1 Proportion of population using safely managed drinking water services	WHO, UNICEF
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	WHO, UNICEF
6.3.1 Proportion of domestic and industrial wastewater flows safely treated	WHO, UN-Habitat, UNSD
6.3.2 Proportion of bodies of water with good ambient water quality	UNEP
6.4.1 Change in water-use efficiency over time	FAO
6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	FAO
6.5.1 Degree of integrated water resources management	UNEP
6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	UNECE, UNESCO
6.6.1 Change in the extent of water-related ecosystems over time	UNEP, Ramsar
6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	WHO, OECD
6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	WHO, OECD

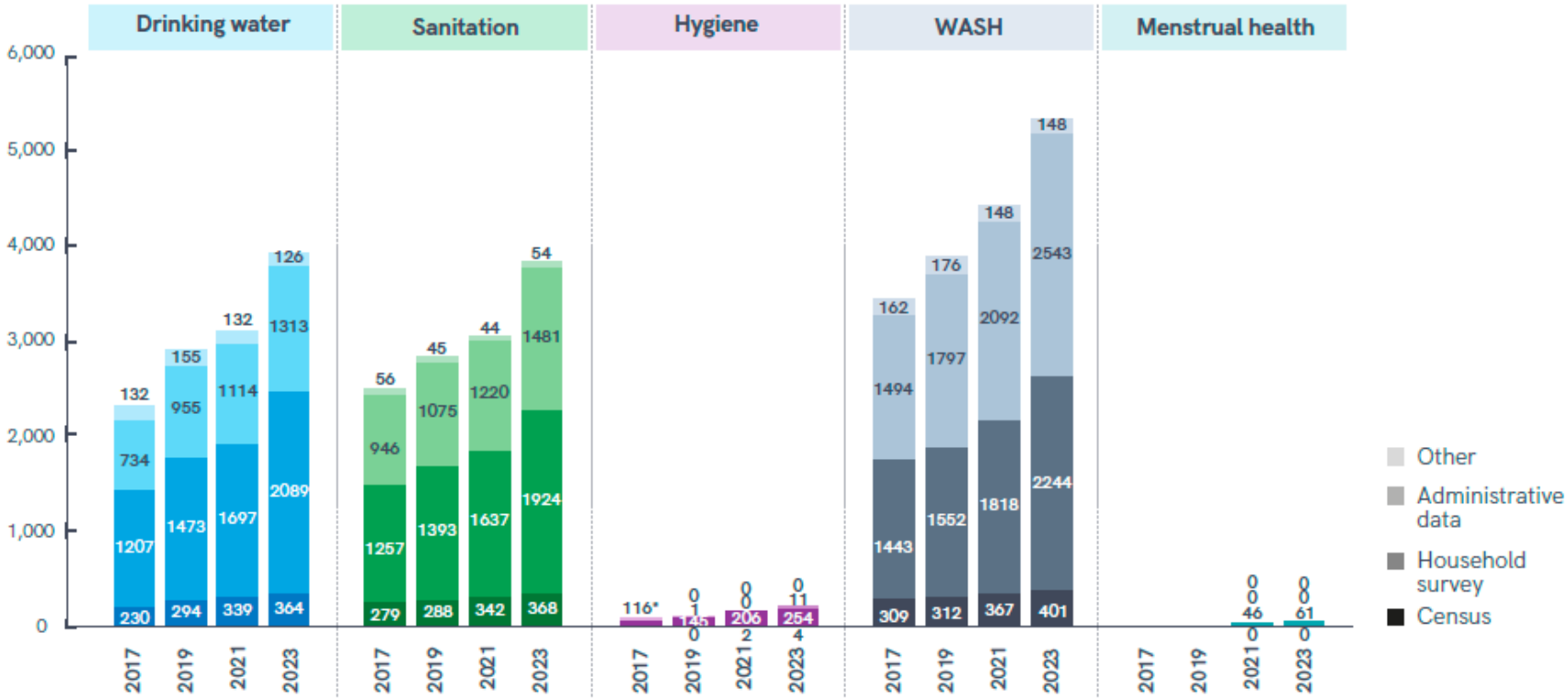
Joint Monitoring Programme (JMP)

- WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)
  - Established 1990
  - Global monitoring of water, sanitation and hygiene targets
- Progress reports every 2 years
- Also WASH in schools, health care facilities

JMP 2023 progress update: special focus on gender



Data sources used for the JMP 2023 progress update



https://washdata.org/reports/jmp-2023-wash-households

https://washdata.org/data/

Data

The WHO/UNICEF Joint Monitoring Programme (JMP) is the custodian of global data on Water Supply, Sanitation and Hygiene (WASH).

Households

The WHO/UNICEF JMP global database includes estimates of progress in household drinking water, sanitation and hygiene since 2000.

INTRODUCTION

EXPLORE THE DATA

Schools

In 2018 the WHO/UNICEF JMP established a new global database on drinking water, sanitation and hygiene in schools.

INTRODUCTION

EXPLORE THE DATA

Health Care Facilities

In 2019 the WHO/UNICEF JMP established a new global database on water, sanitation, hand hygiene, waste management, and environmental cleaning in health care facilities.

INTRODUCTION

EXPLORE THE DATA

https://washdata.org/data/household#!/

JMP

washdata.org/data/household#!/

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HOUSEHOLDS

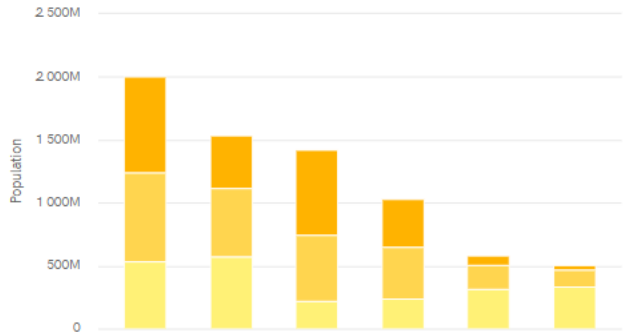
World

World

View data table | Download data | Create new chart

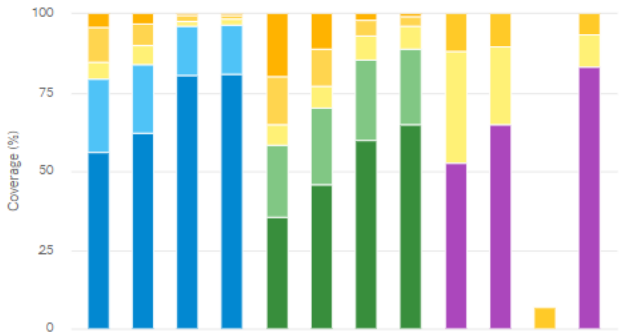
Summary | Drinking Water | Sanitation | Hygiene

Population lacking basic sanitation, 2015 and 2022



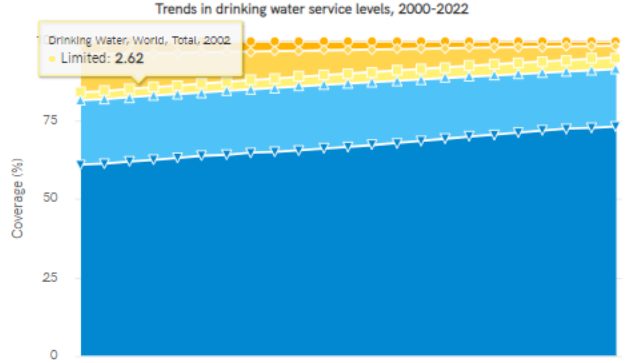
Edit

Rural and urban service levels, 2015 and 2022



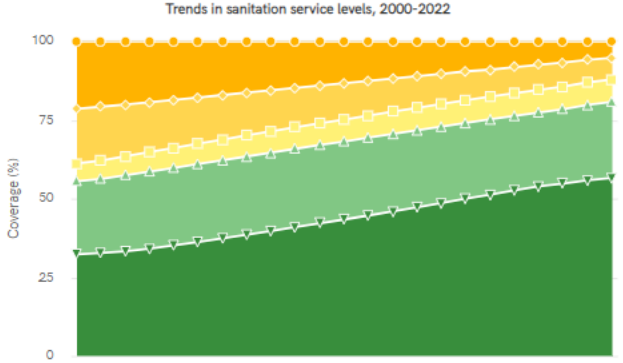
Edit

Trends in drinking water service levels, 2000-2022



Edit

Trends in sanitation service levels, 2000-2022



Edit

Create map

Google

Keyboard shortcuts | Map data ©2023 Google, INEGI | Terms

Downloads index

	Household	School	Health Care Facilities
World	World file	World file	World file
Regions	Regions file	Regions file	Regions file
[+] Australia and New Zealand (2)			
[-] Central and Southern Asia (14)			
Afghanistan	Country file Inequalities	Country file	Country file
Bangladesh	Country file Inequalities	Country file	Country file
Bhutan	Country file Inequalities	Country file	Country file
India	Country file Inequalities	Country file	Country file
Iran (Islamic Republic of)	Country file	Country file	Country file
Kazakhstan	Country file Inequalities		

*Target 6.1: By 2030, achieve **universal** and **equitable** access to **safe** and **affordable** drinking water **for all***

Indicator 6.1.1 : Safely managed drinking water

	DRINKING WATER
IMPROVED FACILITIES	**Piped supplies** • Tap water in the dwelling, yard or plot, including piped to a neighbour • Public taps or standpipes **Non-piped supplies** • Boreholes/tubewells • Protected wells and springs • Rainwater • Packaged water, including bottled water and sachet water • Delivered water, including tanker trucks and small carts/tank/drum • Water kiosk
UNIMPROVED FACILITIES	**Non-piped supplies** • Unprotected wells and springs
NO FACILITY	**Surface water** • Open water sources located above ground including rivers, lakes, ponds, streams, canals, reservoirs and irrigation channels

TABLE A1.1 JMP classification of improved and unimproved facility types

SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Drinking water from an improved source that is accessible on premises, available when needed and free from faecal and priority chemical contamination
BASIC	Drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing
LIMITED	Drinking water from an improved source, for which collection time exceeds 30 minutes for a round trip, including queuing
UNIMPROVED	Drinking water from an unprotected dug well or unprotected spring
SURFACE WATER	Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation canal

FIGURE 14 SDG ladder for drinking water services

Note: Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water.

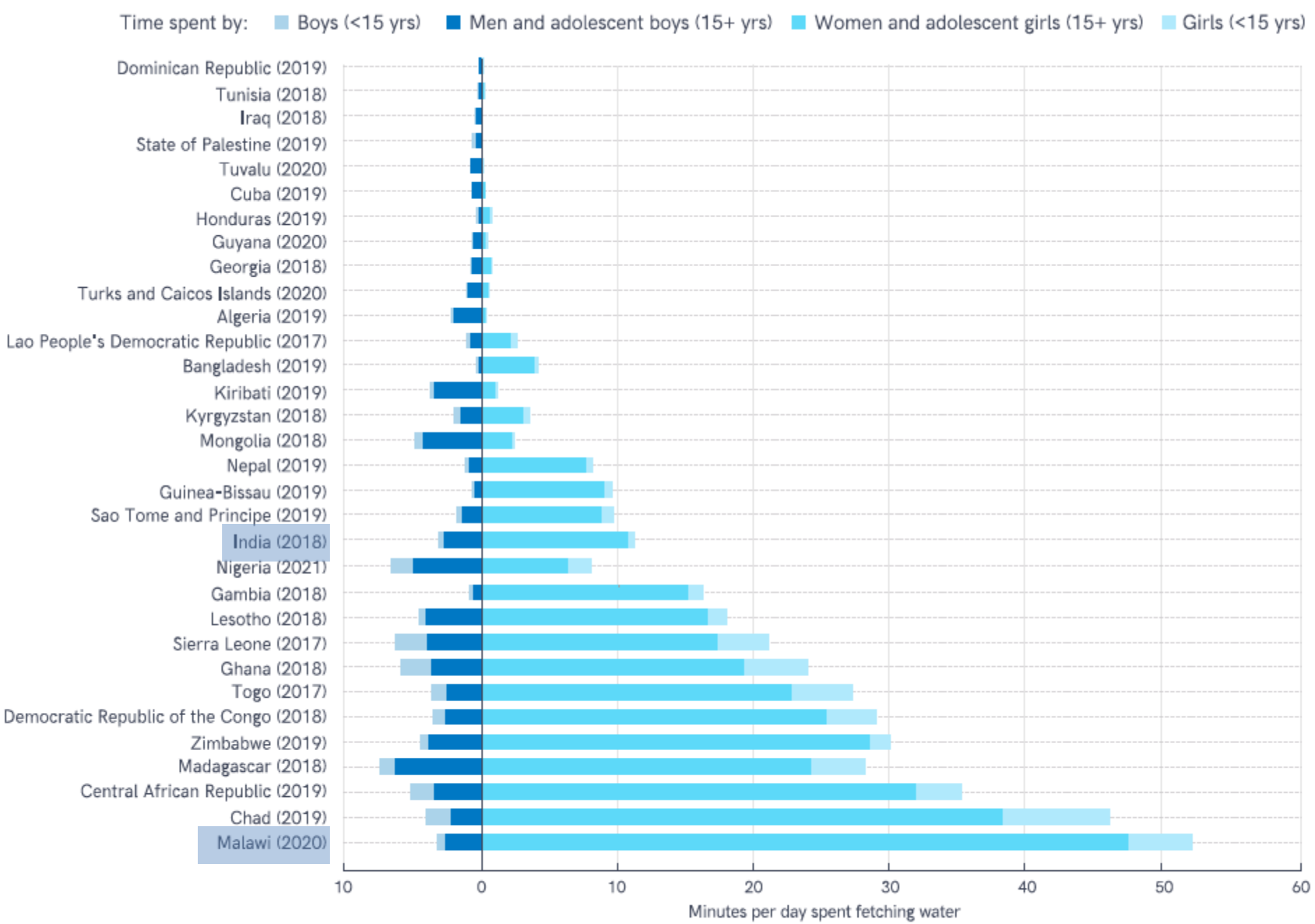
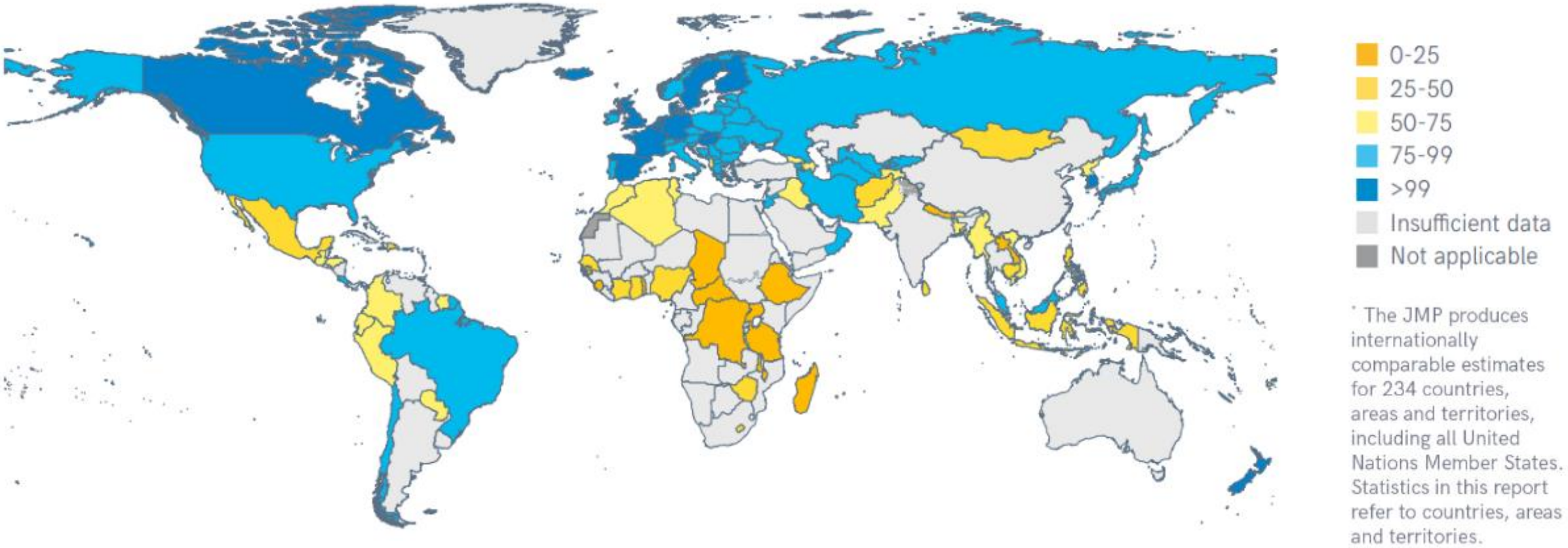


FIGURE 21 Average time spent collecting water by women, men, girls and boys, by country, selected surveys, 2012–2022 (minutes per day)

142 countries had estimates for safely managed services in 2022



Proportion of population using safely managed drinking water services, 2022 (%)

Water quality is the most common limiting factor for safely managed drinking water services

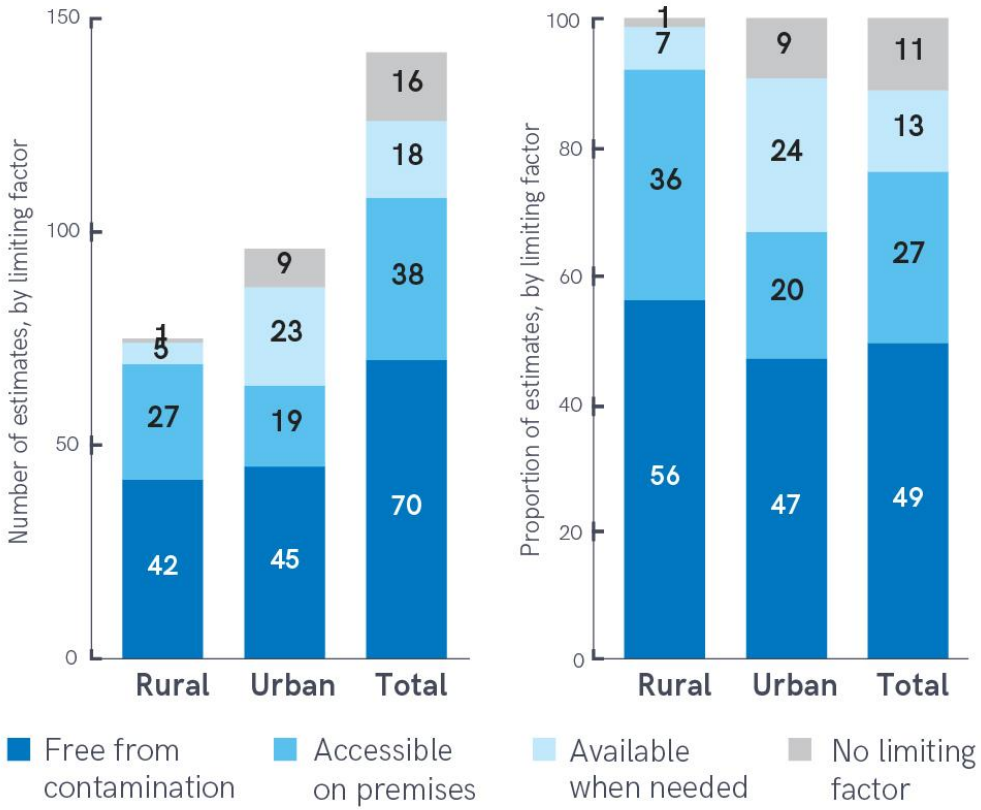
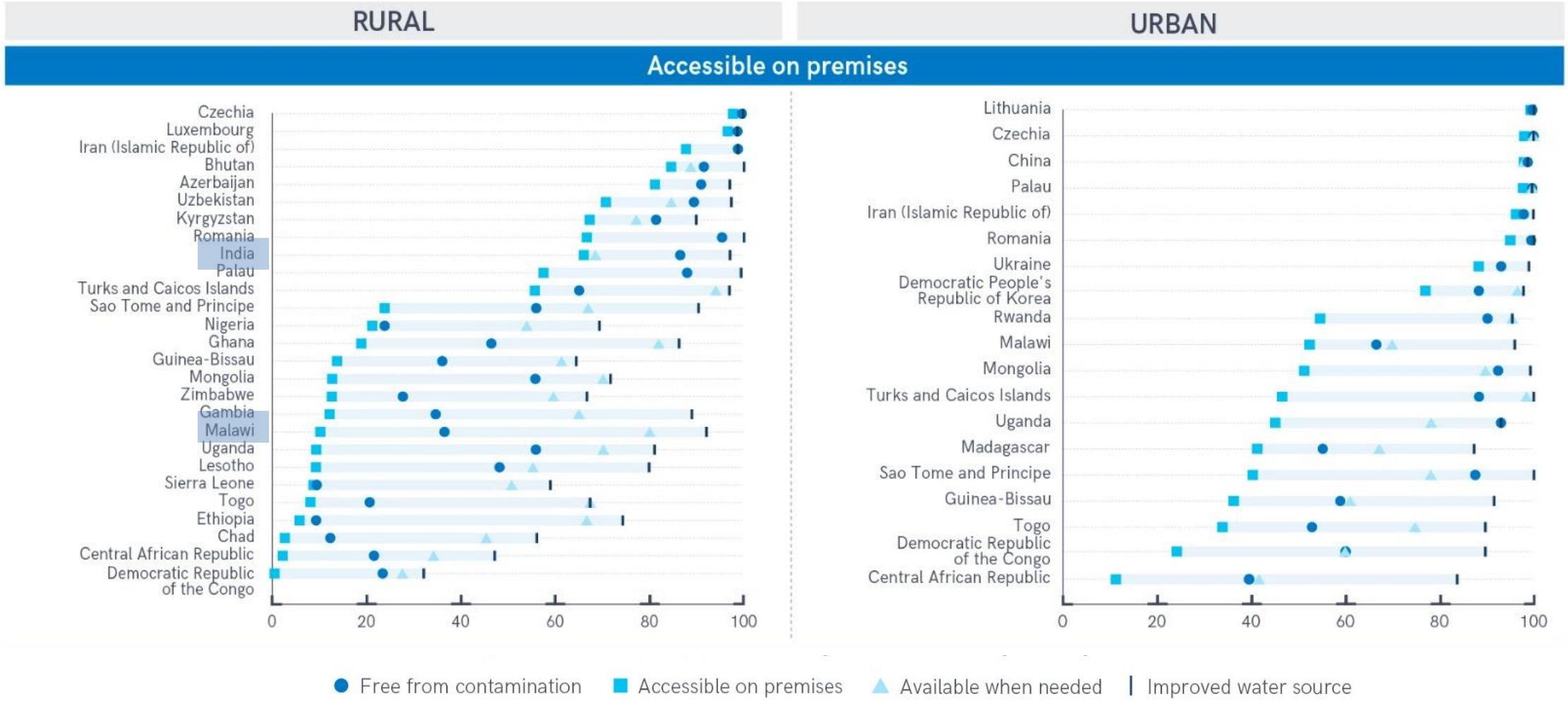


FIGURE 38 Number and proportion of countries by limiting factor for safely managed drinking water services, 2022

Limiting factors for safely managed drinking water vary between and within countries

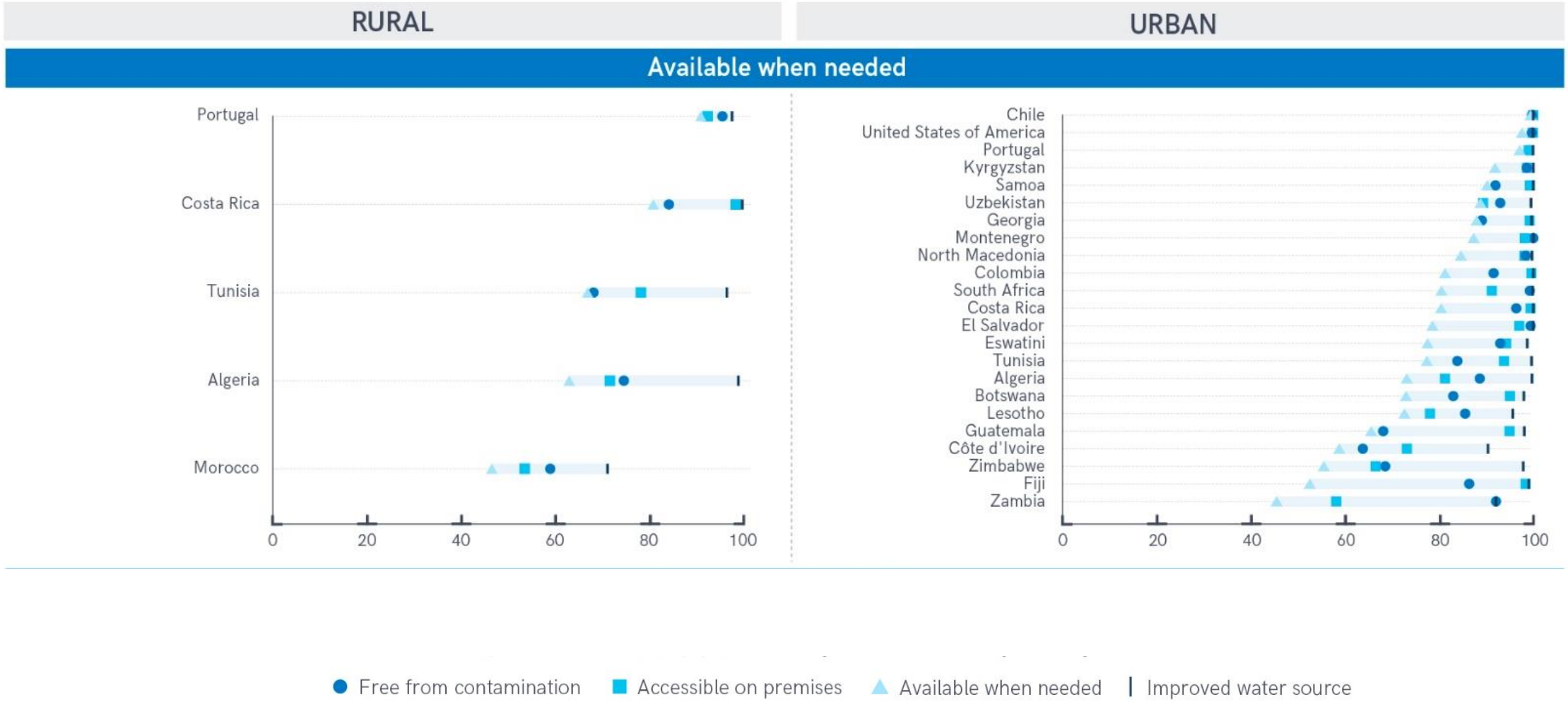


World Health Organization

WHO UNICEF JMP

unicef

Limiting factors for safely managed drinking water vary between and within countries



Limiting factors for safely managed drinking water vary between and within countries

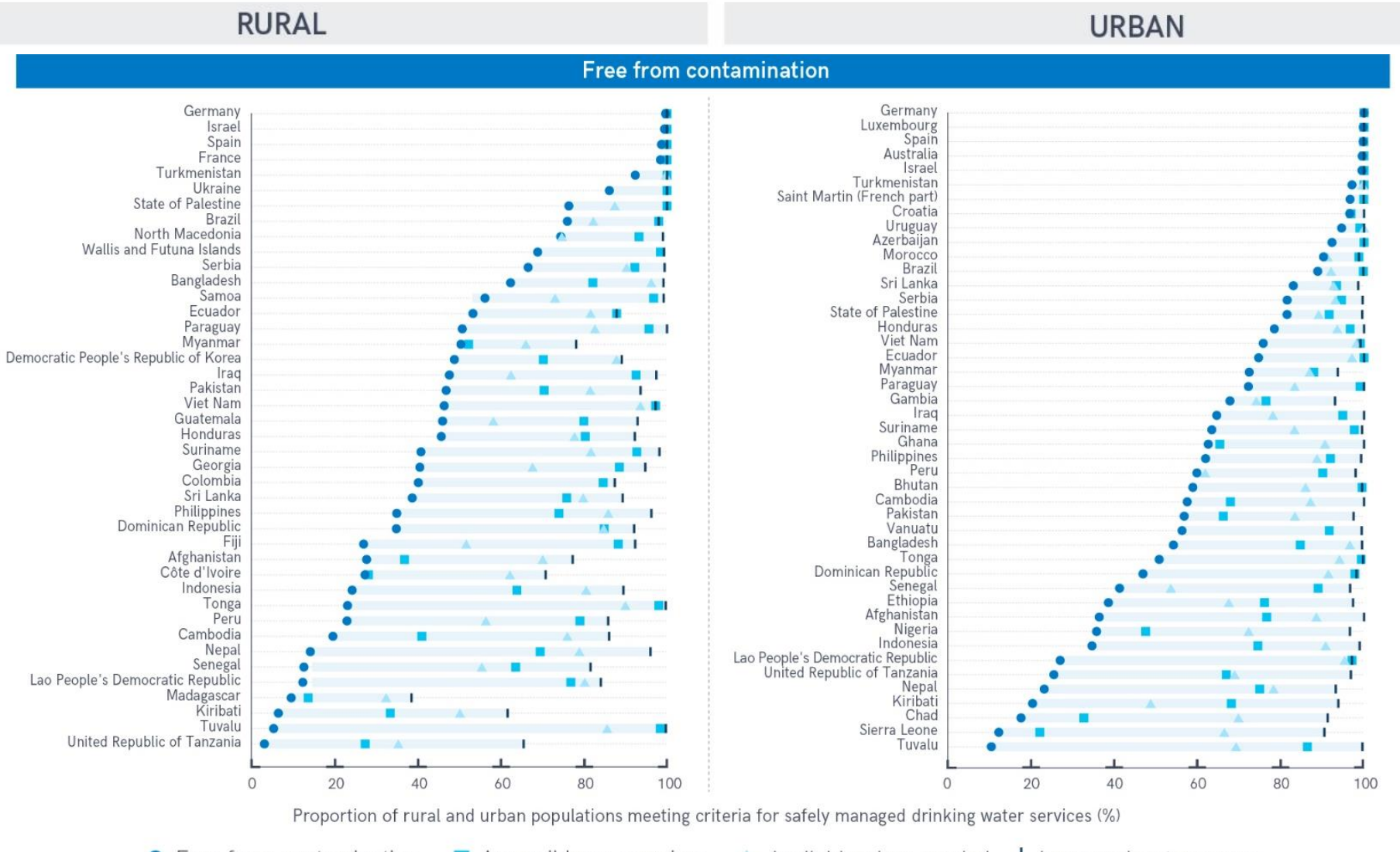


FIGURE 39 Rural and urban coverage, by limiting factor for safely managed drinking water services, 2022 (%)

AutoSave Off | JMP_2023_IND_India.xlsx | Search (Alt+Q) | JOHNSTON, Richard Paul

File Home Insert Page Layout Formulas Data Review View Developer Add-ins Help | Comments | Share

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Joint Monitoring Programme for Water Supply, Sanitation and Hygiene

Estimates on the use of water, sanitation and hygiene in

India

Updated April 2023

Follow the links below to find the following information:

JMP Estimates:

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Data inputs:

Data Summary
Water Data
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Wastewater Data
Hygiene Data
Menstrual Health Data
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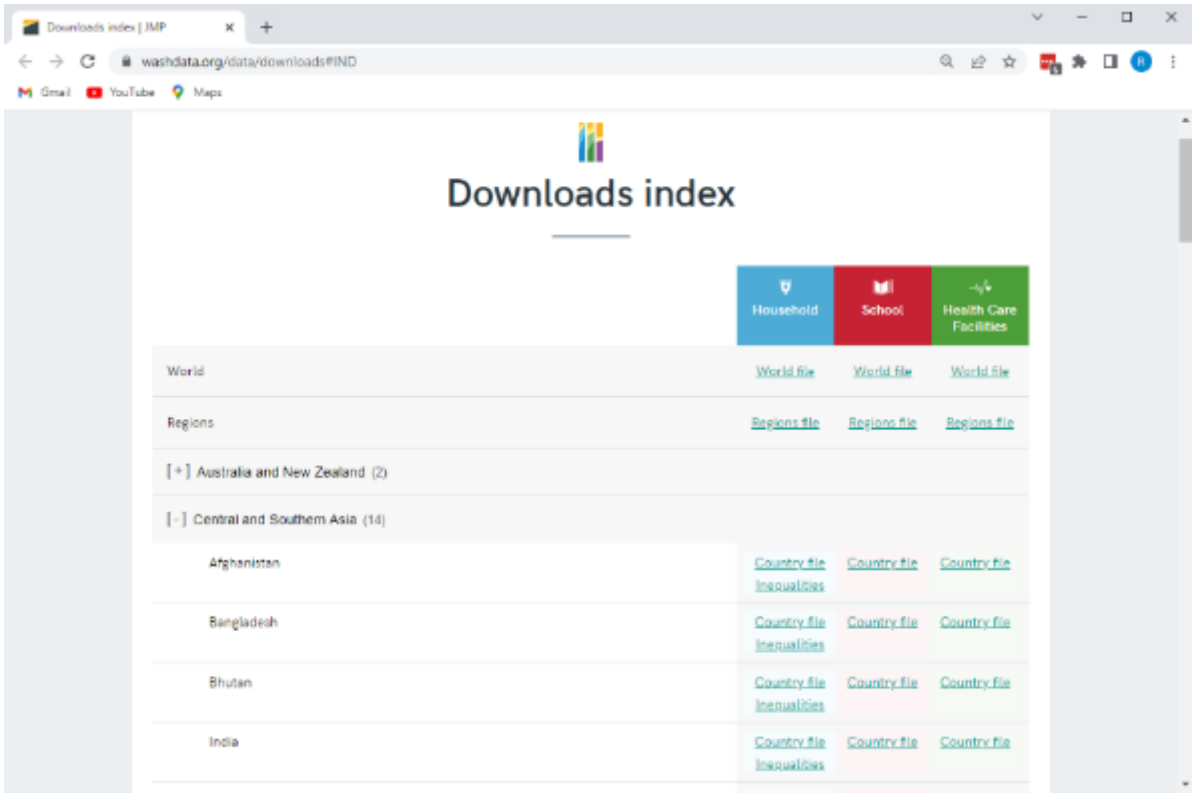


https://washdata.org/data/country/IND/household/download

Introduction | Ladders | Charts SM | Charts B | Estimates | Data Summary | Water Data | Sanitation Data | Wastewater Data | Hygiene Data | Menstrual Health Data | Population

Ready | Accessibility: Investigate | 100%

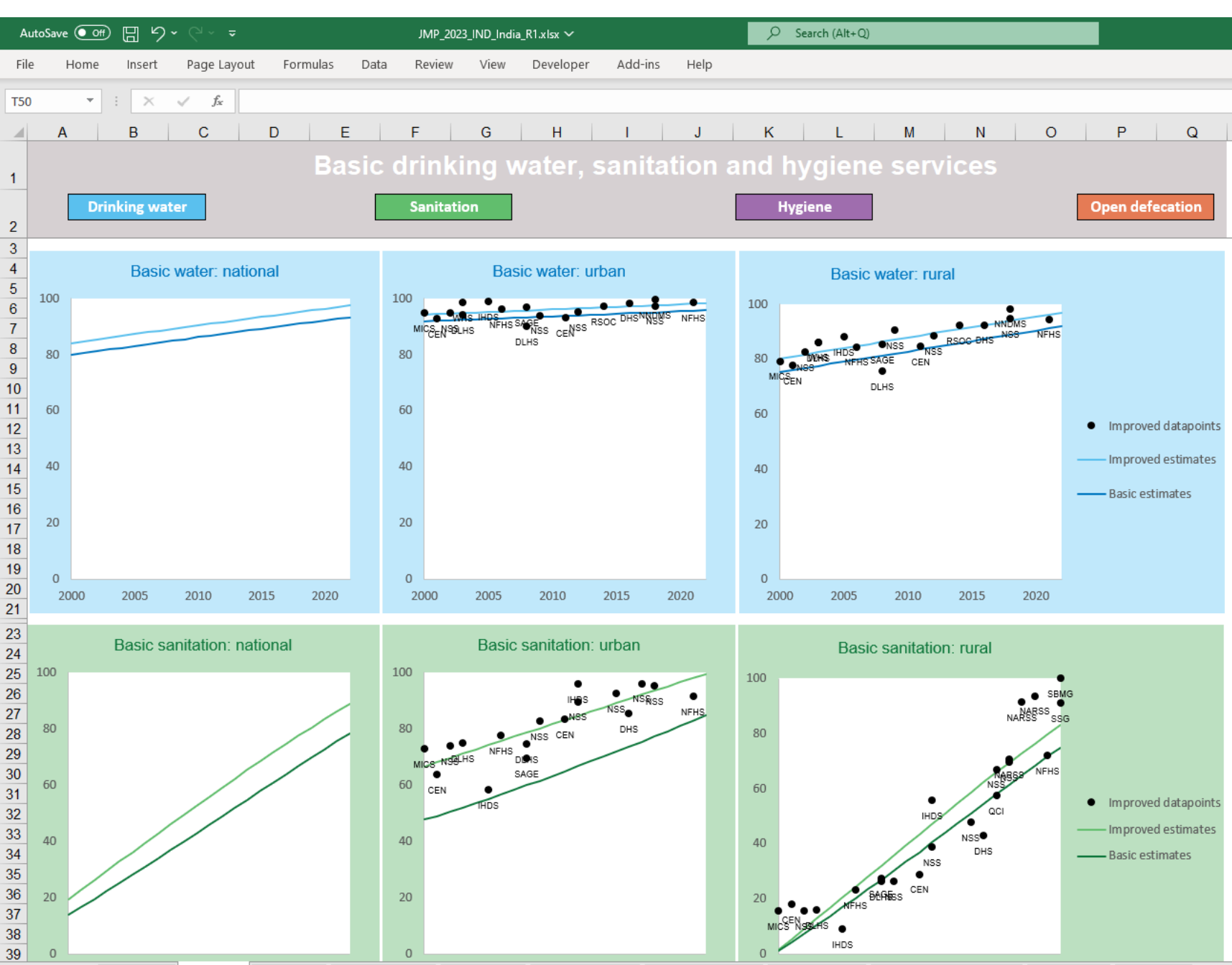
Summary of data from national surveys, censuses and regulators

[values in square brackets not used]

Drinking water | Hygiene | Sanitation | Menstrual Health

Drinking water

Source	Type	Year	National							Urban							Rural						
			Improved	Piped	Surface	No more than 30 mins	Accessible on premises	Available when needed	Free from contamination	Improved	Piped	Surface	No more than 30 mins	Accessible on premises	Available when needed	Free from contamination	Improved	Piped	Surface	No more than 30 mins	Accessible on premises	Available when needed	Free from contamination
IND_2016_DHS	Survey with microdata	2016	[94]	[44]	[1]	[98]	[69]			98	68	0	99	82			92	32	1	98	62		
IND_2016_NRDWP	Admin	2016																					79
IND_2017_NRDWP	Admin	2017																					68
IND_2018_NSS	Survey	2018	[96]	[44]	[1]	[90]	[64]	[58]		97	65	0	94	79	72		95	33	1	90	56	51	
IND_2018_NNDMS	Survey	2018	[99]							100							98						
IND_2019_JJM	Admin	2019																					88
IND_2021_JJM	Admin	2021															[34]	[34]					88
IND_2021_NFHS	Survey with microdata	2021	[96]	[46]	[1]	[97]	[76]	[82]		99	67	0	98	86	80		95	36	1	96	72	84	
IND_2021_DDWS	Admin	2021																				[84]	
IND_2022_JJM	Admin	2022															[57]	[57]					89
IND_2022_DDWS	Admin	2022																				[85]	
IND_2022_AMR	Admin	2022														[86]							



- JMP uses simple linear regression among all available national data points
  - Limits on extrapolation
- All data points have equal weight
- Urban and rural estimates produced separately

	A	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	JL	JM	JN	JO	JP
1			**Use of drinking water sources**		**India**				**Use of drinking water sources**		**India**				**Use of drinking water sources**		**India**		
2			IND_2021_JJM						IND_2021_NFHS						IND_2022_JJM				
3	Links to sources within this tab		Admin		Jal Jeevan Mission				Survey with microdata		National Family Health Survey (NFHS-5) 2019-21				Admin		Jal Jeevan Mission		
4		National	**Definitions**		**Facility type estimates**	Urban	Rural	National	**Definitions**		**Facility type estimates**	Urban	Rural	National	**Definitions**		**Facility type estimates**	Urban	Rural
5	IND_1991_CEN				Improved		33.7				Improved	98.7	94.6	95.9			Improved		57.3
6	IND_1993_DHS				All piped		33.7				All piped	73.2	38.4	49.5			All piped		57.3
7	IND_1993_NSS				Non-piped		0.0				Non-piped	25.4	56.2	46.4			Non-piped		0.0
8	IND_1996_NSS				Surface water						Surface water	0.4	0.9	0.7			Surface water		
9	IND_1999_NFHS				**Service level estimates**						**Service level estimates**						**Service level estimates**		
10	IND_2000_MICS				Accessibility						Accessibility						Accessibility		
11	IND_2001_CEN				On premises				On premises		On premises	86.5	71.6	76.5			On premises		
12	IND_2002_NSS				Within 30 minutes				Within 30 minutes		Within 30 minutes	98.5	95.8	96.6			Within 30 minutes		
13	IND_2003_WHS				Availability						Availability	79.9	83.5	82.3			Availability		
14	IND_2003_DLHS				Sufficient						Sufficient	79.9	83.5	82.3			Sufficient		
15	IND_2005_IHDS				Most of the time						Most of the time						Most of the time		
16	IND_2006_NFHS				Continuous						Continuous						Continuous		
17	IND_2008_DLHS				Other						Other						Other		
18	IND_2008_SAGE				Quality		88.1				Quality						Quality		88.7
19	IND_2008_CPCB		No E. coli per 100 mL sample		Microbial		88.1				Microbial				No E. coli per 100 mL sample		Microbial		88.7
20	IND_2009_NSS				Fluoride						Fluoride						Fluoride		
21	IND_2009_CES				Arsenic						Arsenic						Arsenic		
22	IND_2010_NRDWP				Other						Other						Other		
23	IND_2011_NRDWP				Safely managed						Safely managed						Safely managed		
24	IND_2011_CEN				**Data used for estimates**						**Data used for estimates**						**Data used for estimates**		
25	IND_2012_IHDS	No			Improved	No	No	No			Improved	Yes	Yes	No			Improved	No	No
26	IND_2012_NRDWP	No			All piped	No	Yes	No			All piped	Yes	Yes	No			All piped	No	Yes
27	IND_2012_NSS	-			Accessibility	-	-	-			Accessibility	-	-	-			Accessibility	-	-
28	IND_2013_NRDWP	No			On premises	No	No	No			On premises	Yes	Yes	No			On premises	No	No
29	IND_2014_RSOC	No			Within 30 minutes	No	No	No			Within 30 minutes	Yes	Yes	No			Within 30 minutes	No	No
30	IND_2014_SQUAT	No			Availability	No	No	No			Availability	Yes	Yes	No			Availability	No	No
31	IND_2014_NRDWP	No			Quality	No	Yes	No			Quality	No	No	No			Quality	No	Yes
32	IND_2015_CPCB	No			Surface water	No	No	No			Surface water	Yes	Yes	No			Surface water	No	No
	IND_2015_NRDWP		Notes		Data on tap water as of 21 January 2021. During the financial year 2021-2022, about 20,41,273 samples were tested for bacterial contamination in 2,03,103 villages, and 2,42,803 samples in 19,206 villages were found contaminated				Notes						Notes		Data taken from the JJM website where the dashboard shows household with tap water equals 57.32. Website last accesse Feb 23. During the financial year 2022-2023, about 26,98,330 were tested for bacterial contamination in 2,56,778 villages, 3, samples in 49,404 villages were found contaminated		
33																			
34	IND_2015_NSS	National	Original denomination		Classification	Urban	Rural	National	Original denomination		Classification	Urban	Rural	National	Original denomination		Classification	Urban	Rural
35	IND_2016_DHS				**Tap water**		*33.7*				**Tap water**	*66.8*	*36.4*	*46.1*			**Tap water**		*57.3*
36	IND_2016_NRDWP				**House connections**						**House connections**	*53.8*	*22.3*	*32.3*			**House connections**		
37	IND_2017_NRDWP				Piped water into dwelling				piped into dwelling		Piped water into dwelling	37.9	10.5	19.2			Piped water into dwelling		
38	IND_2017_QCI				Piped water to yard/plot				piped to yard/plot		Piped water to yard/plot	15.9	11.7	13.1			Piped water to yard/plot		
39	IND_2017_NSS				Public tap, standpipe				public tap/standpipe		Public tap, standpipe	11.4	12.7	12.3			Public tap, standpipe		
40	IND_2018_NARSS				Other				piped to neighbor		Other	1.6	1.4	1.5			Other		
41	IND_2018_NSS				**Ground water**						**Ground water**	*21.7*	*56.3*	*45.3*			**Ground water**		
42	IND_2018_NNDMS				Protected ground water						Protected ground water	*21.1*	*52.1*	*42.2*			Protected ground water		

Exercise 1

- What proportion of drinking water in Malawi is free from *E. coli*? Where did this data come from?

	Household	School	Health Care Facilities
Liberia			
Madagascar	Country file Inequalities	Country file	Country file
Malawi	Country file Inequalities	Country file	Country file
Mali	Country file Inequalities	Country file	Country file
Mauritania	Country file Inequalities	Country file	Country file
Mauritius	Country file	Country file	
Mayotte	Country file		
Mozambique	Country file Inequalities	Country file	Country file
Namibia	Country file Inequalities	Country file	Country file
Niger	Country file Inequalities	Country file	Country file
Nigeria	Country file Inequalities	Country file	Country file
Rwanda	Country file Inequalities	Country file	Country file
Réunion	Country file		

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Joint Monitoring Programme for Water Supply, Sanitation and Hygiene

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Updated April 2023

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M77 =+IF(AND(ISTEXT(OFFSET('Water Data'!$B$2,0,6*ROW('Water Data'!P71))),DE77="Yes"),OFFSET('Water Data'!$E$8,0,6*ROW('Water Data'!P71)),IF(AND(ISTEXT(OFFSET('Water Data'!$B$2,0,6*ROW('Water Data'!P71))),DE77="No",ISNUMBER(OFFSET('Water Data'!$E$8,0,

Summary of data from national surveys, censuses and regulators

[values in square brackets not used]

Drinking water | Hygiene | Sanitation | Menstrual Health

Drinking water

National

Source	Type	Year	Improved	Piped	Surface	No more than 30 mins	Accessible on premises	Available when needed	Free from contamination
MWI_2014_WMS	Survey with microdata	2014	[87]	[21]	[3]	[75]			
MWI_2015_UNSD	Admin	2015							
MWI_2016_UNSD	Admin	2016							
MWI_2016_PHIA	Survey with microdata	2016	[89]	[22]	[4]				
MWI_2016_DHS	Survey with microdata	2016	[87]	[20]	[4]	[72]	[17]	[76]	
MWI_2017_AFB	Survey with microdata	2017						[77]	
MWI_2017_IHS	Survey with microdata	2017	[87]	[20]	[4]	[82]	[18]		
MWI_2017_MIS	Survey with microdata	2017	[87]	[24]	[3]	[90]	[16]		
MWI_2017_WV	Survey with microdata	2017							
MWI_2017_UNSD	Admin	2017							
MWI_2018_UNSD	Admin	2018							
MWI_2018_CEN	Census	2018	[86]	[19]	[6]				
MWI_2019_UNSD	Admin	2019							
MWI_2019_AFB	Survey with microdata	2019	[81]	[62]	[7]				
MWI_2020_IHS	Survey with microdata	2020	[89]	[20]	[4]	[68]	[19]		
MWI_2020_MICS	Survey with microdata	2020	[88]	[18]	[3]	[84]	[13]	[84]	[44]
MWI_2020_HFPS	Survey with microdata	2020						[97]	

Urban

Improved	Piped	Surface	No more than 30 mins	Accessible on premises	Available when needed	Free from contamination
97	81	0	88			
96	79	1				
98	86	0	88	57	45	
					63	
94	76	1	94	55		
99	90	0	96	59		
87	59	0				
98	77	0	85	50		
98	75	0	91	42	76	69
					95	

Rural

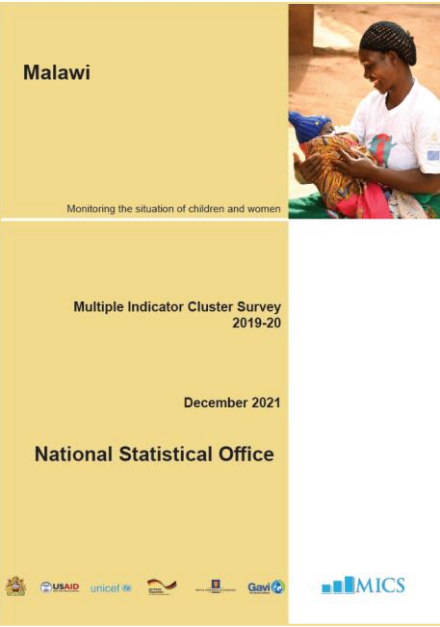
Improved	Piped	Surface	No more than 30 mins	Accessible on premises	Available when needed	Free from contamination
86	10	4	73			
87	10	5				
85	9	4	69	9	82	
					64	
86	7	5	79	9		
84	12	4	88	6		
[85]	[7]	[3]	[83]	[9]	[96]	[60]
83	7	5				
87	9	5	64	11		
86	8	3	82	7	85	40
					97	

Sanitation

National

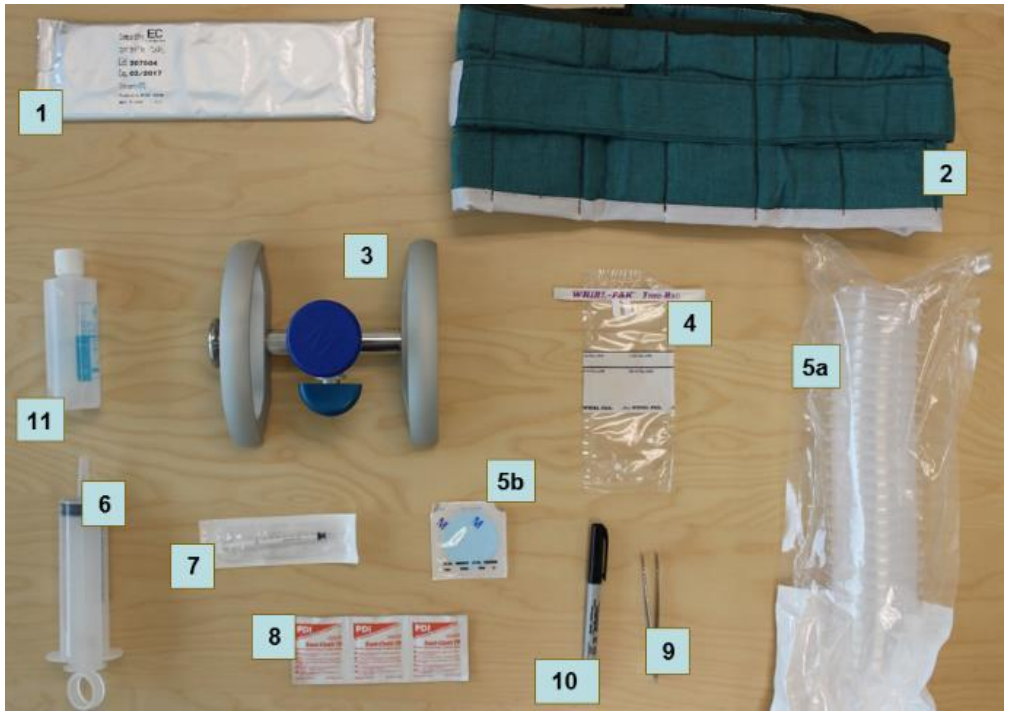
Improved	Sewer	Septic	Latrines and other	Open defecation	Wastewater enters network	Wastewater reaches
[37]	[1]	[3]	[34]	[3]		
						10
						10
[37]				[4]		
[82]	[1]	[2]	[80]	[5]		
				[0]		
[81]				[7]		
[82]	[0]	[2]	[79]	[6]		
						10
						10
[18]				[6]		
						10
				[3]		
[80]	[0]	[2]	[78]	[8]		
[80]	[0]	[2]	[78]	[7]		

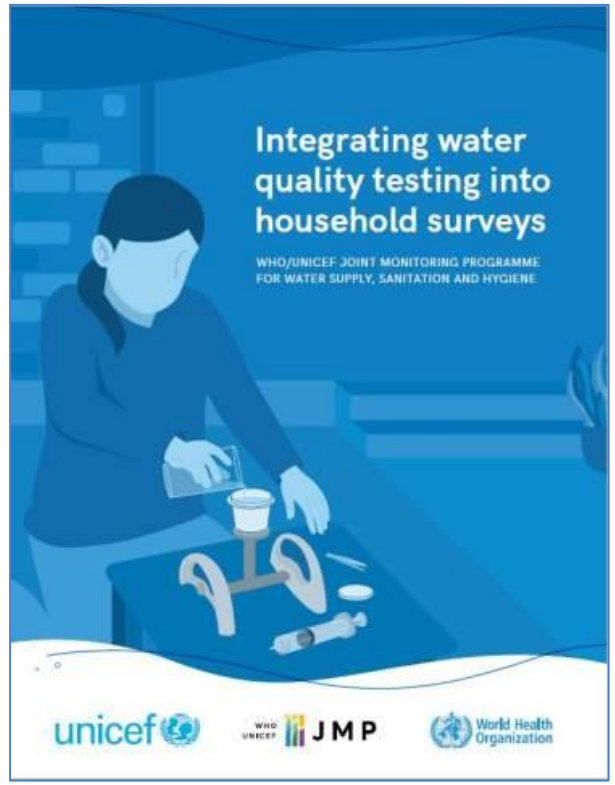
A	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB
1		**Malawi**				**Use of drinking water sources**		**Malawi**				**Use of drinking water sources**		**Malawi**				**Use of drinking wat**
2		Afrobarometer				MWI_2020_IHS		NSO				MWI_2020_MICS		National Statistical Office				MWI_2020_HFPS
3	Links to sources within this tab	AFROBAROMETER ROUND 8 - THE QUALITY				Survey with microdata		Malawi Integrated Household Survey, 2019-				Survey with microdata		Multiple Indicator Cluster Survey				Survey with microdata
4		**Facility type estimates**	Urban	Rural	National	**Definitions**		**Facility type estimates**	Urban	Rural	National	**Definitions**		**Facility type estimates**	Urban	Rural	National	**Definitions**
5	MWI_1987_CEN	Improved	87.3	82.8	81.5			Improved	97.6	87.0	88.6			Improved	97.9	86.1	87.9	
6	MWI_1992_DHS	All piped	58.5	7.2	62.5			All piped	76.8	9.1	19.7			All piped	75.3	7.9	18.3	
7	MWI_1995_MICS	Non-piped	28.8	75.7	19.0			Non-piped	20.8	77.9	69.0			Non-piped	22.6	78.2	69.6	
8	MWI_1996_DHS	Surface water	0.0	4.6	7.5			Surface water	0.4	4.7	4.0			Surface water	0.1	3.2	2.8	
9	MWI_1996_IHS	**Service level estimates**						**Service level estimates**						**Service level estimates**				
10	MWI_1997_IHS	Accessibility						Accessibility						Accessibility				
11	MWI_1998_CEN	On premises				On premises		On premises	50.4	11.1	19.0			On premises	41.6	6.9	12.9	
12	MWI_1999_AFB	Within 30 minutes				No more than 30 mins roundtrip		Within 30 minutes	84.8	63.8	68.0			Within 30 minutes	91.5	82.0	83.6	
13	MWI_2000_IBNET	Availability						Availability						Availability	76.3	85.0	83.5	
14	MWI_2000_DHS	Sufficient						Sufficient						Sufficient	76.3	85.0	83.5	Always sufficient
15	MWI_2001_IBNET	Most of the time						Most of the time						Most of the time				
16	MWI_2002_IBNET	Continuous						Continuous						Continuous				
17	MWI_2002_CWIQ	Other						Other						Other				
18	MWI_2003_AFB	Quality						Quality						Quality	69.4	39.7	44.5	
19	MWI_2003_IBNET	Microbial						Microbial						Microbial	69.4	39.7	44.5	
20	MWI_2003_WHS	Fluoride						Fluoride						Fluoride				
21	MWI_2004_IBNET	Arsenic						Arsenic						Arsenic				
22	MWI_2004_DHS	Other						Other						Other				
23	MWI_2004_IHS	Safely managed						Safely managed						Safely managed				
24	MWI_2005_AFB	**Data used for estimates**						**Data used for estimates**						**Data used for estimates**				
25	MWI_2005_IBNET	Improved	Yes	Yes	No			Improved	Yes	Yes	No			Improved	Yes	Yes	No	
26	MWI_2005_WMS	All piped	Yes	Yes	No			All piped	Yes	Yes	No			All piped	Yes	Yes	No	
27	MWI_2006_IBNET	Accessibility	-	-	-			Accessibility	-	-	-			Accessibility	-	-	-	
28	MWI_2006_MICS	On premises	No	No	No			On premises	Yes	Yes	No			On premises	Yes	Yes	No	
29	MWI_2007_IBNET	Within 30 minutes	No	No	No			Within 30 minutes	Yes	Yes	No			Within 30 minutes	Yes	Yes	No	
30	MWI_2007_WMS	Availability	No	No	No			Availability	No	No	No			Availability	Yes	Yes	No	
31	MWI_2008_AFB	Quality	No	No	No			Quality	No	No	No			Quality	Yes	Yes	No	
32	MWI_2008_IBNET	Surface water	Yes	Yes	No			Surface water	Yes	Yes	No			Surface water	Yes	Yes	No	
	MWI_2008_CEN					Notes						Notes						Notes
33																		
34	MWI_2008_WMS	Classification	Urban	Rural	National	Original denomination		Classification	Urban	Rural	National	Original denomination		Classification	Urban	Rural	National	Original denomination
35	MWI_2009_IBNET	**Tap water**	*58.5*	*7.2*	*62.5*			**Tap water**	*76.8*	*9.1*	*19.7*			**Tap water**	*75.3*	*7.9*	*18.3*	
36	MWI_2009_WMS	**House connections**	*44.3*	*3.7*	*39.3*			**House connections**	*35.3*	*2.6*	*7.7*			**House connections**	*38.9*	*2.4*	*8.0*	
37	MWI_2009_CFSVA	Piped water into dwelling	21.9	0.6	7.5	Piped Into Dwelling		Piped water into dwelling	12.6	0.6	2.5	PIPED WATER: PIPED INTO DWELLING		Piped water into dwelling	10.6	0.4	2.0	
38	MWI_2010_IBNET	Piped water to yard/plot	22.4	3.1	31.8	Piped Into Yard/Plot		Piped water to yard/plot	22.7	2.0	5.2	PIPED WATER: PIPED TO YARD / PLOT		Piped water to yard/plot	28.4	1.9	6.0	
39	MWI_2010_DHS	Public tap, standpipe	14.2	3.4	23.2	Communal Standpipe		Public tap, standpipe	32.5	5.3	9.5	PIPED WATER: PUBLIC TAP / STANDPIPE		Public tap, standpipe	27.3	4.6	8.1	



LIVE IN A SAFE AND CLEAN ENVIRONMENT					
WS.1	Use of improved drinking water sources		WS	Percentage of household members using improved sources of drinking water	87.9
WS.2	Use of basic drinking water services	1.4.1	WS	Percentage of household members using improved sources of drinking water either in their dwelling/yard/plot or within 30 minutes round trip collection time	74.2
WS.3	Availability of drinking water		WS	Percentage of household members with a water source that is available when needed	83.3
WS.4	Faecal contamination of source water		WQ	Percentage of household members whose source water was tested and with *E. coli* contamination in source water	60.2
WS.5	Faecal contamination of household drinking water		WQ	Percentage of household members whose household drinking water was tested and with *E. coli* contamination in household drinking water	93.2
WS.6	Use of safely managed drinking water services	6.1.1	WS – WQ	Percentage of household members with an improved drinking water source on premises, whose source water was tested and free of *E. coli* and available when needed	4.9

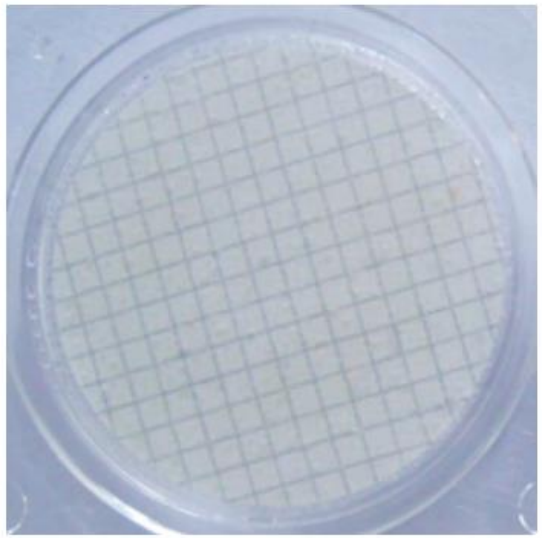
Free from contamination



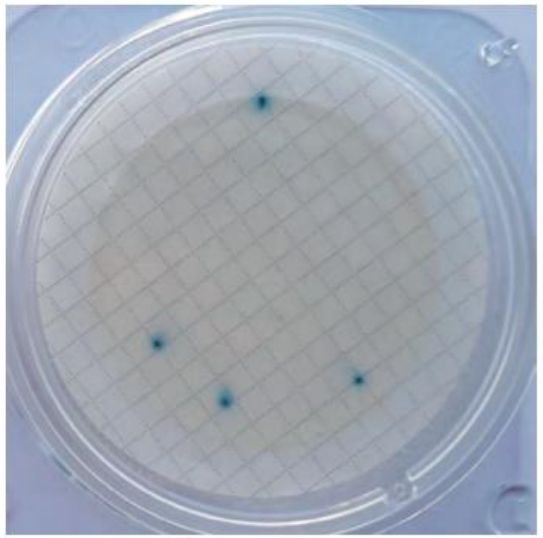


https://washdata.org/reports/jmp-2020-water-quality-testing-household-surveys

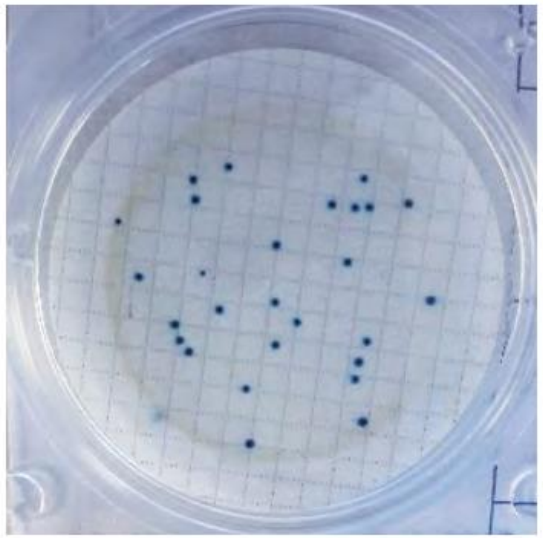
E. coli in 100 mL	Risk level
<1	Low
1-10	Medium
11-100	High
>100	Very high



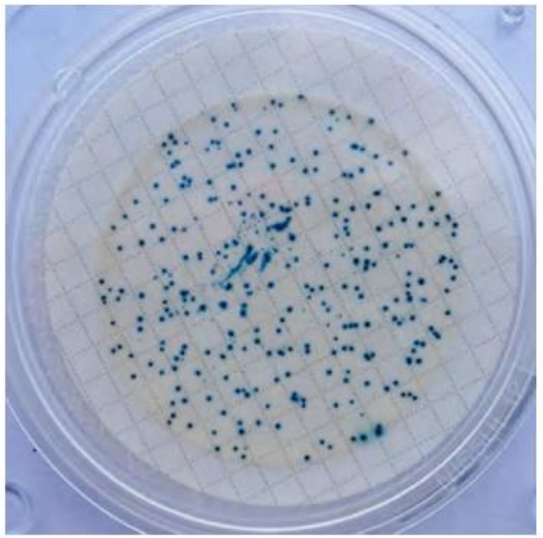
LOW RISK
(no *E.coli* detected)



MEDIUM RISK



HIGH RISK



VERY HIGH RISK

*Target 6.2: By 2030, achieve access to **adequate** and **equitable sanitation** and hygiene for all, and **end open defecation**, paying special attention to the needs of women and girls and those in vulnerable situations*

Indicator 6.2.1a: Safely managed sanitation

	SANITATION
IMPROVED FACILITIES	**Networked sanitation** • Flush and pour-flush toilets connected to sewers **On-site sanitation** • Flush and pour-flush toilets or latrines connected to septic tanks or pits • Ventilated improved pit (VIP) latrines • Pit latrines with slabs (constructed from materials that are durable and easy to clean) • Composting toilets, including twin pit latrines with slabs and container-based systems
UNIMPROVED FACILITIES	**Networked sanitation** • Flush and pour-flush toilets flushed to open drain or elsewhere* **On-site sanitation** • Flush and pour-flush toilets or latrines flushed to open drain or elsewhere* • Pit latrines without slabs • Open pits • Hanging toilets/latrines • Bucket latrines, including pans, trays or other unsealed containers
NO FACILITY	**Open defecation** • Defecation in the bush, field or ditch • Defecation into surface water, including beaches, rivers, streams, drainage channels or the sea

SERVICE LEVEL	DEFINITION
SAFELY MANAGED	Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or removed and treated off-site
BASIC	Use of improved facilities that are not shared with other households
LIMITED	Use of improved facilities that are shared with other households
UNIMPROVED	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines
OPEN DEFECATION	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches or other open places, or with solid waste

FIGURE 41 SDG ladder for sanitation services

135 countries had estimates for safely managed services in 2022

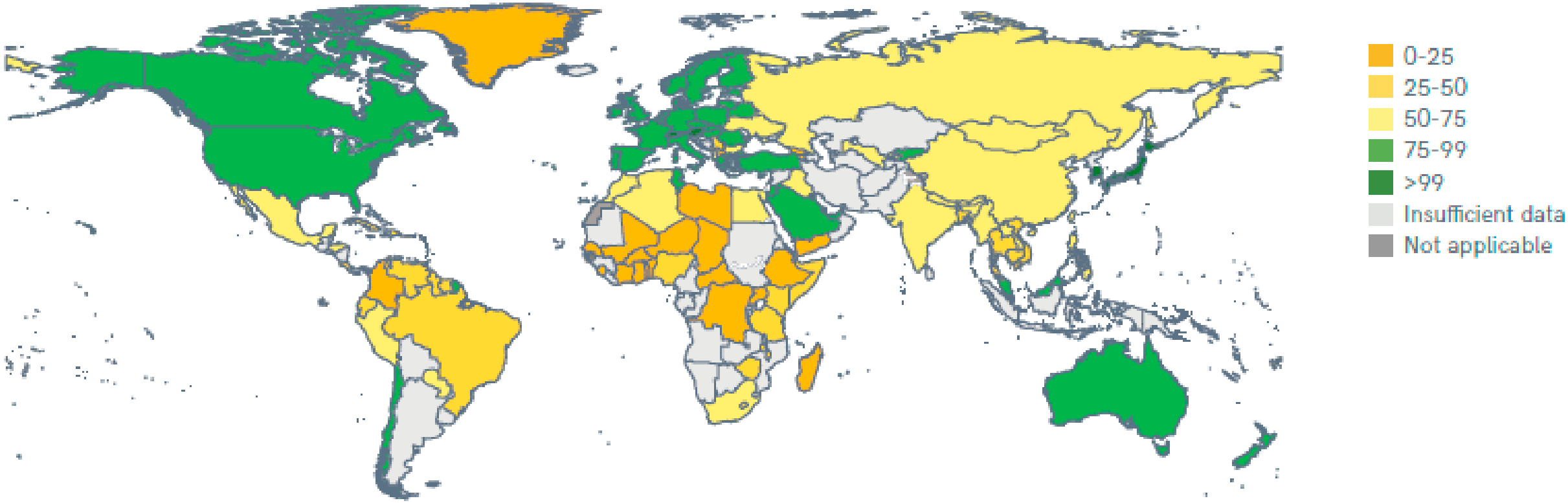


FIGURE 5 Proportion of population using safely managed sanitation services, 2022 (%)

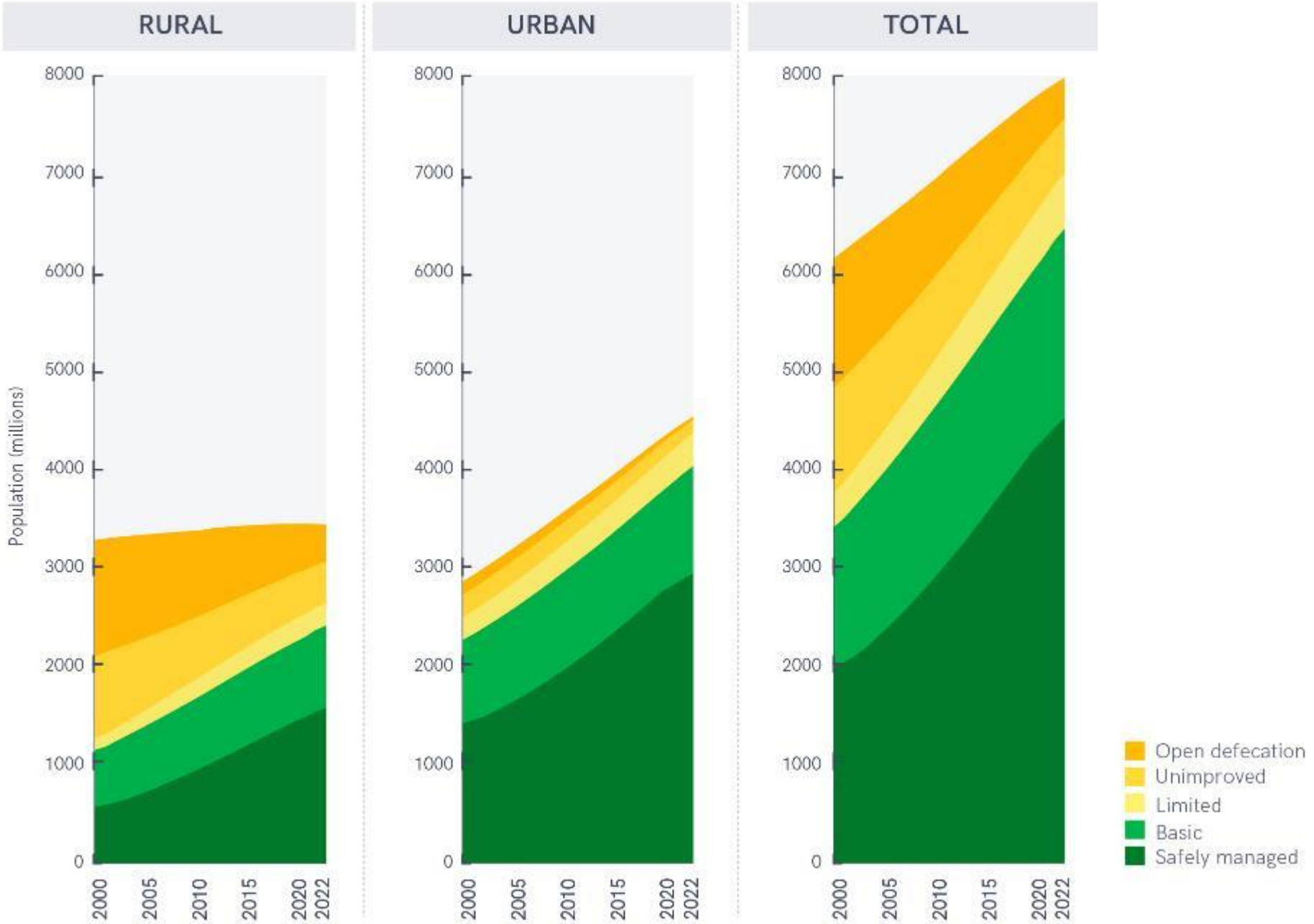


FIGURE 42 Rural, urban and total populations, by sanitation service level, 2000–2022 (millions)

Gender and sanitation

In 33 countries, more than one in four people in urban areas used limited sanitation services in 2022

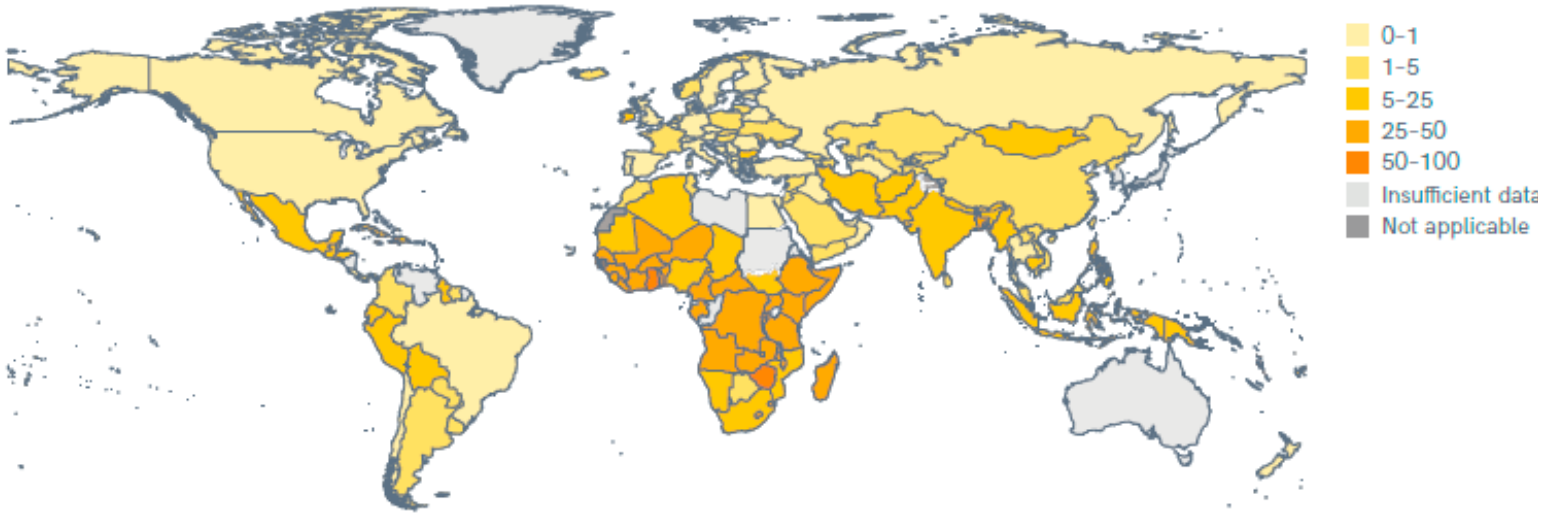


FIGURE 45 Proportion of urban population with limited sanitation services in 2022 (%)

In households with shared sanitation, women are less likely to feel very safe and more likely to feel very unsafe walking alone after dark

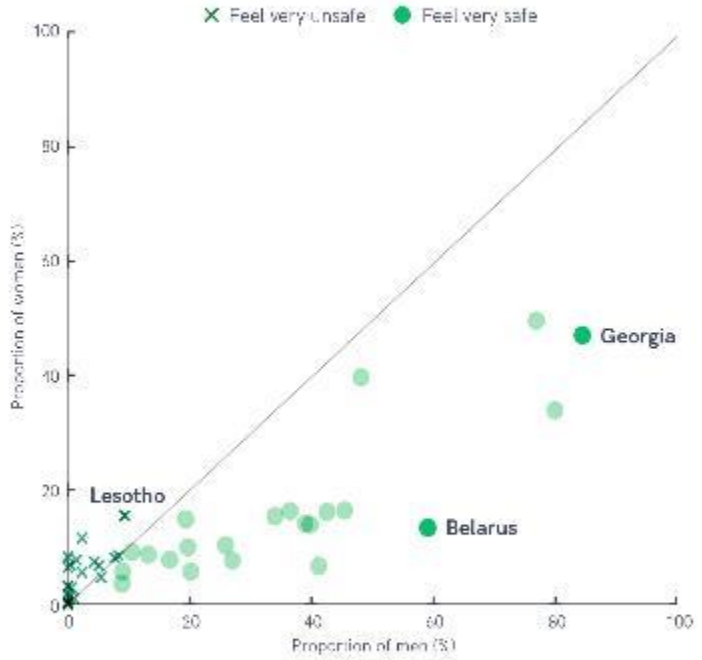


FIGURE 47 Proportion of women and men sharing sanitation facilities who report feeling very safe and very unsafe while walking alone in their neighbourhood after dark, selected Multiple Indicator Cluster Surveys, 2018-2021 (%)

In 13 countries, more than 1 in 4 people practised open defecation in 2022

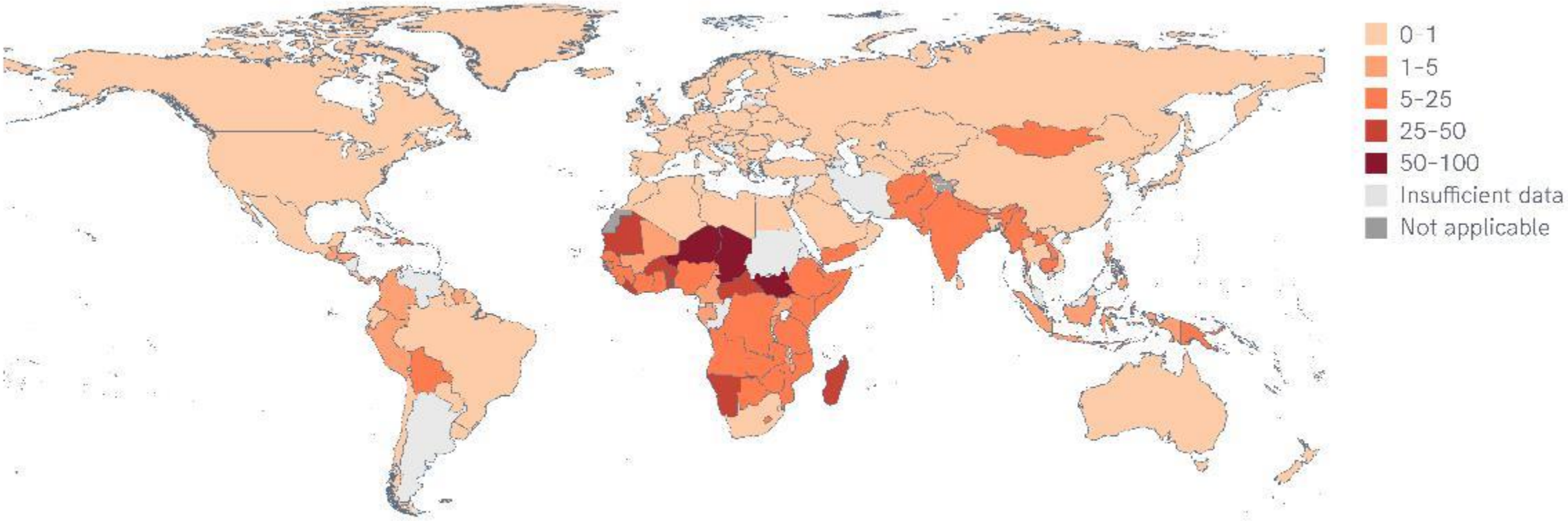


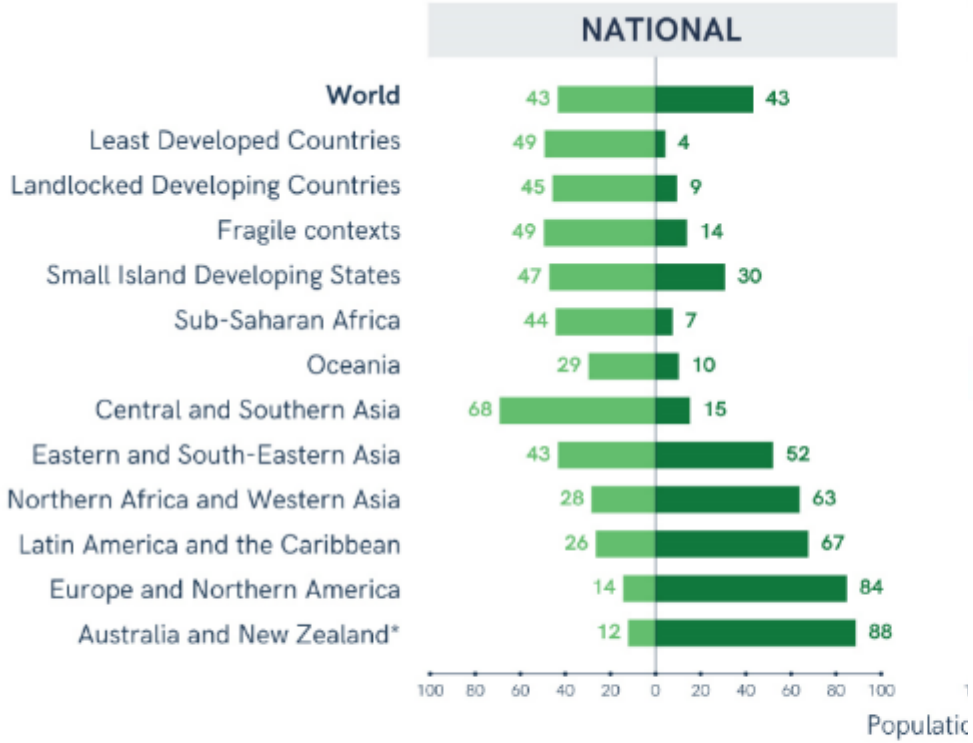
FIGURE 44 Proportion of population practising open defecation in 2022 (%)

Leave no one behind: JMP inequalities database reveals huge disparities between and within countries

FIGURE 67 Inequalities in open defecation in Madagascar and sub-Saharan Africa, 2020 (%)

Note: Wealth quintiles and sub-national inequalities from the Madagascar 2018 MICS.

The distribution of on-site and sewered sanitation varies widely by region



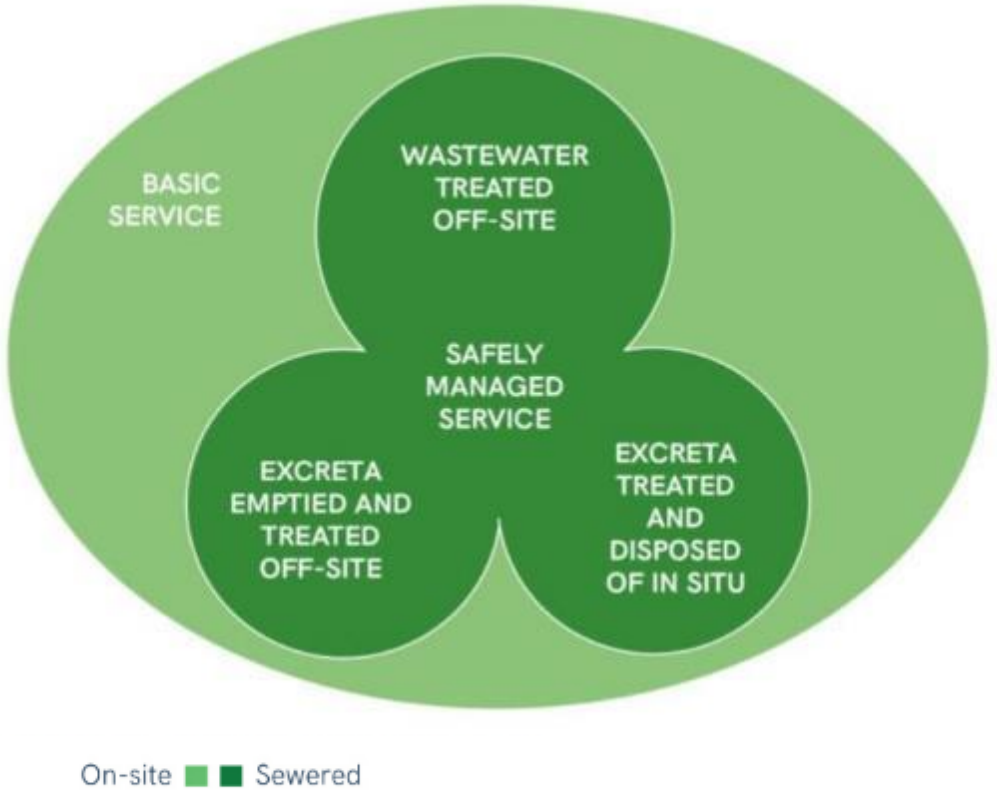


FIGURE 56 National, urban and rural populations using on-site and sewered sanitation, by region, 2020 (%)

*Disaggregated data unavailable for urban and rural areas

Wastewater

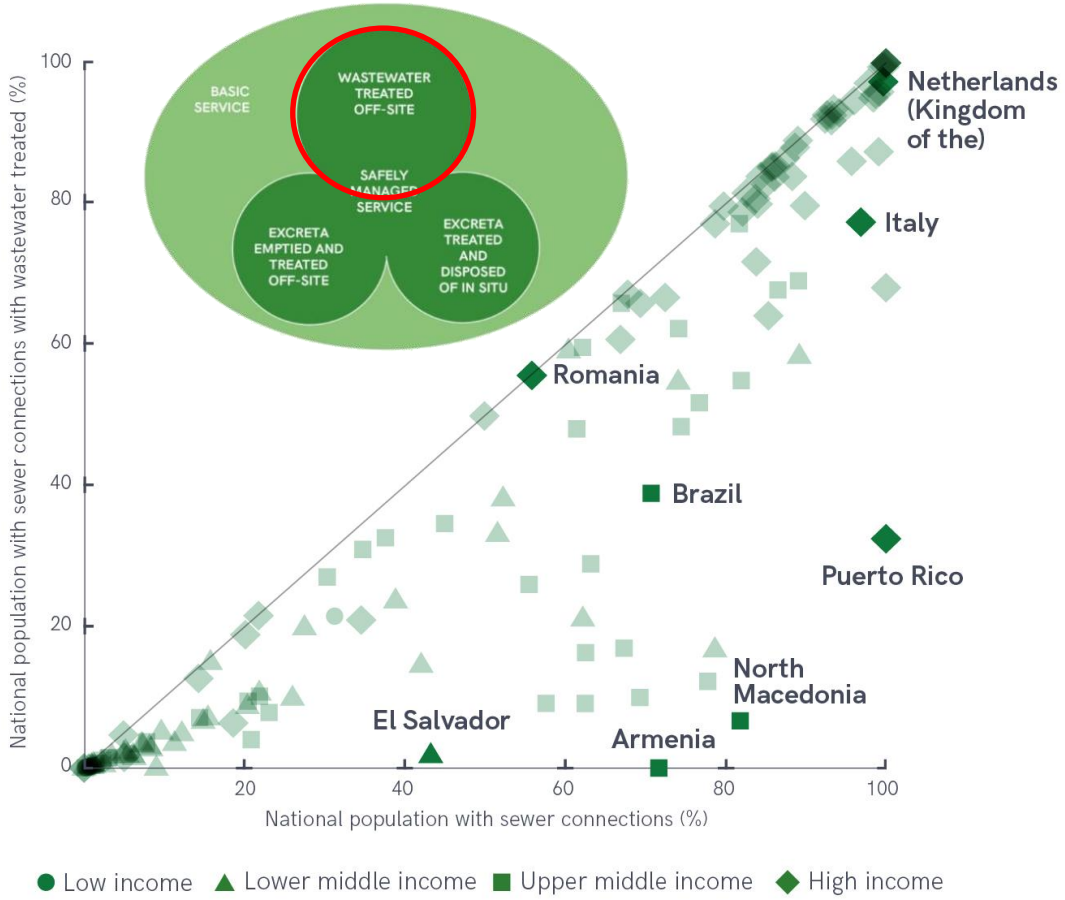


FIGURE 65 Proportion of population with sewer connections and sewer connections with wastewater treated, by country, 2022 (%)

Wastewater, faecal sludge (emptied)

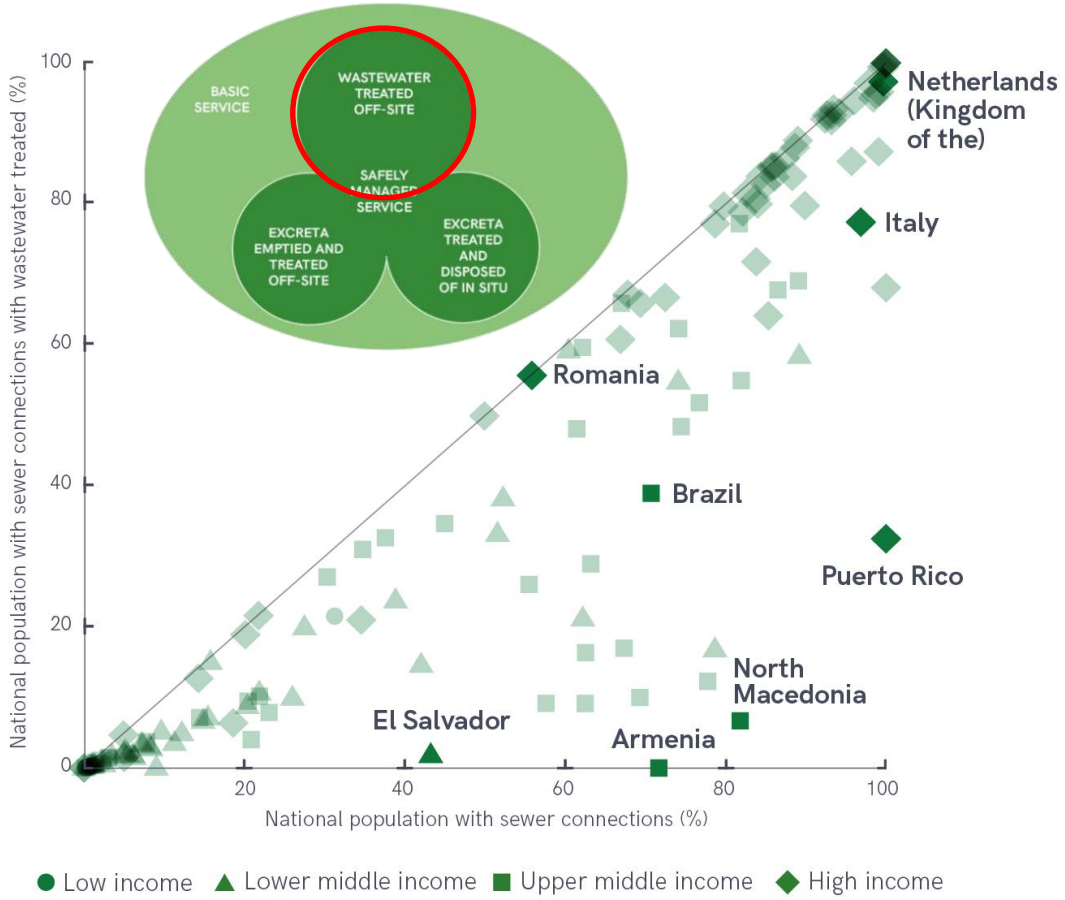


FIGURE 65 Proportion of population with sewer connections and sewer connections with wastewater treated, by country, 2022 (%)

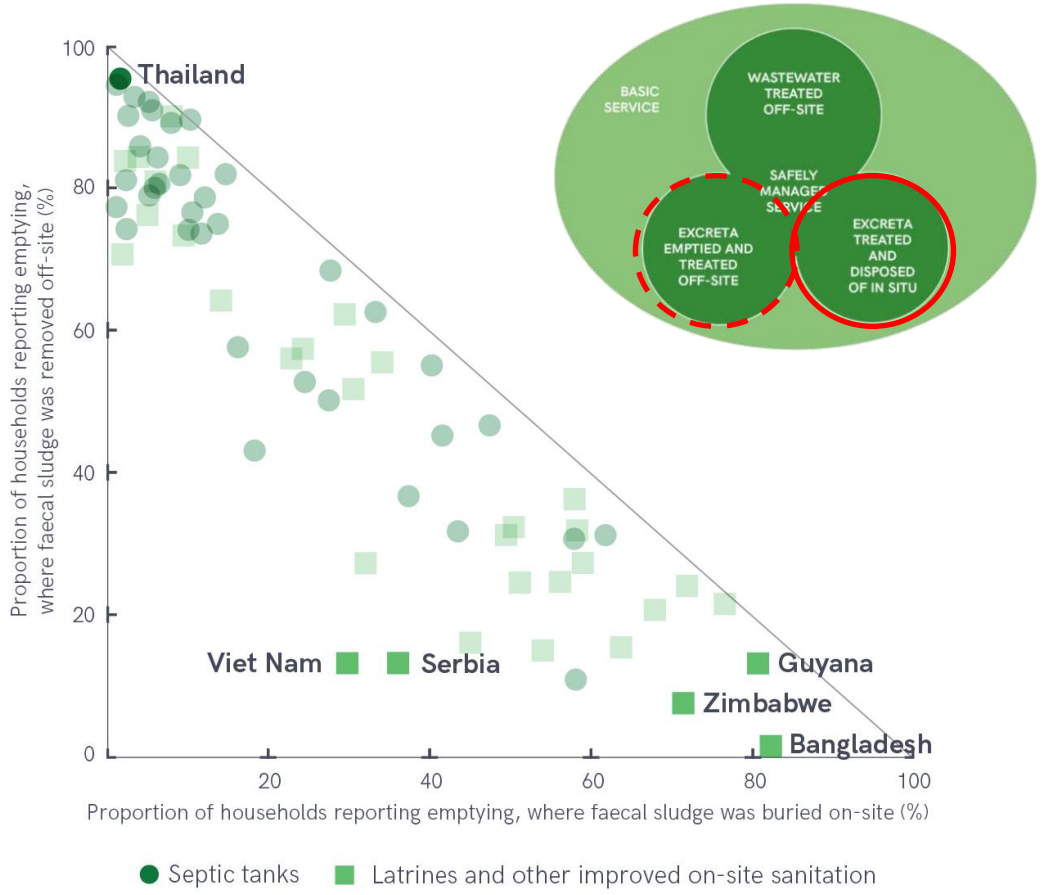
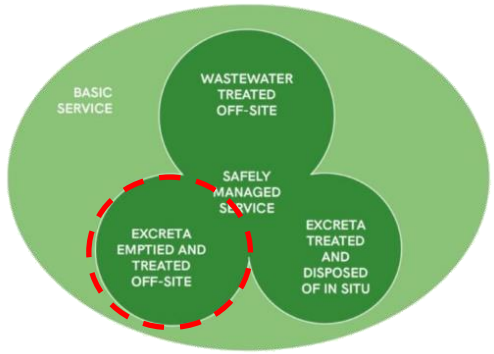


FIGURE 64 Proportion of population emptying on-site sanitation facilities where faecal sludge was disposed of in-situ and removed off-site, selected MICS surveys, 2017-2022

Never emptied, but contained



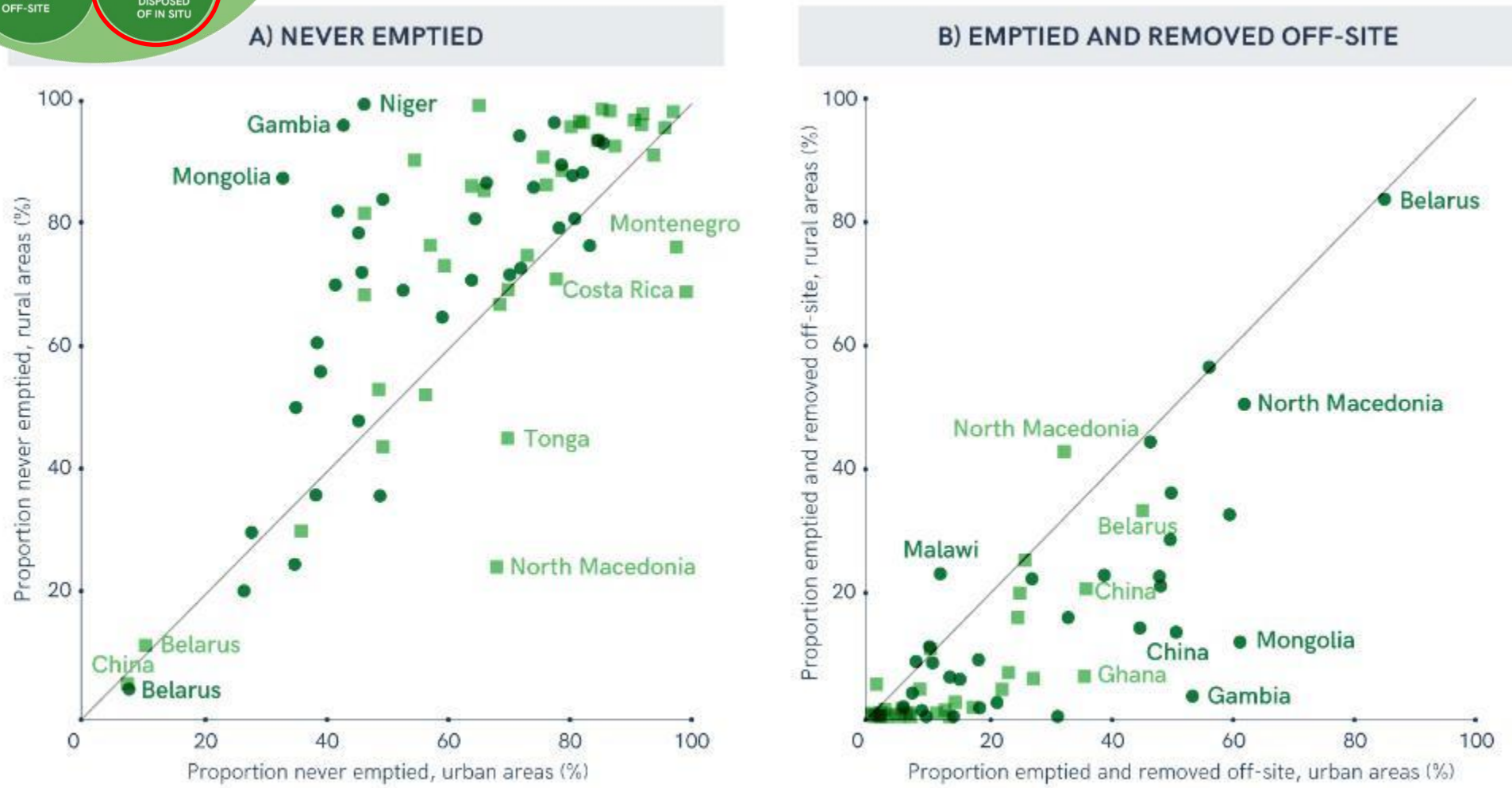


FIGURE 58 Proportion of septic tanks and improved latrines that have never been emptied (A) or have been emptied and waste removed off-site (B), in urban and rural areas, 2017-2020

The distribution of safely managed on-site and sewered sanitation varies widely by region

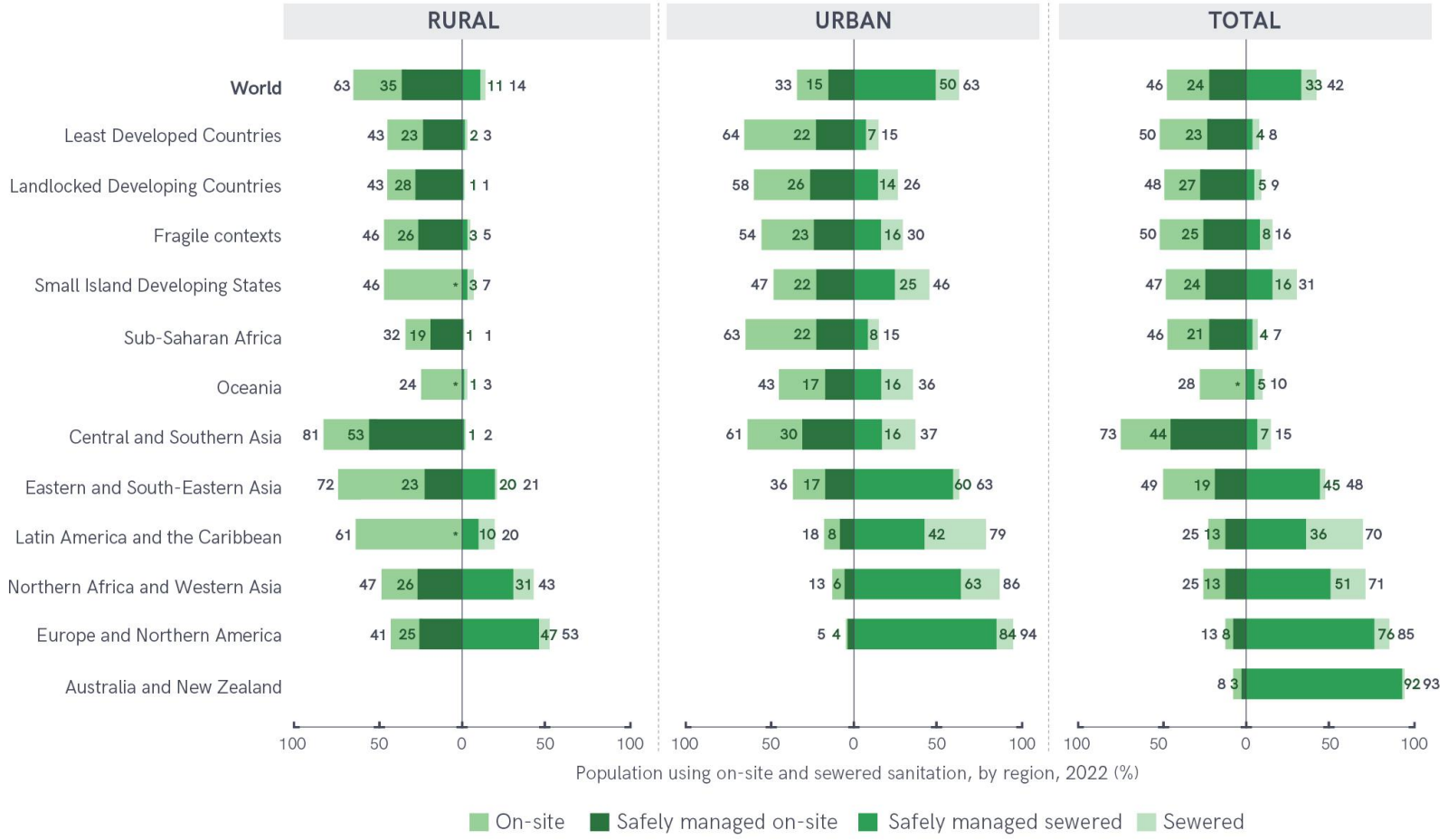


FIGURE 62 Proportion of the population using on-site and sewered sanitation facilities that are safely managed, 2022 (%)

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washdata.org/data/household#!/

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HOUSEHOLDS

World

World

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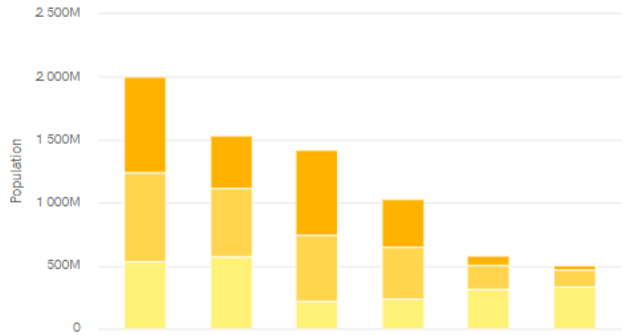
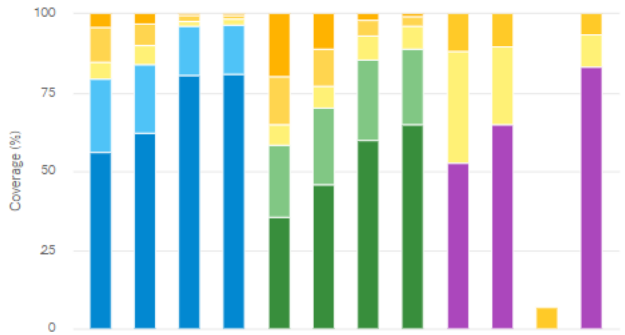
Summary | Drinking Water | Sanitation | Hygiene

Population lacking basic sanitation, 2015 and 2022



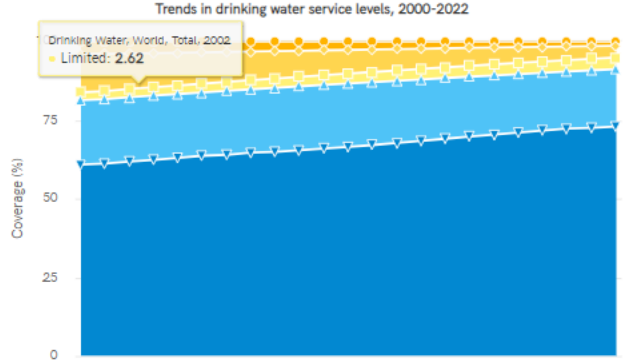
Edit

Rural and urban service levels, 2015 and 2022



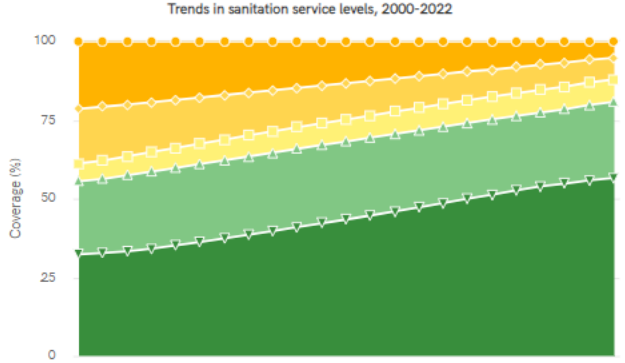
Edit

Trends in drinking water service levels, 2000-2022



Edit

Trends in sanitation service levels, 2000-2022



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Select a chart type

Ladder Inequality Rank Trend Progress

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HOUSEHOLDS

Rank Chart

Geography: Rank countries | Region Type: World

Measure
- (•) Coverage ( ) Population
- ( ) Percentage point change (2000 - 2022)
- ( ) Wealth inequalities (% pt difference richest vs poorest)
- ( ) Subnational inequalities (% pt difference highest vs lowest)
- ( ) Drinking Water (•) Sanitation ( ) Hygiene

Inequality
- (•) Total ( ) Rural ( ) Urban
- [ ] Poorest [ ] Poor [ ] Middle [ ] Rich [ ] Richest

Ladder Type

Analyse by service level
- [x] Open defecation
- [ ] Unimproved
- [ ] Limited
- [ ] Basic
- [ ] Safely managed

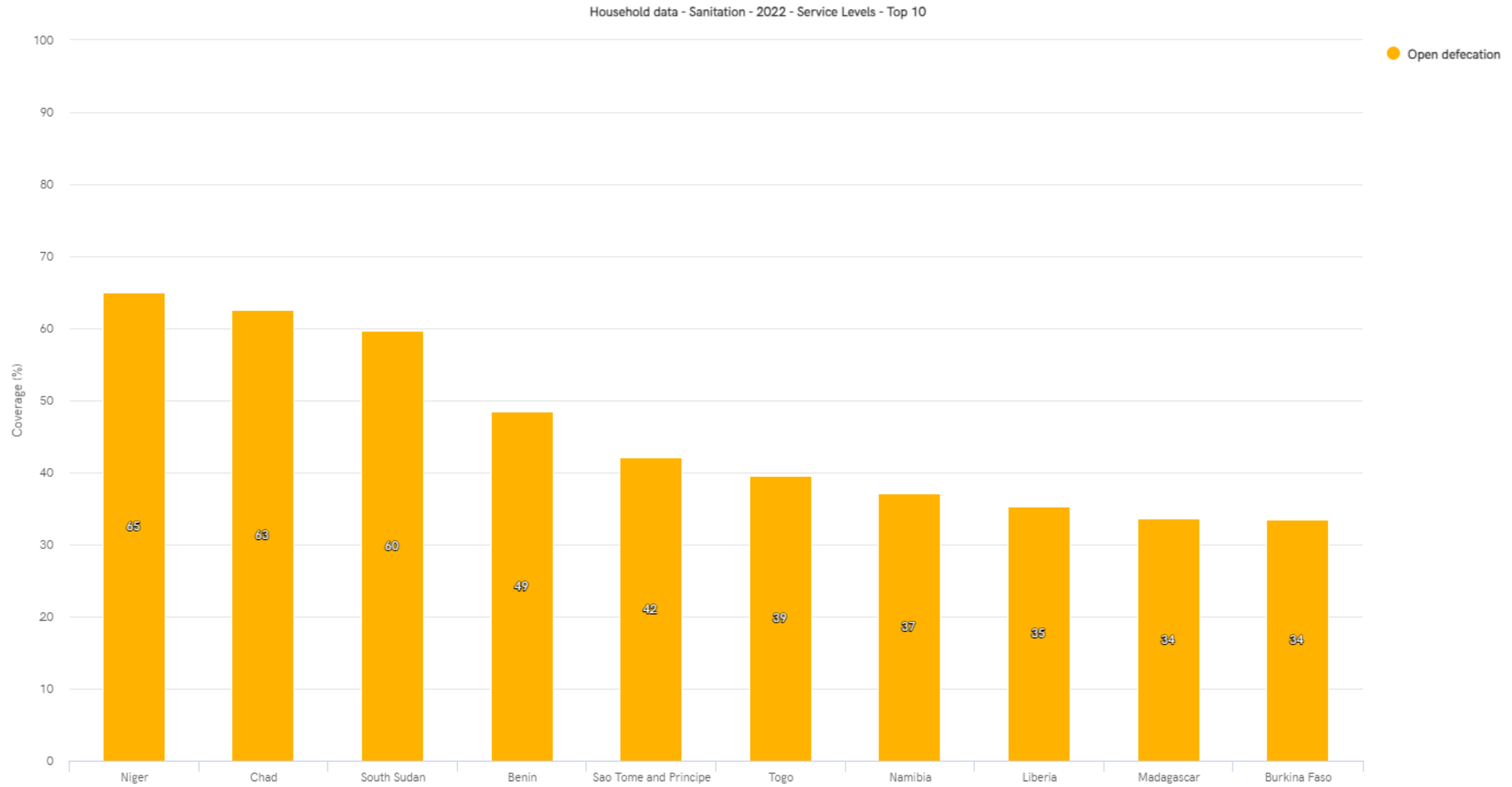
Analyse by facility type
- [ ] Latrines
- [ ] Septic
- [ ] Sewer

Analyse by safely managed criteria
- [ ] Disposed insitu
- [ ] Faecal sludge treated
- [ ] Sewage treated

Time period: 2022

Display: (•) Top 10 ( ) Bottom 10 ( ) All

Highest rates of open defecation in the world



Edit | Edit in new grid

Exercise 2

- Which low-income country has the highest level of safely managed sanitation services in the world?
  - How much of this comes from wastewater treated offsite, faecal sludge treated offsite, and onsite sanitation treated in situ?

https://washdata.org/data/household#!/dashboard/5482

JMP

washdata.org/data/household#!/dashboard/5482

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HOUSEHOLDS

Rank Chart

Geography: Rank ... | Region Type: Income | Region: Low income

Measure

- (•) Coverage ( ) Population
- ( ) Percentage point change (2000 - 2022)
- ( ) Wealth inequalities (% pt difference richest vs poorest)
- ( ) Subnational inequalities (% pt difference highest vs lowest)

( ) Drinking Water (•) Sanitation ( ) Hygiene

Inequality

(•) Total ( ) Rural ( ) Urban

[ ] Poorest [ ] Poor [ ] Middle [ ] Rich [ ] Richest

Ladder Type

Analyse by service level	Analyse by facility type	Analyse by safely managed criteria
[ ] Open defecation	[ ] Latrines	[ ] Disposed insitu
[ ] Unimproved	[ ] Septic	[ ] Faecal sludge treated
[ ] Limited	[ ] Sewer	[ ] Sewage treated
[ ] Basic		
[x] Safely managed		

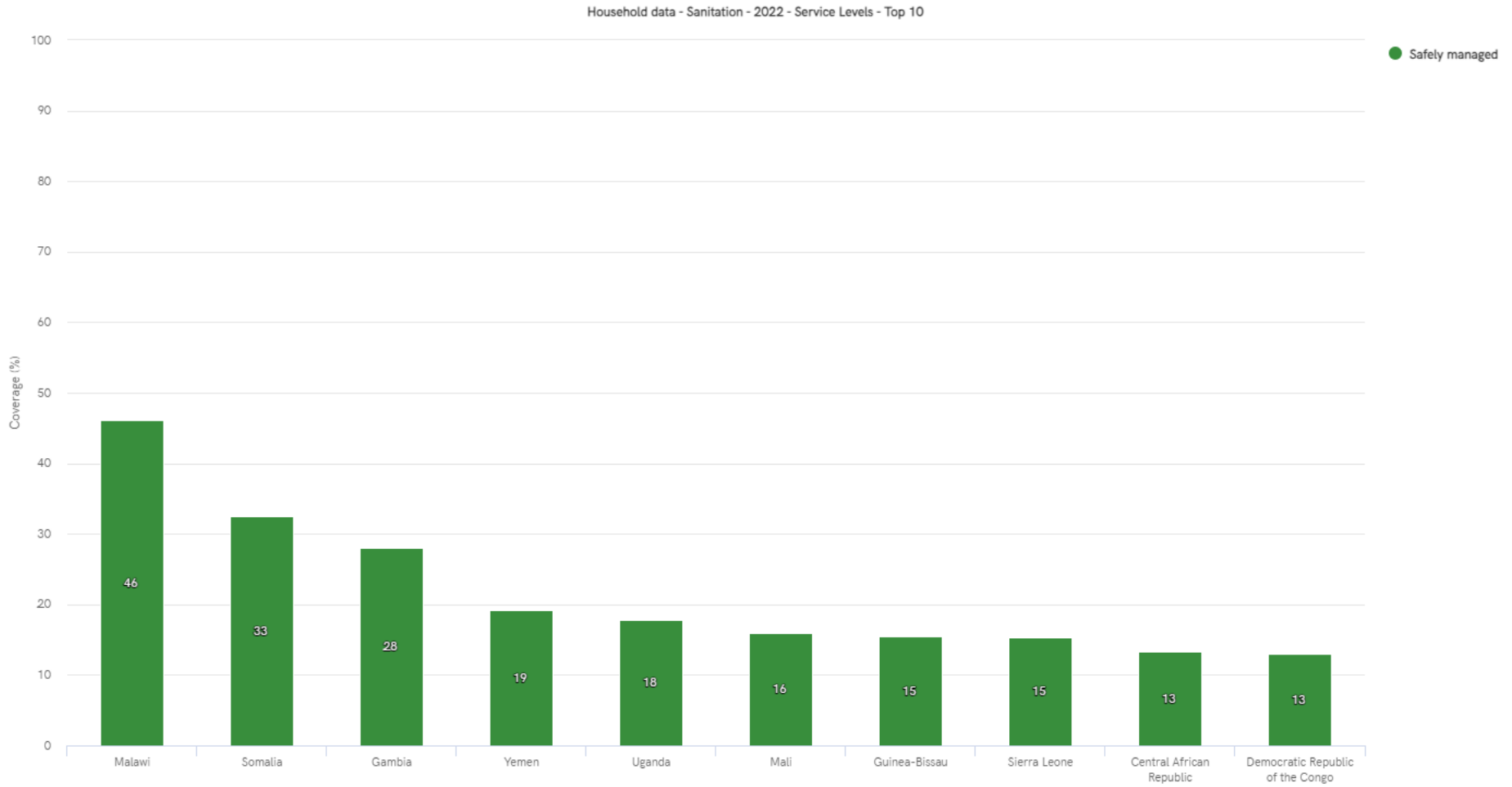
Time period

2022

Display

(•) Top 10 ( ) Bottom 10 ( ) All

Highest rate of safely managed sanitation in a low-income country



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HOUSEHOLDS

Rank Chart

Geography: Rank ... | Region Type: Income | Region: Low income

Measure

- (•) Coverage ( ) Population
- ( ) Percentage point change (2000 - 2022)
- ( ) Wealth inequalities (% pt difference richest vs poorest)
- ( ) Subnational inequalities (% pt difference highest vs lowest)

( ) Drinking Water (•) Sanitation ( ) Hygiene

Inequality

(•) Total ( ) Rural ( ) Urban

[ ] Poorest [ ] Poor [ ] Middle [ ] Rich [ ] Richest

Ladder Type

Analyse by service level
- [ ] Open defecation
- [ ] Unimproved
- [ ] Limited
- [ ] Basic
- [ ] Safely managed

Analyse by facility type
- [ ] Latrines
- [ ] Septic
- [ ] Sewer

Analyse by safely managed criteria
- [x] Disposed insitu
- [x] Faecal sludge treated
- [x] Sewage treated

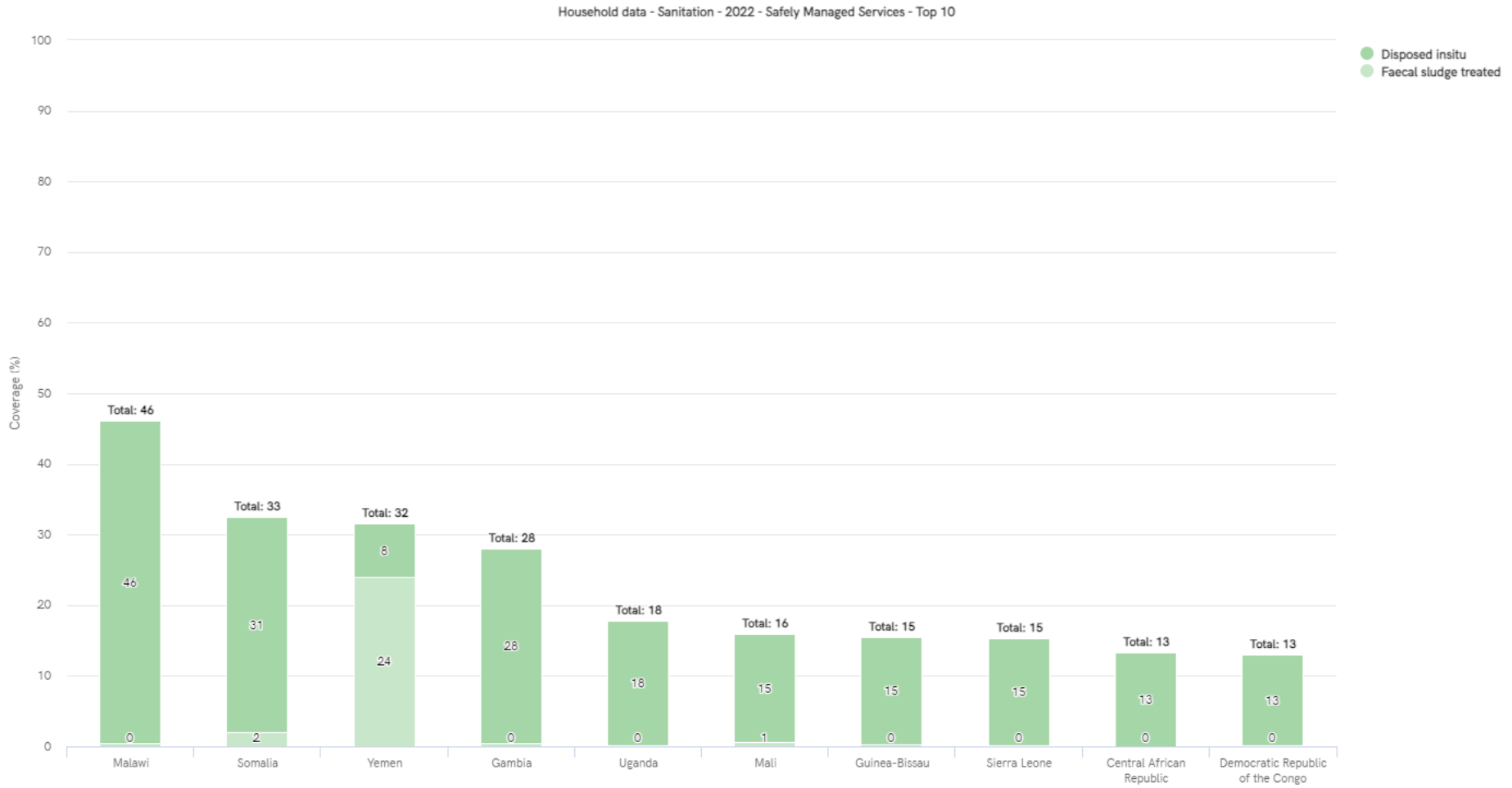
Time period

2022

Display

(•) Top 10 ( ) Bottom 10 ( ) All

Highest rate of safely managed sanitation in a low-income country, by safely managed criteria



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6.2.1b Hygiene

SERVICE LEVEL	DEFINITION
BASIC	Availability of a handwashing facility with soap and water at home
LIMITED	Availability of a handwashing facility lacking soap and/or water at home
NO FACILITY	No handwashing facility at home

FIGURE 68 SDG service ladder for hygiene

Note: Handwashing facilities may be located within the dwelling, yard or plot. They may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents.

84 countries had estimates for basic hygiene services in 2022

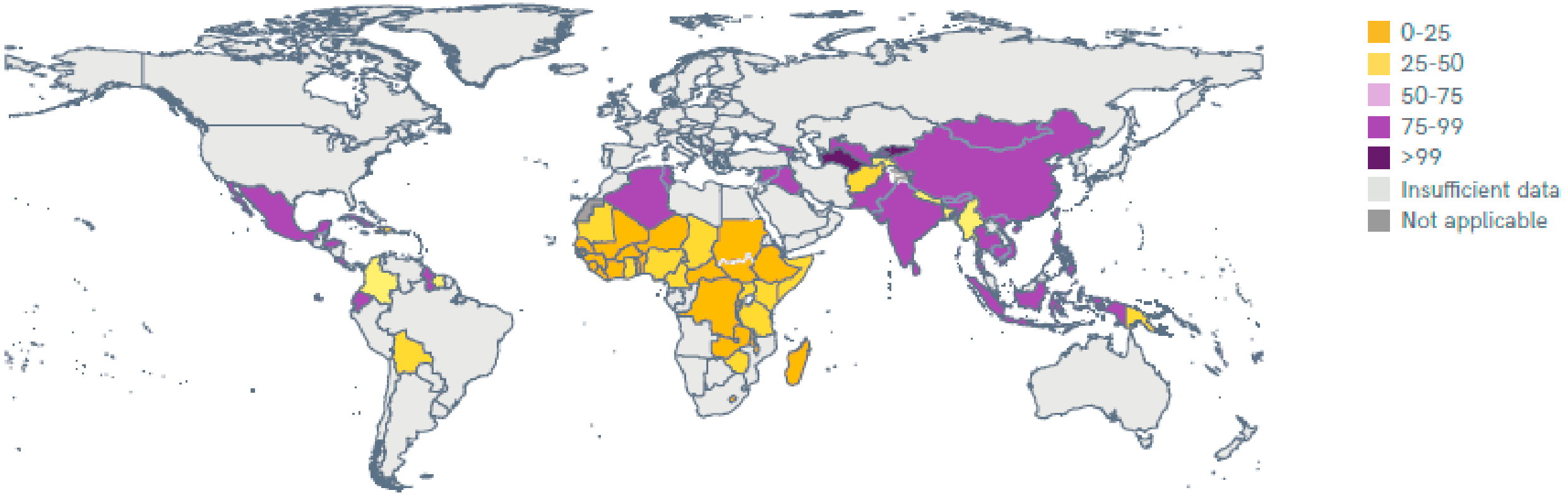


FIGURE 7 Proportion of population with basic hygiene services, 2022 (%)

Progress on household hygiene services 2015-2022

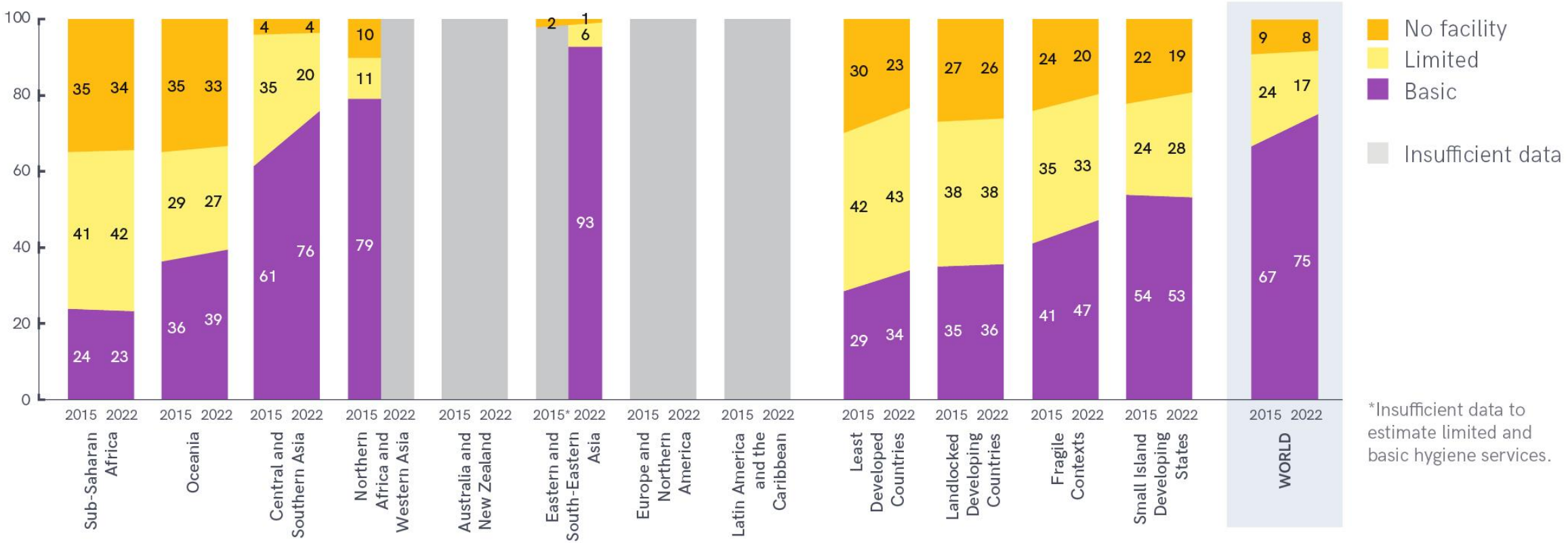


FIGURE 6 Global and regional hygiene coverage, 2022 (%)

Gender and hygiene

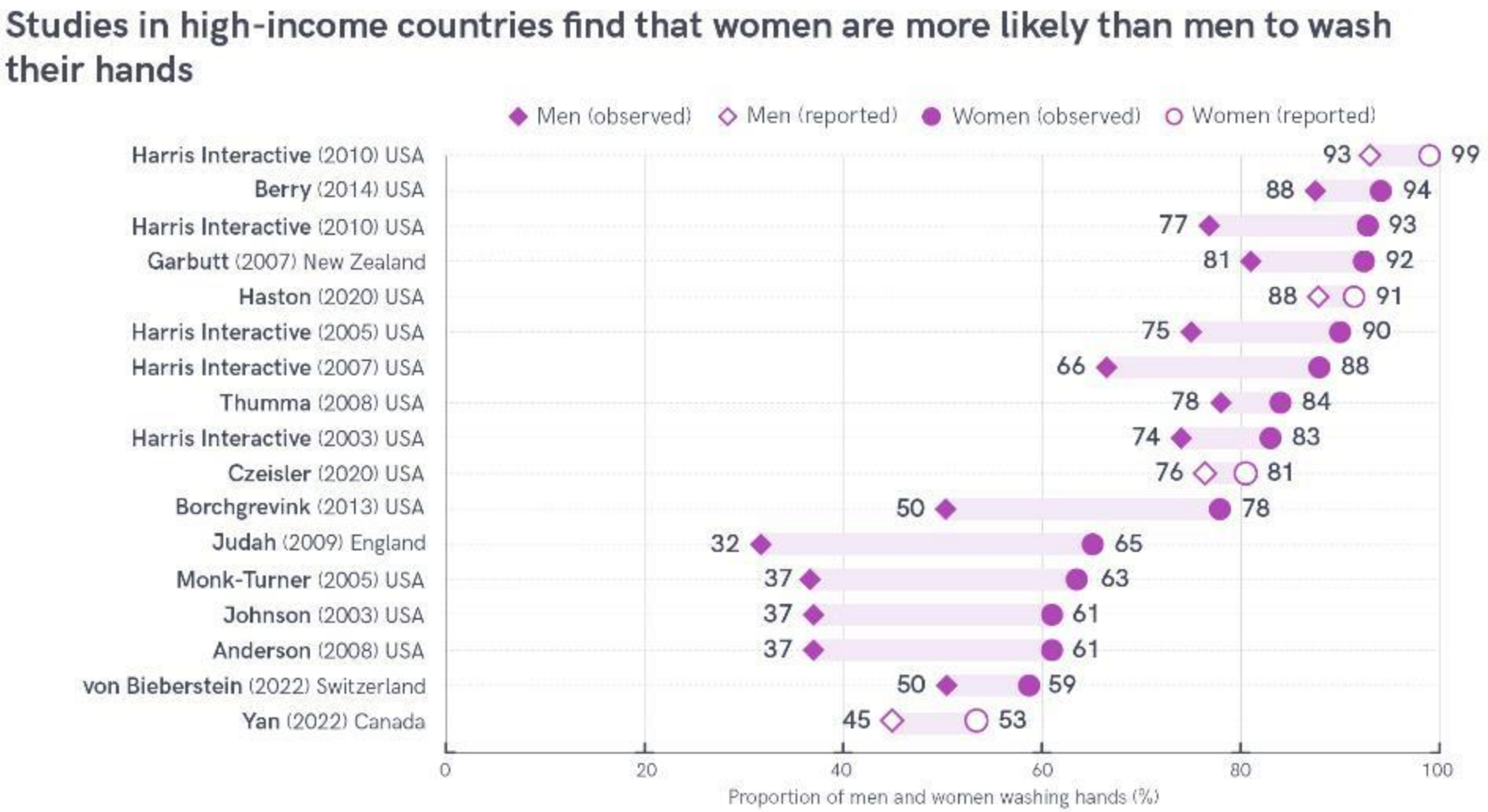


FIGURE 72 Proportion of women and men observed or reporting washing their hands with soap and water, selected studies, 2003-2022 (%)

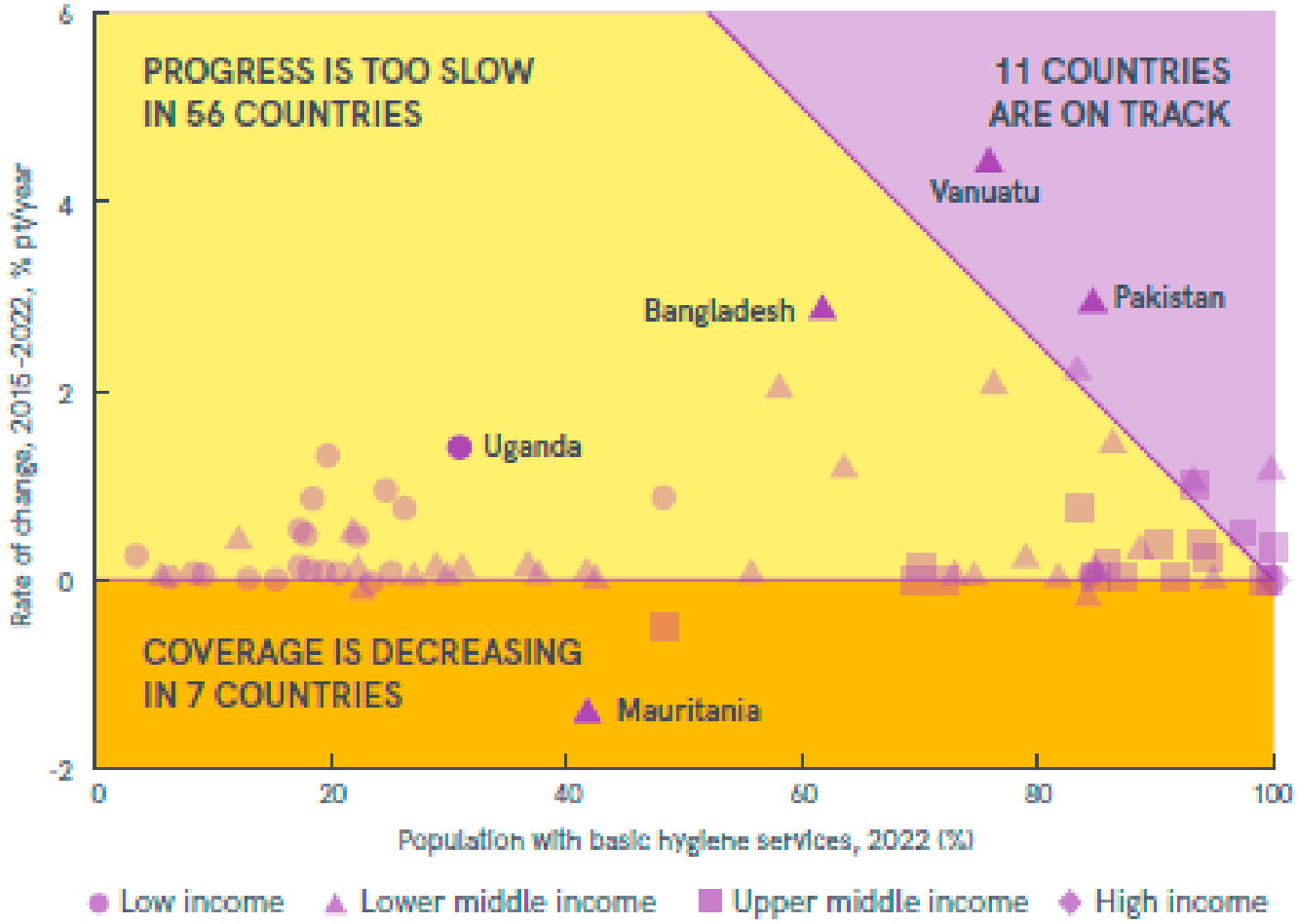


FIGURE 74 Progress on basic hygiene services among countries with data on trends, 2015–2022, by income group

Downloads index

	Household	School	Health Care Facilities
World	World file	World file	World file
Regions	Regions file	Regions file	Regions file
[+] Australia and New Zealand (2)			
[-] Central and Southern Asia (14)			
Afghanistan	Country file Inequalities	Country file	Country file
Bangladesh	Country file Inequalities	Country file	Country file
Bhutan	Country file Inequalities	Country file	Country file
India	Country file Inequalities	Country file	Country file
Iran (Islamic Republic of)	Country file	Country file	Country file
Kazakhstan	Country file		

WHO UNICEF JMP

Joint Monitoring Programme for Water Supply, Sanitation and Hygiene

Estimates on household water, sanitation and hygiene by wealth quintile and sub-national region in Bangladesh

Updated April 2021

Please make sure to click the "Enable Editing" and the "Enable Content" buttons when opening the file, if they appear

Follow the links below to find the following information:

JMP Estimates

WASH status and trends by wealth quintile
(customized quintiles made without water and sanitation assets)

Water
Sanitation
Hygiene

Data inputs

customized wealth quintiles and subnational data:

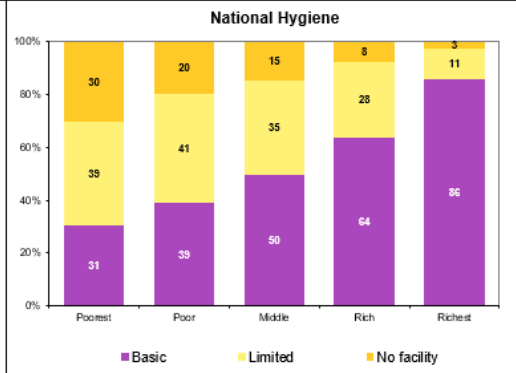
DHS04
MICS06
DHS07
DHS11
MICS13
DHS14
DHS18
MICS19

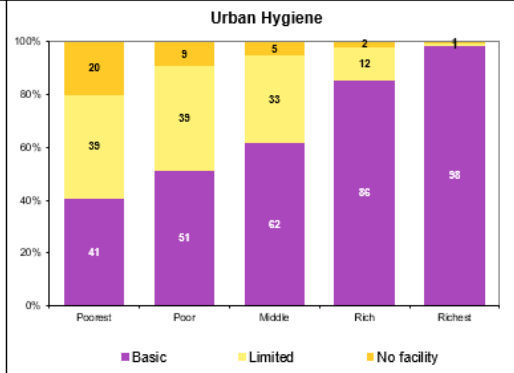
MHH | BASIC | WATER | SANITATION | RAW | SUBNATIONAL | Component MATRIX | WEALTH QUINTILES

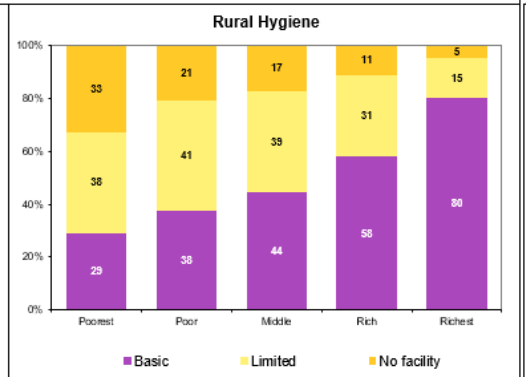
Bangladesh 2019

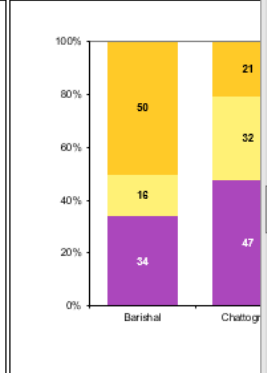
Access to hygiene facilities by wealth quintile and sub-national region

Notes:
WHO/UNICEF JMP customised wealth index excludes water, sanitation and hygiene assets.
Survey used for analysis: **MICS19**









Access to handwashing

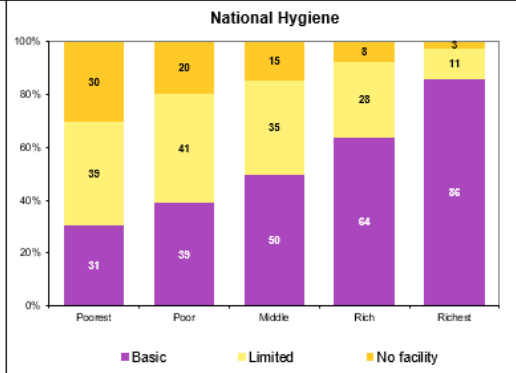
		NATIONAL wealth index quintile					URBAN wealth index quintile					RURAL wealth index quintile					SUB-REGIONS:	
Weighted percentage (used in graphs)		Poorest	Poor	Middle	Rich	Richest	Poorest	Poor	Middle	Rich	Richest	Poorest	Poor	Middle	Rich	Richest	Barishal	Chattogram
Hygiene ladder	Basic	30.6	38.9	49.9	63.7	85.8	40.7	51.2	61.8	85.6	98.3	29.2	37.8	44.4	58.1	80.4	33.9	47.4
	Limited	39.1	41.3	35.3	28.4	11.4	39.2	39.5	33.1	12.4	1.0	38.2	41.3	38.6	30.9	14.9	15.9	31.8
	No facility	30.4	19.9	14.8	7.8	2.8	20.1	9.4	5.2	2.0	0.7	32.6	21.0	17.1	11.0	4.7	50.2	20.8
Observed handwashing place	Fixed	81.1	86.9	86.9	89.4	96.3	84.3	88.9	92.4	97.6	99.4	79.8	87.4	87.0	87.4	92.8	76.9	83.7
	Mobile	18.9	13.1	13.1	10.6	3.7	15.7	11.1	7.6	2.4	0.6	20.2	12.6	13.0	12.6	7.2	23.1	16.3
Water / Soap	Water and soap	41.4	47.1	57.4	68.4	88.1	49.3	55.9	64.7	87.2	99.0	40.5	46.3	52.2	64.2	84.0	67.6	57.7
	Water only	51.0	48.3	38.5	29.0	11.4	45.5	41.7	33.6	12.4	1.0	51.1	49.1	43.2	32.3	14.8	30.8	34.3
	Soap only	1.9	1.7	2.1	1.6	0.3	2.0	1.4	1.0	0.2	0.0	2.0	1.5	2.3	2.0	0.8	1.0	4.3
	Neither	5.7	2.9	2.0	1.0	0.2	3.3	1.0	0.7	0.2	0.0	6.3	3.1	2.3	1.5	0.5	0.6	3.7
Place where household members most often wash their hands	OBSERVED: FIXED FACILITY OBSERVED (SINK / TAP	2.4	2.7	4.7	15.2	64.4	3.6	12.7	31.2	71.3	94.8	2.4	2.4	3.5	7.1	39.5	10.1	24.4
	OBSERVED: FIXED FACILITY OBSERVED (SINK / TAP	57.3	68.9	70.8	67.9	29.4	65.9	68.5	57.1	24.4	3.9	54.8	68.7	70.3	71.8	49.3	28.2	44.3
	OBSERVED: MOBILE OBJECT (BUCKET / JUG / KETT	13.9	10.8	11.4	9.9	3.6	13.0	10.1	7.2	2.4	0.6	14.5	10.3	11.0	11.4	6.9	11.5	13.3
	NOT OBSERVED: NO HANDWASHING PLACE IN DWE	26.1	17.4	13.0	6.9	2.6	17.3	8.5	4.5	1.9	0.7	27.9	18.4	15.1	9.6	4.3	49.6	17.7
	NOT OBSERVED: NO PERMISSION TO SEE	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
	OTHER REASON	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0	0.5	0.2

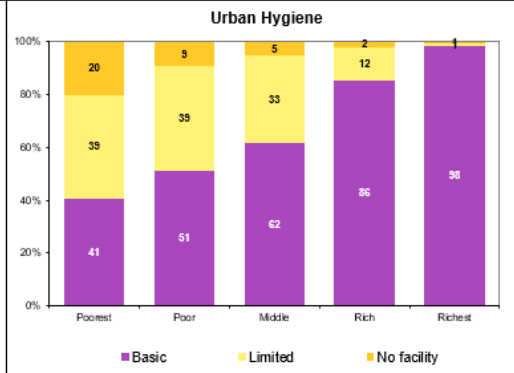
MHH | BASIC | WATER | SANITATION | RAW | SUBNATIONAL | Component MATRIX | WEALTH QUINTILES

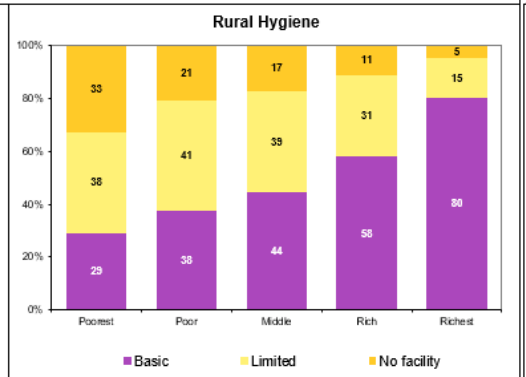
Bangladesh 2019

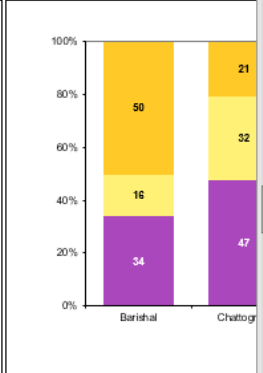
Access to hygiene facilities by wealth quintile and sub-national region

Notes:
WHO/UNICEF JMP customised wealth index excludes water, sanitation and hygiene assets.
Survey used for analysis: **MICS19**









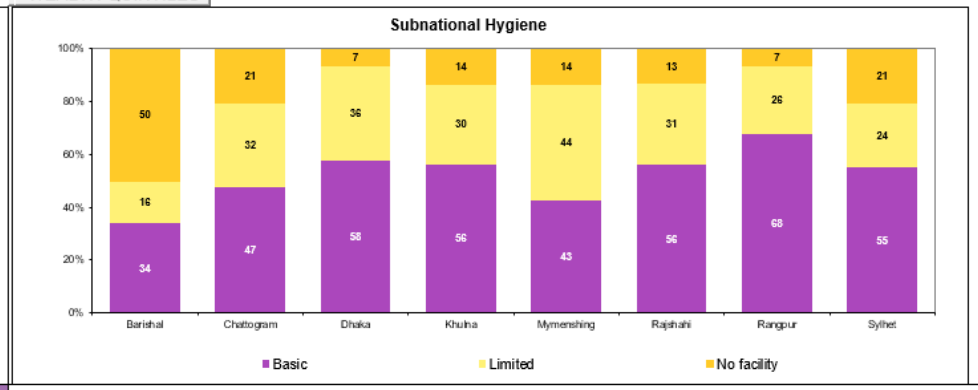
Access to handwashing		NATIONAL wealth index quintile					URBAN wealth index quintile					RURAL wealth index quintile					SUB-REGIONS:	
Weighted percentage (used in graphs)		Poorest	Poor	Middle	Rich	Richest	Poorest	Poor	Middle	Rich	Richest	Poorest	Poor	Middle	Rich	Richest	Barishal	Chattogram
Hygiene ladder	Basic	30.6	38.9	49.9	63.7	85.8	40.7	51.2	61.8	85.6	98.3	29.2	37.8	44.4	58.1	80.4	33.9	47.4
	Limited	39.1	41.3	35.3	28.4	11.4	39.2	39.5	33.1	12.4	1.0	38.2	41.3	38.6	30.9	14.9	15.9	31.8
	No facility	30.4	19.9	14.8	7.8	2.8	20.1	9.4	5.2	2.0	0.7	32.6	21.0	17.1	11.0	4.7	50.2	20.8
Observed handwashing place	Fixed	81.1	86.9	86.9	89.4	96.3	84.3	88.9	92.4	97.6	99.4	79.8	87.4	87.0	87.4	92.8	76.9	83.7
	Mobile	18.9	13.1	13.1	10.6	3.7	15.7	11.1	7.6	2.4	0.6	20.2	12.6	13.0	12.6	7.2	23.1	16.3
Water / Soap	Water and soap	41.4	47.1	57.4	68.4	88.1	49.3	55.9	64.7	87.2	99.0	40.5	46.3	52.2	64.2	84.0	67.6	57.7
	Water only	51.0	48.3	38.5	29.0	11.4	45.5	41.7	33.6	12.4	1.0	51.1	49.1	43.2	32.3	14.8	30.8	34.3
	Soap only	1.9	1.7	2.1	1.6	0.3	2.0	1.4	1.0	0.2	0.0	2.0	1.5	2.3	2.0	0.8	1.0	4.3
	Neither	5.7	2.9	2.0	1.0	0.2	3.3	1.0	0.7	0.2	0.0	6.3	3.1	2.3	1.5	0.5	0.6	3.7
Place where household members most often wash their hands	OBSERVED: FIXED FACILITY OBSERVED (SINK / TAP	2.4	2.7	4.7	15.2	64.4	3.6	12.7	31.2	71.3	94.8	2.4	2.4	3.5	7.1	39.5	10.1	24.4
	OBSERVED: FIXED FACILITY OBSERVED (SINK / TAP	57.3	68.9	70.8	67.9	29.4	65.9	68.5	57.1	24.4	3.9	54.8	68.7	70.3	71.8	49.3	28.2	44.3
	OBSERVED: MOBILE OBJECT (BUCKET / JUG / KETT	13.9	10.8	11.4	9.9	3.6	13.0	10.1	7.2	2.4	0.6	14.5	10.3	11.0	11.4	6.9	11.5	13.3
	NOT OBSERVED: NO HANDWASHING PLACE IN DWE	26.1	17.4	13.0	6.9	2.6	17.3	8.5	4.5	1.9	0.7	27.9	18.4	15.1	9.6	4.3	49.6	17.7
	NOT OBSERVED: NO PERMISSION TO SEE	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
	OTHER REASON	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0	0.5	0.2

MHH | BASIC | WATER | SANITATION | RAW | WEALTH QUINTILES

Bangladesh 2019

Access to hygiene facilities by wealth quintile and sub-national region

Notes:
WHO/UNICEF JMP customised wealth index excludes water, sanitation and hygiene assets.
Survey used for analysis: **MICS19**



Access to handwashing		SUB-REGIONS:							
Weighted percentage (used in graphs)		Barishal	Chattogram	Dhaka	Khulna	Mymenshing	Rajshahi	Rangpur	Sylhet
Hygiene ladder	Basic	33.9	47.4	57.6	56.4	42.8	56.1	67.7	55.0
	Limited	15.9	31.8	35.7	29.9	43.6	30.6	25.8	24.3
	No facility	50.2	20.8	6.7	13.7	13.6	13.3	6.5	20.8
Observed handwashing place	Fixed	76.9	83.7	91.6	86.4	86.0	94.1	97.2	75.2
	Mobile	23.1	16.3	8.4	13.6	14.0	5.9	2.8	24.8
Water / Soap	Water and soap	67.6	57.7	61.1	64.0	48.4	63.9	69.8	67.6
	Water only	30.8	34.3	37.2	32.6	48.8	34.3	25.2	29.2
	Soap only	1.0	4.3	0.6	1.3	0.5	0.7	1.4	0.7
	Neither	0.6	3.7	1.1	2.0	2.4	1.1	3.7	2.5
Place where household members most often wash their hands	OBSERVED: FIXED FACILITY OBSERVED (SINK / TAP	10.1	24.4	28.3	12.6	7.7	11.4	4.4	22.7
	OBSERVED: FIXED FACILITY OBSERVED (SINK / TAP	28.2	44.3	58.1	63.5	68.5	71.1	89.7	38.4
	OBSERVED: MOBILE OBJECT (BUCKET / JUG / KETT	11.5	13.3	7.9	11.9	12.4	5.1	2.7	20.1
	NOT OBSERVED: NO HANDWASHING PLACE IN DWE	49.6	17.7	5.7	11.9	11.4	12.3	3.0	18.7
	NOT OBSERVED: NO PERMISSION TO SEE	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0
	OTHER REASON	0.5	0.2	0.0	0.1	0.0	0.0	0.0	0.1

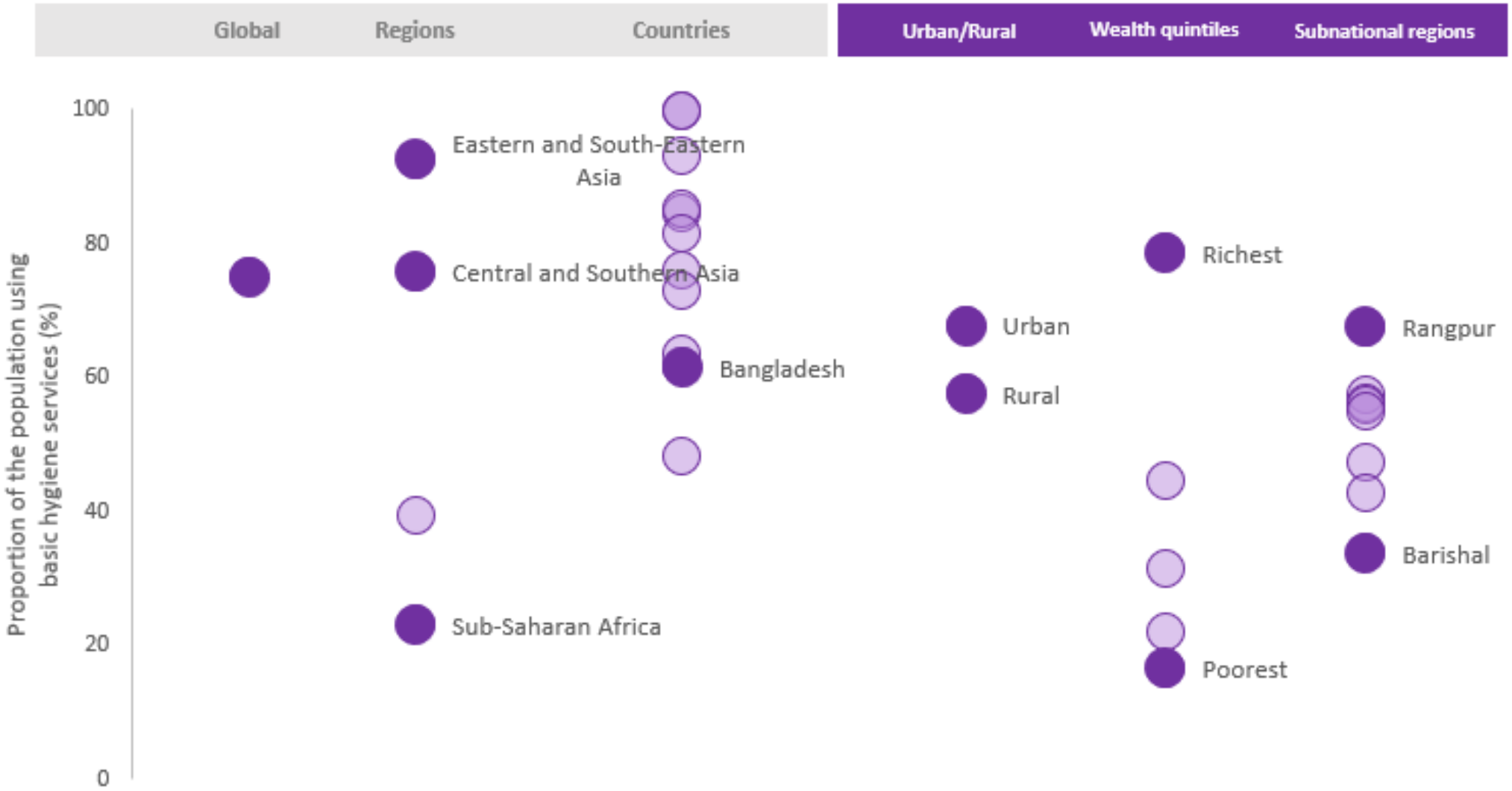


Figure H9: Inequalities in use of basic hygiene services in Bangladesh (%)

Target 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, ***paying special attention to the needs of women and girls*** *and those in vulnerable situations*

https://washdata.org/monitoring/menstrual-health

COMMENTARY

SRHM SEXUAL AND REPRODUCTIVE HEALTH MATTERS MORE THAN A JOURNAL

Menstrual health: a definition for policy, practice, and research

Julie Hennegan [a], Inga T. Winkler [b], Chris Bobel [c], Danielle Keiser [d], Janie Hampton [e], Gerda Larsson [f], Venkatraman Chandra-Mouli [g], Marina Plesons [h], Thérèse Mahon [i]

a Research Fellow, Maternal, Child and Adolescent Health Program, Burnet Institute, Melbourne, Australia; Adjunct Research Associate, Department of Environmental Health and Engineering, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

b Lecturer in Human Rights, Institute for the Study of Human Rights, Columbia University, New York, NY, USA

c Professor, Women's, Gender, and Sexuality Studies, College of Liberal Arts, Department of Women's, Gender, and Sexuality Studies, University of Massachusetts Boston, Boston, MA, USA

d Founder & Executive Director, Menstrual Health Hub / MH Hub, Berlin, Germany

e Co-Founder, Menstrual Cup Coalition, Nairobi, Kenya

f Co-Founder and Managing Director, The Case for Her, Stockholm, Sweden

g Scientist, UNDP–UNFPA–UNICEF–WHO–World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), Department of Sexual and Reproductive Health and Research, World Health Organization, Geneva, Switzerland

h Consultant, UNDP–UNFPA–UNICEF–WHO–World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), Department of Sexual and Reproductive Health and Research, World Health Organization, Geneva, Switzerland

i Regional Programme Manager South Asia, WaterAid, London, UK. *Correspondence:* theresemahon@wateraid.org

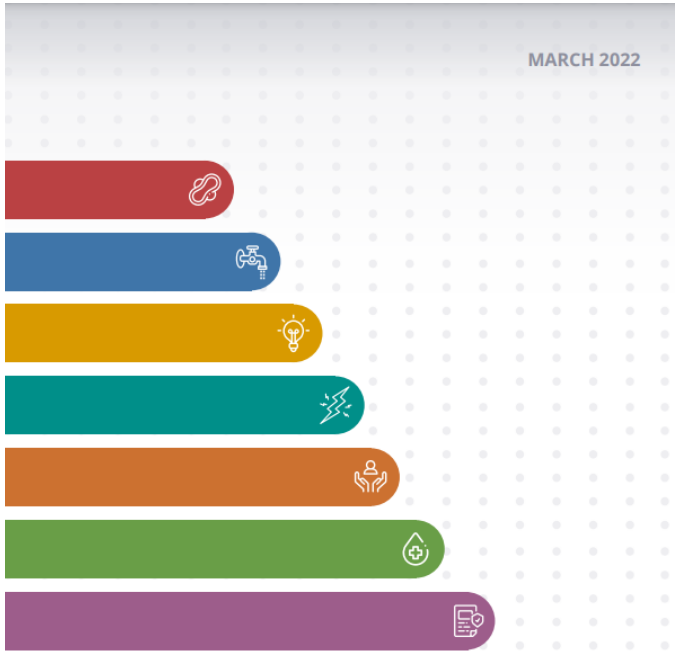
Abstract: *The term "menstrual health" has seen increased use across advocacy, programming, policy, and research, but has lacked a consistent, self-contained definition. As a rapidly growing field of research and practice a comprehensive definition is needed to (1) ensure menstrual health is prioritised as a unified objective in global health, development, national policy, and funding frameworks, (2) elucidate the breadth of menstrual health, even where different needs may be prioritised in different sectors, and (3) facilitate a shared vocabulary through which stakeholders can communicate across silos to share learning. To achieve these aims, we present a definition of menstrual health developed by the Terminology Action Group of the Global Menstrual Collective. We describe the definition development process, drawing on existing research and terminology, related definitions of health, and consultation with a broad set of stakeholders. Further, we provide elaboration, based on current evidence, to support interpretation of the definition.* DOI: 10.1080/26410397.2021.1911618

Keywords: gender equality, health, menstrual cycle, menstrual health, human rights

Introduction

Menstrual health is integral to improving global population health,[1] achieving the Sustainable Development Goals, and realising gender equality and human rights.[2,3] Although the past decade has seen growing awareness of menstrual-related challenges,[4,5] increased multi-sectoral investment is needed to comprehensively address the needs of all people who menstruate.

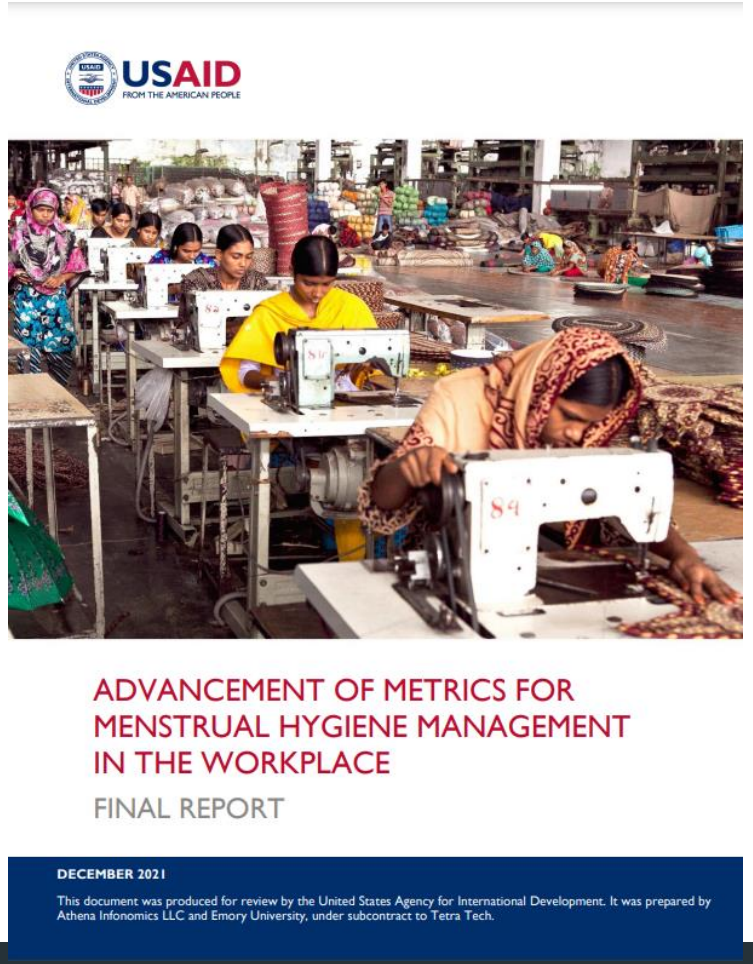
Research and practice have developed a nuanced understanding of menstrual experiences, and their intersections with physical, mental, and social health.[6,7] Varied terminologies have evolved, but increasingly actors are using *menstrual health* to evoke a holistic framework relevant to the varied objectives of policy and programming. Despite broad usage, *menstrual health* lacks a formal, self-contained definition.



MARCH 2022

Priority List of Indicators for Girls' Menstrual Health and Hygiene:

TECHNICAL GUIDANCE FOR NATIONAL MONITORING



USAID FROM THE AMERICAN PEOPLE

ADVANCEMENT OF METRICS FOR MENSTRUAL HYGIENE MANAGEMENT IN THE WORKPLACE

FINAL REPORT

DECEMBER 2021

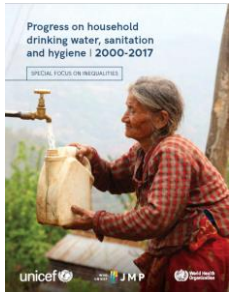
This document was produced for review by the United States Agency for International Development. It was prepared by Athena Infonomics LLC and Emory University, under subcontract to Tetra Tech.

World Health Organization

WHO UNICEF JMP

unicef

Progress on global monitoring of Menstrual Health



Highlighted as emerging thematic area in global household report

2018

Globally recommended core questions on menstrual health for household surveys

2019

2020

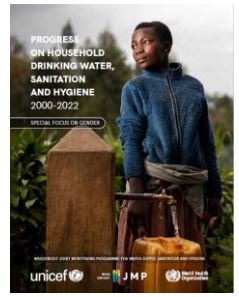
Published global guidance on monitoring Menstrual Health

Dedicated chapter in JMP global report *(42 countries with data)*

2021

2022

New indicators and questions agreed on by expert group



Dedicated chapter in global report *(53 countries and examples on new indicators)*

2023

MH also included in global monitoring of health care facilities and schools

Four core indicators on Menstrual Health

Domain	Proportion of women and girls age 15-49 years who have menstruated in the past year who…
Materials	used menstrual materials during their last period
Facilities	had a private place to wash and change at home during their last menstrual period
Knowledge	Knew about menstruation before their first period
MH impacts	Participated in school, work or social activities during their last menstrual period

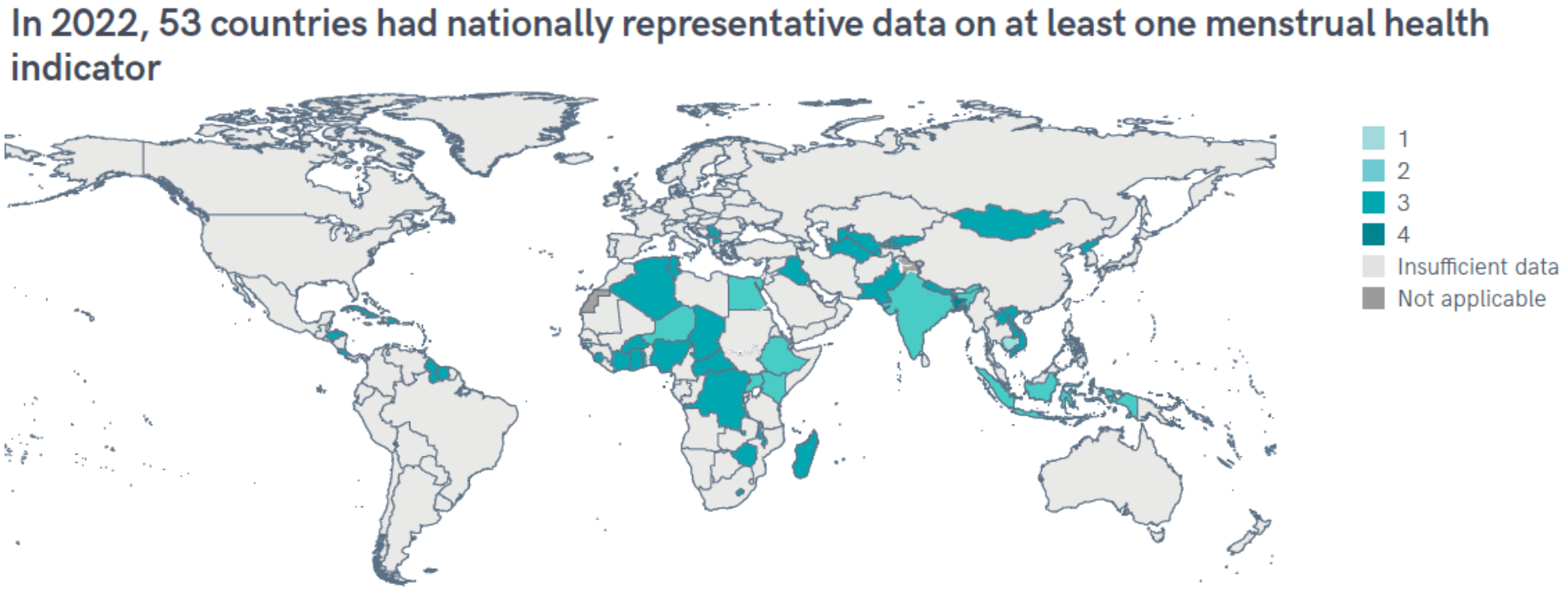


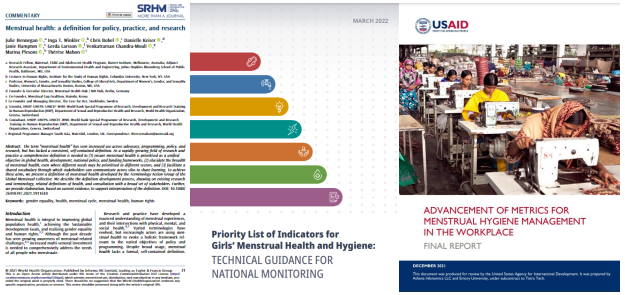
FIGURE 9 Number of menstrual health indicators with national data available, by country, 2022

In countries with data on all three indicators, the proportion of adolescent girls and women meeting all three criteria for menstrual health is often significantly lower

FIGURE 99 Proportion of adolescent girls and women, age 15-49, who used menstrual materials, had a private place to wash and change, and participated in work, school and social activities during their last period, selected MICS surveys, 2016-2022 (%)

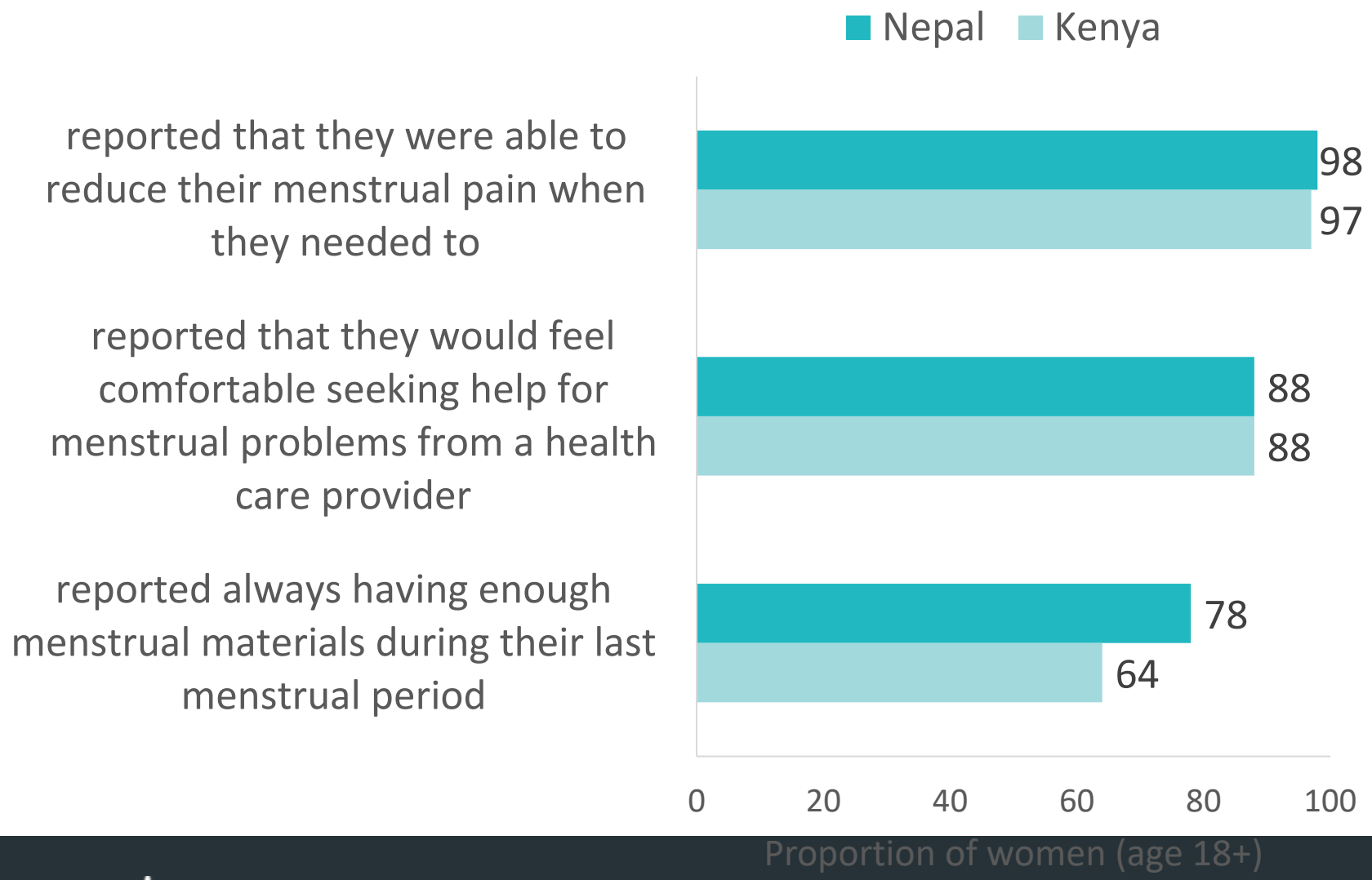
Updated indicators on Menstrual Health

- Updated to better capture the experiences of those who menstruate.
- Based on new literature (definition of menstrual health, priority indicators for monitoring girls' MHH, USAID workplace study…) and expert review



Domain	Proportion of women and girls age 15-49 years who have menstruated in the past year who…
Materials	Reported having enough menstrual materials throughout their last menstrual period
Facilities	had a private place to change their menstrual materials at home
Knowledge	knew about menstruation before their first menstrual period
Discomfort/ disorders	Were able to reduce their menstrual (menstruation-related) pain during their last menstrual period when they needed to
Supportive environment	Would feel comfortable seeking help for menstrual problems from a health care provider
MH impacts	Did not have trouble participating in school, paid work, or social activities due to their last menstrual period

Examples of monitoring the new indicators



A USAID survey of women in the workplace includes data from Kenya and Nepal for some of the new indicators

Additional data are expected as the new questions are included by countries implementing MICS7

Exercise 3

- In Bangladesh, what type of menstrual materials did women and girls use during their last period?
  - Mainly reusable or mainly single-use?
  - How does this vary by wealth?

A1

1		**Bangladesh**				**Menstrual health**		**Bangladesh**				**Menstrual health**		**Bangladesh**					
2		ICDDR, B				BGD_2018_NHS		ICDDR, B				BGD_2019_MICS		Bangladesh Bureau of Statistics					
3	Links to sources within	National Hygiene Baseline Survey				Survey with microdata		National Hygiene Survey				Survey with microdata		Multiple Indicator Cluster Survey, 2019					
7	BGD_2019_MICS	Reusable materials						Reusable materials						Reusable materials	51.0	70.8	66.2		
8		Single-use materials						Single-use materials						Single-use materials	46.7	25.1	30.2		
9		Participation in activities during menstruation			52.0			Participation in activities during menstruation	59.3	44.2	44.5			Participation in activities during menstruation	79.3	73.8	75.1		
10		Awareness of menstruation before menarche			36.0			Awareness of menstruation before menarche	30.6	32.8	31.9			Awareness of menstruation before menarche					
11		**used for estimates**	Urban	Rural	National			**Data used for estimates**	Urban	Rural	National			**Data used for estimates**	Urban	Rural	National		
12		Private place to wash and change	No	No	No			Private place to wash and change	Yes	Yes	No			Private place to wash and change	Yes	Yes	No		
13		Use of menstrual materials	No	No	No			Use of menstrual materials	No	No	No			Use of menstrual materials	Yes	Yes	No		
14		Reusable materials	No	No	No			Reusable materials	No	No	No			Reusable materials	Yes	Yes	No		
15		Single-use materials	No	No	No			Single-use materials	No	No	No			Single-use materials	Yes	Yes	No		
16		Participation in activities during menstruation	No	No	No			Participation in activities during menstruation	Yes	Yes	No			Participation in activities during menstruation	No	No	No		
17		Awareness of menstruation before menarche	No	No	No			Awareness of menstruation before menarche	Yes	Yes	No			Awareness of menstruation before menarche	No	No	No		
18		l on adult women 19-49 (n=2107).				**Notes**		Data relate to women and adolescent girls 11-49 reporting regular menstrual periods. Weights not available for individual women. Women were asked whether they were forbidden from: go to certain places, eating certain foods, cooking, going out, participating in religious activities and other activities.				**Notes**		Data based on all women and adolescent girls (15-49) reporting a last menstrual period in the previous 12 months. Large proportion of respondents did give a response to whether they had missed activities ("DK/Missing/no such activity"). Not used for participation in activities during menstruation as NHS18 demonstrates that adolescent girls and women often do not participate in religious activities which were not captured in the MICS indicator.			
19		ication	Urban	Rural	National	**Original denomination**		Classification	Urban	Rural	National	**Original denomination**		Classification	Urban	Rural	National		
20		**te place to wash and change at home**						**Private place to wash and change at home**						**Private place to wash and change at home**					
21		Yes				No problem with privacy when changing materials		Yes	81.7	84.2	83.2	Private place to wash and change		Yes	97.1	96.6	96.7		
22		No				Problem with privacy when changing materials		No	18.3	15.8	16.8	No private place to wash and change		No	2.9	3.4	3.2		
23		DK/missing						DK/missing						DK/missing					
24		Total						Total	100.0	100.0	100.0			Total	99.9	100.0	100.0		
25		**trual materials**						**Menstrual materials**						**Menstrual materials**					
26		Menstrual materials used (multiple response)						Menstrual materials used (multiple response)						Menstrual materials used (multiple response)					
27		Single-use sanitary pads			10.0	Pad		Single-use sanitary pads	39.6	23.0	29.9	Sanitary napkin		Single-use sanitary pads	43.7	20.1	25.8		
28		Reusable sanitary pads						Reusable sanitary pads						Reusable sanitary pads					
29		Tampons						Tampons						Tampons					
30		Menstrual cup						Menstrual cup						Menstrual cup					
31		Cloth			86.0	Old or new cloth		Cloth	55.9	73.4	66.1	Cloth		Cloth	54.4	78.1	72.4		
32		Cotton wool				Cotton		Cotton wool	0.3	0.1	0.2	Cotton pad		Cotton wool	0.3	0.2	0.2		
33		Other menstrual materials						Other menstrual materials						Other menstrual materials					
34		Toilet paper				Tissue paper		Toilet paper				Tissue		Toilet paper	1.6	1.5	1.5		
35		Underwear only						Underwear only						Underwear only					
36		Other				Other/pieces of garment		Other	0.7	0.4	0.5	Others		Other	0.0	0.0	0.0		
37		Nothing				Nothing		Nothing	1.7	2.2	2.0			Nothing					
38		DK/missing						DK/missing						DK/missing					
39		Total			96.0			Total	98.2	99.1	98.8			Total	100.0	100.0	100.0		
40		**able and single-use menstrual materials**						**Reusable and single-use menstrual materials**						**Reusable and single-use menstrual materials**					
41		Reusable materials						Reusable materials				Materials reusable		Reusable materials	51.0	70.8	66.2		
42		Single-use materials						Single-use materials				Materials not reusable		Single-use materials	46.7	25.1	30.2		
43		No materials used						No materials used				No materials		No materials used	2.2	3.9	3.5		
44		DK/missing						DK/missing				Missing/DK		DK/missing	0.1	0.2	0.1		
45		Total						Total						Total	100.0	100.0	100.0		
46		**cipation in activities during menstruation**						**Participation in activities during menstruation**						**Participation in activities during menstruation**					
47		Participation in all specified activities			52.0			Participation in all specified activities	59.3	44.2	44.5	Participation in school, work and social activities		Participation in all specified activities	79.3	73.8	75.1		
48		Did not go to school (amongst those usually attending school)						Did not go to school (amongst those usually attending school)						Did not go to school (amongst those usually attending school)					
49		Did not go to work (amongst those who usually work)						Did not go to work (amongst those who usually work)						Did not go to work (amongst those who usually work)					
50		Did not participate in social activities						Did not participate in social activities						Did not participate in social activities					
51		Did not cook food				Not allowed to cook amongst all women		Did not cook food	0.0	1.5	3.9			Did not cook food					

Introduction | Ladders | Charts SM | Charts B | Estimates | Data Summary | Water Data | Sanitation Data | Wastewater Data | Hygiene Data | Menstrual Health Data | Population | ...

BASIC | WATER | SANITATION | HYGIENE | RAW | SUBNATIONAL | WEALTH QUINTILES

Bangladesh
2019
Access to menstrual health and hygiene facilities by wealth quintile and sub-national region

Notes:
WHO/UNICEF JMP customised wealth index excludes water, sanitation and hygiene assets.

Survey used for analysis: **MICS19**

Menstrual health and hygiene		NATIONAL wealth index quintile					URBAN wealth index quintile					RURAL wealth index quintile					SUB-REGIONS:	
Percentage based on weighted women population		Poorest	Poor	Middle	Rich	Richest	Poorest	Poor	Middle	Rich	Richest	Poorest	Poor	Middle	Rich	Richest	Barishal	Chattogram
Private place to wash and change	Yes	95.2	96.4	96.8	97.3	97.7	96.2	96.7	96.6	97.8	97.9	95.0	96.3	96.7	97.0	97.9	94.9	96.6
	No	4.8	3.6	3.2	2.7	2.3	3.8	3.3	3.4	2.2	2.1	4.9	3.7	3.3	3.0	2.1	5.1	3.4
	DK/not sure/missing	0.0	0.0	0.0	0	0.0	0	0	0	0	0	0.0	0.0	0.0	0	0.0	0.0	0
Use of menstrual materials	Materials reusable	82.3	79.8	72.9	64.6	40.4	78.6	70.6	61.5	42.0	18.9	81.9	81.1	76.2	67.6	51.6	65.5	67.0
	Materials not reusable	11.9	15.8	23.4	32.2	57.7	17.1	26.2	35.7	56.4	80.4	12.0	14.3	20.1	28.7	45.8	30.6	28.4
	No materials used	5.5	4.2	3.6	3.1	1.8	4.2	3.1	2.7	1.6	0.6	5.7	4.3	3.6	3.7	2.5	3.7	4.5
	DK/not sure/missing	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.3	0.2	0.1	0.1	0.2	0.1	0.1
Use of menstrual materials with private place to wash and change	Materials reusable	83.4	80.7	73.7	65.2	40.7	79.0	71.4	61.9	42.3	19.1	83.1	82.1	76.9	68.3	52.0	66.3	67.9
	Materials not reusable	11.9	15.8	23.5	32.3	57.8	17.2	26.4	35.7	56.4	80.5	12.0	14.3	20.1	28.8	45.9	30.3	28.7
	No materials used	4.7	3.6	2.9	2.5	1.5	3.8	2.2	2.4	1.3	0.4	4.9	3.6	2.9	2.9	2.1	3.4	3.4
Awareness of menstruation before menarche	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	DK/not sure/missing	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Participation in (all) activities during menstruation	Yes	73.6	73.4	73.5	75.3	78.6	74.7	78.2	81.1	81.7	79.4	73.4	73.8	73.1	73.3	75.3	54.1	64.2
	No	8.2	7.9	8.2	8.2	7.1	8.2	6.8	5.9	5.8	5.8	8.1	8.0	7.9	8.5	9.0	9.9	12.9
	DK/not sure/missing/no such activity	18	19	18	16	14.3	17.1	15.1	13.0	12.6	14.9	18.5	18.2	18.9	18.2	15.7	36.0	23.0
Participation in specific activities during menstruation	Did not go to school (amongst those usually attending	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Did not go to work (amongst those who usually work)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Did not participate in social activities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Did not cook food	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Did not eat with others	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Did not bathe in regular place	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Did not participate in other activities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	DK/not sure/missing/no such activity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

In 2022, data coverage for SDG WASH indicators varied widely between regions

% of population (number of countries, areas and territories) in 2022	DRINKING WATER					SANITATION						HYGIENE
	At least basic	Safely managed	Accessible on premises	Available when needed	Free from contamination	Open defecation	At least basic	Safely managed	Safely disposed of in situ	Emptied and treated	Wastewater treated	Basic
World (234)	99% (207)	51% (142)	99% (207)	86% (139)	51% (142)	96% (198)	98% (206)	86% (135)	85% (137)	1% (5)	59% (110)	69% (84)
Rural	98% (164)	64% (75)	98% (162)	91% (111)	64% (75)	97% (156)	98% (161)	80% (89)	84% (89)	0% (1)	9% (4)	82% (82)
Urban	94% (175)	63% (96)	93% (173)	76% (124)	63% (96)	94% (172)	94% (172)	81% (116)	83% (118)	24% (2)	44% (24)	59% (80)
SDG REGIONS												
Australia and New Zealand (2)	100% (2)	17% (1)	100% (2)	83% (1)	17% (1)	100% (2)	100% (2)	100% (2)	100% (2)	0% (0)	100% (2)	0% (0)
Central and Southern Asia (14)	99% (13)	31% (11)	99% (13)	95% (12)	31% (11)	96% (13)	100% (14)	80% (6)	92% (7)	0% (0)	13% (3)	95% (11)
Eastern and South-Eastern Asia (18)	100% (18)	35% (14)	100% (18)	93% (12)	35% (14)	99% (17)	100% (18)	87% (14)	77% (15)	2% (1)	17% (7)	89% (8)
Europe and Northern America (53)	100% (49)	100% (46)	100% (49)	44% (16)	100% (46)	99% (47)	99% (47)	99% (42)	99% (42)	1% (4)	99% (46)	0% (2)
Latin America and the Caribbean (50)	92% (37)	79% (20)	92% (37)	90% (27)	79% (20)	88% (37)	92% (39)	82% (17)	80% (17)	0% (0)	86% (18)	40% (14)
Northern Africa and Western Asia (25)	100% (24)	36% (16)	100% (24)	82% (20)	36% (16)	86% (21)	90% (22)	85% (20)	95% (20)	0% (0)	94% (21)	33% (9)
Oceania (21)	93% (17)	16% (12)	93% (17)	85% (10)	16% (12)	92% (15)	94% (18)	11% (6)	33% (6)	0% (0)	8% (4)	87% (7)
Sub-Saharan Africa (51)	99% (47)	64% (22)	99% (47)	98% (41)	64% (22)	99% (46)	99% (46)	83% (28)	81% (28)	0% (0)	53% (9)	87% (33)

TABLE 1 Percentage of population and number of countries with estimates available for global WASH indicators, by regional grouping, 2022

Careers in WASH

- Domestic and international
- NGOs
  - Helvetas, Terre des Hommes
- Academia
  - Eawag/Sandec, ETH, EPFL
- UN Junior Professional Officer (<= age 32, two years relevant experience)
  - Australia, Austria, Bahrain, Belgium, China, Denmark, Egypt, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Japan, Kazakhstan, Kuwait, Luxembourg, Morocco, Netherlands, Norway, Poland, Qatar, Russia, Saudi Arabia, Singapore, Republic of Korea, Spain, Sweden, Switzerland, UAE, UK, USA
- World Bank Young Professionals Progamme (need MSc)

Thank you!

info@washdata.org