

Nepal 2019



Drinking Water, Sanitation & Hygiene (WASH)

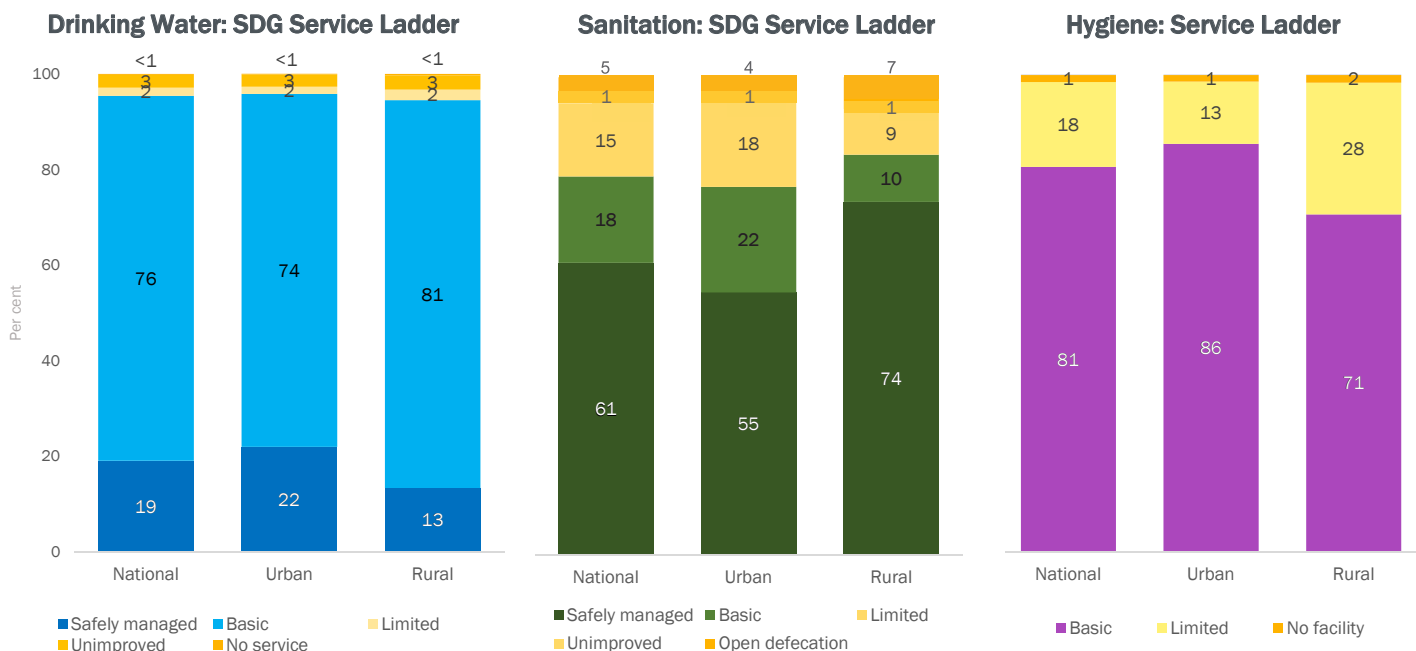
Multiple Indicator
Cluster Surveys



Government of Nepal
National Planning Commission
Central Bureau of Statistics



WASH SDG Ladders by Area



Per cent of population by drinking water, sanitation and hygiene coverage

Drinking Water: Safely managed drinking services refer to drinking water from an improved source which is located on premises, available when needed and free of faecal and priority contamination (i.e. *E. coli* = 0, arsenic <50 ppb as per national standard for Nepal). **Basic Service** refers to drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing. **Improved drinking water sources** are those that have the potential to deliver safe water by nature of their design and construction, and include: piped water, boreholes or tube wells, protected dug wells, protected springs, rainwater, and packaged or delivered water. **At least basic service** includes both safely managed and basic services. **Limited** refers to an improved source more than 30 minutes roundtrip. **Unimproved** sources include unprotected dug wells and unprotected springs. **No service** (i.e., surface water) refers to the direct collection of water from surface waters such as rivers, lakes or irrigation channels.

Sanitation: Safely managed sanitation services refer use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site. **Basic service** refer to use of improved facilities which are not shared with other households. **Improved sanitation facilities** are those designed to hygienically separate excreta from human contact, and include: flush/pour flush to piped sewer system, septic tanks or pit latrines; ventilated improved pit latrines, composting toilets or pit latrines with slabs. **At least basic service** includes both safely managed and basic services. **Limited** sanitation service refers use of improved facilities shared between two or more households. **Unimproved** sanitation facilities include flush/pour flush to an open drain, pit latrines without a slab, hanging latrines and bucket latrines. **No service** refers to the practice of open defecation.

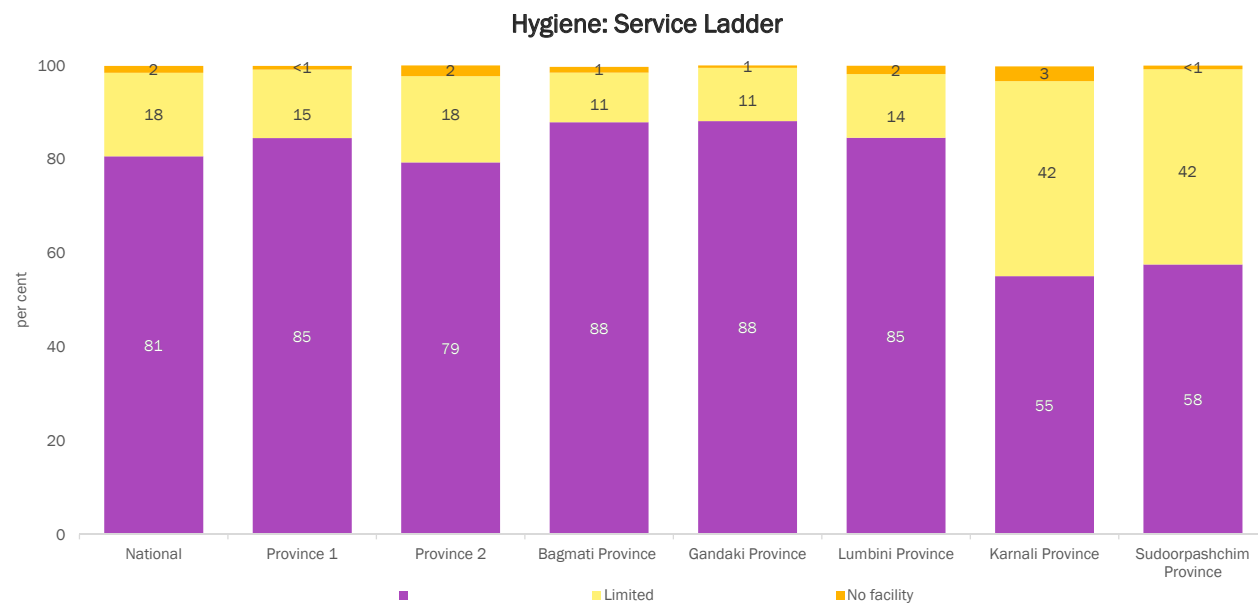
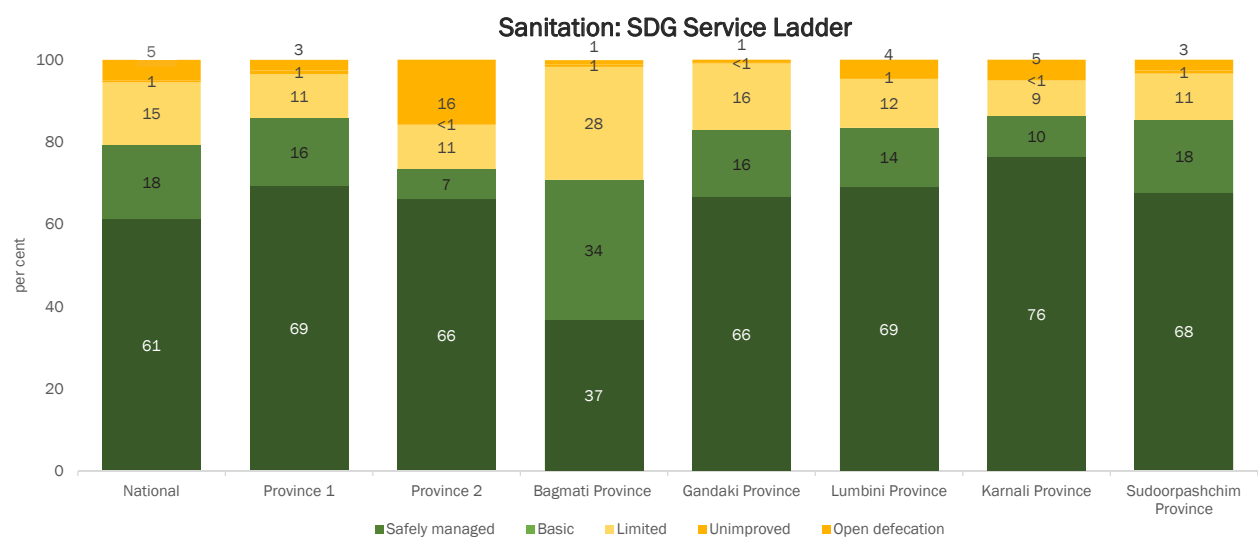
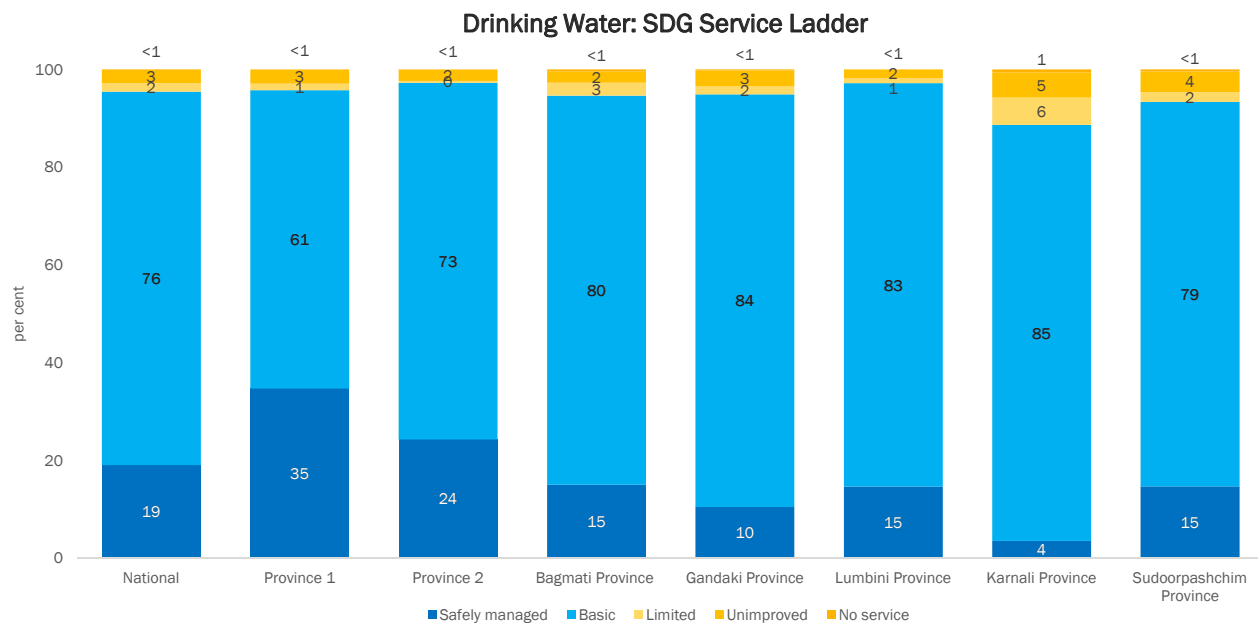
Hygiene: A basic hygiene services (SDG 1.4.1 & SDG 6.2.1) refers to the availability of a handwashing facility on premises with soap and water. Handwashing facilities may be fixed or mobile and include a sink with tap water service, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents. **Limited** hygiene service refers to a facility lacking water and/or soap. **No facility** means there is no handwashing facility on the household's premises.

Key Messages

- The majority of the population in Nepal has access to basic drinking water (76%) while only 19% use safely managed services. Only 18% of households have access to basic sanitation while 61% of households are using safely managed sanitation.
- Nationally, 81% of households have access to basic hygiene, although urban households have higher proportions of access to basic hygiene (86%) than do rural households (71%).
- Although, many households in Nepal have access to basic drinking water and most report access to adequate amounts of drinking water, fewer households have access to safely managed drinking water. For example, while 81% of people who live in rural areas of Nepal have access to basic drinking water, only 13% have access to safely managed drinking water. Even in the richest households, only 26% have access to safely managed drinking water.
- In Nepal, *E. coli* contamination of drinking water at source and at the household level is high. In the poorest households, 96% of household water is contaminated with *E. coli*. *E. coli* contamination amongst the richest households is also high (65%).

WASH SDG Ladders at National and Provincial Level

Per cent of population by drinking water, sanitation and hygiene coverage



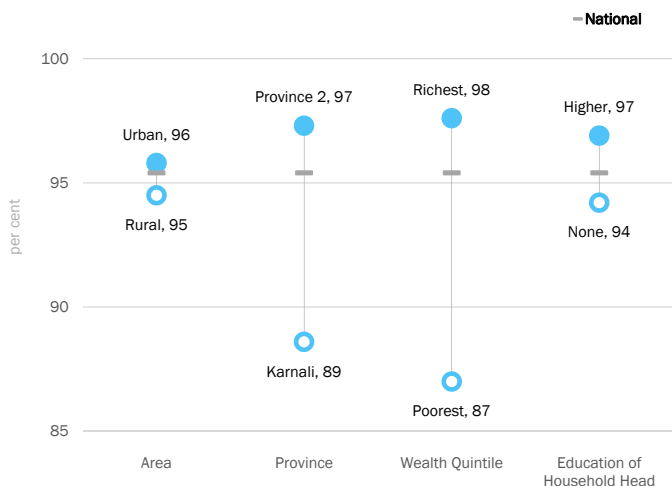
Water, Sanitation and Hygiene SDG Service Ladders

per centage of household population by drinking water, sanitation and handwashing ladders, Nepal, 2019

	per centage of household population by drinking water, sanitation and handwashing ladders, Nepal, 2019																				Basic drinking water, sanitation and hygiene service	Number of household members	
	Drinking water							Sanitation							Hygiene								
	Safely managed	Basic Services	Limited service	Unimproved	Surface water	Total	Improved (basic+ safely managed)	Safely managed	Basic Service	Limited service	Unimproved	Open defecation	Missing/DK	Total	Improved that are not shared (basic+safely managed)	Improved including shared toilets	Basic facility	Limited facility	No facility	No permission to see /other			Total
National	19.0	76.4	1.7	2.7	0.2	100.0	95.4	61.1	18.1	15.3	0.5	5.0	0.0	100.0	79.2	94.5	80.6	17.8	1.5	0.1	100.0	62.3	53,815
Rural	13.3	81.2	2.2	3.0	0.3	100.0	94.5	73.9	9.9	9.0	0.6	6.7	0.0	100.0	83.8	92.8	70.7	27.6	1.6	0.1	100.0	58.5	17,590
Urban	21.9	73.9	1.5	2.6	0.2	100.0	95.8	54.9	22.1	18.3	0.5	4.2	0.0	100.0	77.0	95.3	85.5	13.0	1.4	0.1	100.0	64.2	36,225
Province 1	34.7	61.0	1.3	2.8	0.1	100.0	95.7	69.4	16.4	10.7	0.8	2.6	0.0	100.0	85.8	96.5	84.5	14.6	0.8	0.1	100.0	72.0	9,087
Rural	21.6	73.0	2.3	2.8	0.2	100.0	94.6	74.6	10.8	9.6	1.1	4.0	0.0	100.0	85.4	95.0	76.9	22.0	1.2	0.0	100.0	66.3	3,428
Urban	42.8	53.6	0.8	2.8	0.0	100.0	96.4	66.2	19.9	11.4	0.7	1.7	0.0	100.0	86.1	97.5	89.2	10.1	0.5	0.2	100.0	75.4	5,659
Province 2	24.3	73.0	0.4	2.2	0.1	100.0	97.3	66.1	7.2	10.8	0.1	15.8	0.0	100.0	73.3	84.1	79.3	18.4	2.3	0.0	100.0	57.9	10,210
Rural	26.9	72.3	0.2	0.6	0.0	100.0	99.2	68.1	4.9	8.6	0.2	18.1	0.0	100.0	73.0	81.6	73.7	24.4	1.8	0.0	100.0	55.6	2,891
Urban	23.3	73.2	0.5	2.9	0.1	100.0	96.5	65.4	8.1	11.6	0.1	14.9	0.0	100.0	73.5	85.1	81.5	16.0	2.5	0.0	100.0	58.9	7,319
Bagmati Province	15.0	79.6	2.6	2.3	0.4	100.0	94.6	36.7	34.1	27.5	0.5	1.1	0.1	100.0	70.8	98.3	87.9	10.6	1.3	0.3	100.0	59.8	12,532
Rural	2.5	89.6	2.7	4.4	0.7	100.0	92.1	74.5	10.6	11.9	0.4	2.5	0.1	100.0	85.1	97.0	68.8	29.8	1.0	0.4	100.0	56.9	2,328
Kathmandu Valley Urban	16.1	79.8	1.9	1.8	0.5	100.0	95.9	17.0	48.8	32.9	0.8	0.3	0.2	100.0	65.8	98.7	95.8	3.1	0.7	0.3	100.0	61.3	6,836
Other Urban	22.3	71.6	4.1	2.0	0.0	100.0	93.9	50.6	20.4	27.2	0.1	1.8	0.0	100.0	71.0	98.2	85.0	12.4	2.5	0.2	100.0	58.8	3,367
Gandaki Province	10.5	84.4	1.7	3.3	0.2	100.0	94.9	66.5	16.2	16.4	0.2	0.8	0.0	100.0	82.7	99.1	88.1	11.4	0.5	0.0	100.0	69.8	4,413
Rural	2.2	91.5	2.0	4.1	0.3	100.0	93.7	75.2	16.1	7.9	0.2	0.6	0.0	100.0	91.3	99.2	83.2	16.5	0.2	0.0	100.0	71.6	1,530
Urban	14.7	80.8	1.5	2.8	0.2	100.0	95.5	61.9	16.2	20.9	0.2	0.9	0.0	100.0	78.1	99.0	90.7	8.6	0.7	0.0	100.0	68.8	2,883
Lumbini Province	14.7	82.5	1.0	1.8	0.0	100.0	97.2	69.1	14.3	11.9	0.7	4.0	0.0	100.0	83.4	95.3	84.6	13.6	1.8	0.1	100.0	70.2	9,874
Rural	13.4	82.9	1.9	1.8	0.0	100.0	96.3	76.3	7.9	8.0	0.9	6.9	0.0	100.0	84.2	92.2	77.8	19.8	2.2	0.1	100.0	65.3	3,998
Urban	15.6	82.2	0.4	1.8	0.0	100.0	97.8	64.2	18.7	14.5	0.6	2.0	0.0	100.0	82.9	97.4	89.1	9.3	1.4	0.1	100.0	73.5	5,876
Karnali Province	3.5	85.1	5.6	5.1	0.7	100.0	88.6	76.4	9.8	8.8	0.1	4.9	0.0	100.0	86.2	95.0	55.1	41.6	3.1	0.2	100.0	45.0	3,032
Rural	4.2	84.7	4.1	5.5	1.4	100.0	88.9	74.5	10.7	8.3	0.0	6.5	0.0	100.0	85.2	93.5	46.5	49.1	4.0	0.4	100.0	38.4	1,448
Urban	2.9	85.3	6.9	4.8	0.1	100.0	88.2	78.1	8.9	9.2	0.3	3.5	0.0	100.0	87.0	96.2	62.9	34.7	2.3	0.0	100.0	51.0	1,584
Sudoorpashchim Province	14.7	78.7	2.0	4.2	0.4	100.0	93.4	67.7	17.5	11.4	0.8	2.6	0.0	100.0	85.2	96.6	57.6	41.6	0.8	0.0	100.0	47.8	4,667
Rural	6.3	85.0	3.6	4.5	0.6	100.0	91.3	73.9	13.3	8.2	0.8	3.8	0.0	100.0	87.2	95.4	50.9	48.1	0.9	0.0	100.0	41.8	1,967
Urban	20.7	74.2	0.8	4.0	0.3	100.0	94.9	63.3	20.5	13.7	0.7	1.8	0.0	100.0	83.8	97.5	62.4	36.9	0.7	0.0	100.0	52.1	2,701
Education of household head																							
None	16.1	78.1	2.1	3.5	0.2	100.0	94.2	65.0	13.9	10.2	1.3	9.6	0.0	100.0	78.9	89.1	72.1	25.7	2.0	0.1	100.0	55.9	19,883
Basic (Gr 1-8)	18.9	77.1	1.4	2.5	0.2	100.0	96.0	63.7	16.8	15.8	0.4	3.3	0.0	100.0	80.5	96.3	81.2	17.2	1.6	0.0	100.0	64.2	18,572
Lower Basic (Gr 1-5)	21.0	74.7	1.5	2.6	0.3	100.0	95.7	65.0	16.9	14.1	0.6	3.4	0.0	100.0	81.9	96.0	79.4	18.8	1.8	0.1	100.0	63.6	11,309
Upper Basic (Gr 6-8)	15.1	81.3	1.2	2.3	0.1	100.0	96.4	61.7	16.5	18.5	0.2	3.0	0.0	100.0	78.2	96.7	84.0	14.7	1.3	0.0	100.0	65.1	7,263
Secondary (Gr 9-12)	20.4	75.6	1.8	1.9	0.3	100.0	96.0	55.2	22.0	20.6	0.7	1.4	0.0	100.0	77.2	97.8	90.0	9.1	0.7	0.2	100.0	67.3	12,277
Lower Secondary (Gr 9-10)	20.8	75.4	2.0	1.7	0.1	100.0	96.2	57.9	20.9	19.0	0.7	1.4	0.0	100.0	78.8	97.8	89.5	9.6	0.8	0.1	100.0	69.0	8,910
Upper Secondary (Gr 11-12)	19.5	75.7	1.4	2.5	1.0	100.0	95.2	48.1	24.8	25.1	0.8	1.2	0.0	100.0	72.9	98.0	91.5	7.6	0.3	0.6	100.0	62.7	3,367
Higher	33.5	63.4	1.2	1.8	0.0	100.0	96.9	44.0	33.1	22.7	0.2	0.0	0.0	100.0	77.1	99.8	94.7	4.7	0.5	0.2	100.0	71.2	3,069
Wealth index quintile																							
Poorest	3.9	83.1	4.9	7.5	0.6	100.0	87.0	71.9	9.8	8.9	0.9	8.5	0.0	100.0	81.7	90.6	49.7	46.3	3.8	0.1	100.0	38.0	10,763
Second	15.0	81.2	1.3	2.4	0.0	100.0	96.2	70.1	10.9	8.8	0.5	9.7	0.0	100.0	81.0	89.8	76.4	21.4	2.0	0.1	100.0	61.6	10,763
Middle	23.0	74.8	0.7	1.5	0.0	100.0	97.8	66.5	15.7	11.6	0.5	5.7	0.0	100.0	82.1	93.7	85.2	13.8	1.0	0.1	100.0	68.9	10,760
Fourth	27.0	71.2	0.5	1.2	0.1	100.0	98.2	60.6	17.4	20.7	0.3	0.9	0.1	100.0	78.0	98.7	93.0	6.7	0.3	0.0	100.0	72.5	10,767
Richest	27.0	70.6	1.2	0.9	0.3	100.0	97.6	36.5	36.9	26.3	0.3	0.0	0.0	100.0	73.3	99.6	98.8	0.8	0.2	0.2	100.0	70.8	10,763

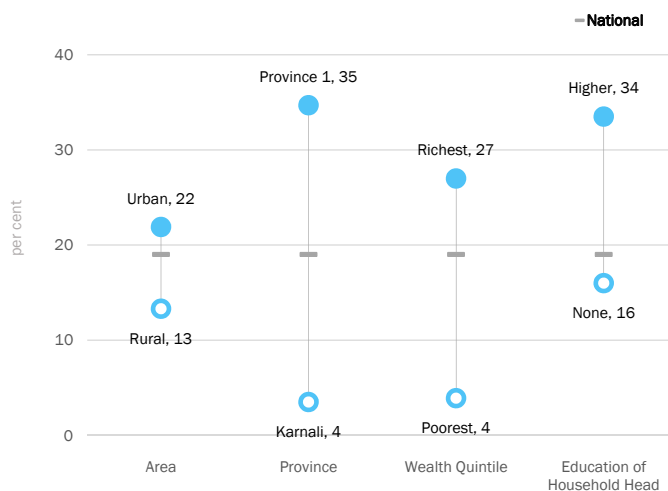
WASH: Inequalities in Basic Services

At least Basic Drinking Water



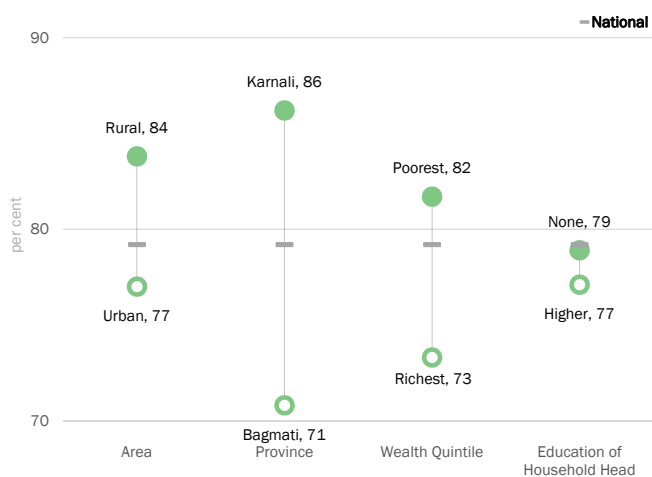
per cent of population using basic drinking water services by background characteristics

Safely Managed Drinking Water



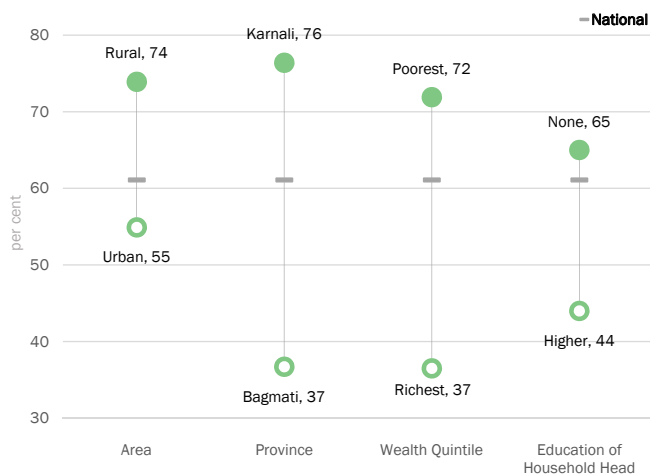
per cent of population using safely managed water services by background characteristics

At least Basic Sanitation



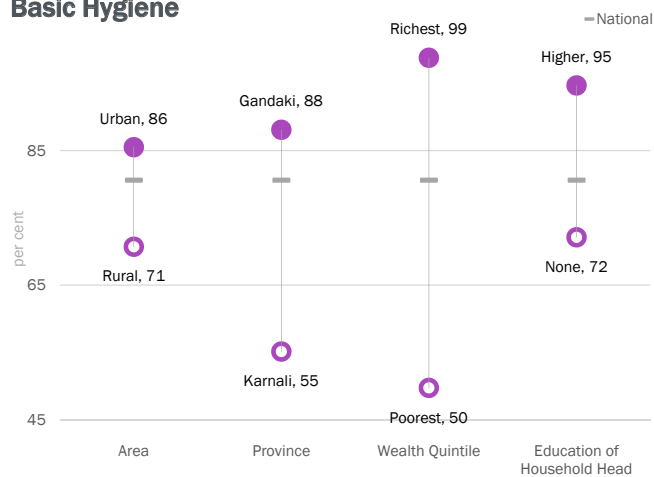
per cent of population using basic sanitation services by background characteristics

Safely Managed Sanitation



per cent of population using safely managed sanitation services by background characteristics

Basic Hygiene



per cent of population using basic hygiene services by background characteristics

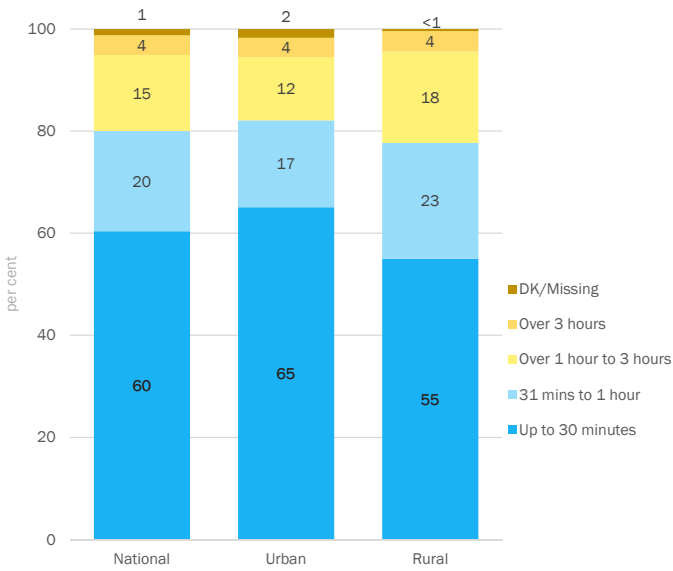
Provincial Data on Basic Services

Province	At least Basic Drinking Water	At least Basic Sanitation	Basic Hygiene
National	95.4	79.2	80.6
Province 1	95.7	85.8	84.5
Province 2	97.3	73.3	79.3
Bagmati Province	94.6	70.8	87.9
Gandaki Province	94.9	82.7	88.1
Lumbini Province	97.2	83.4	84.6
Karnali Province	88.6	86.2	55.1
Sudooapashchim Province	93.4	85.2	57.6

Per cent of population using basic drinking water, sanitation and hygiene services by region

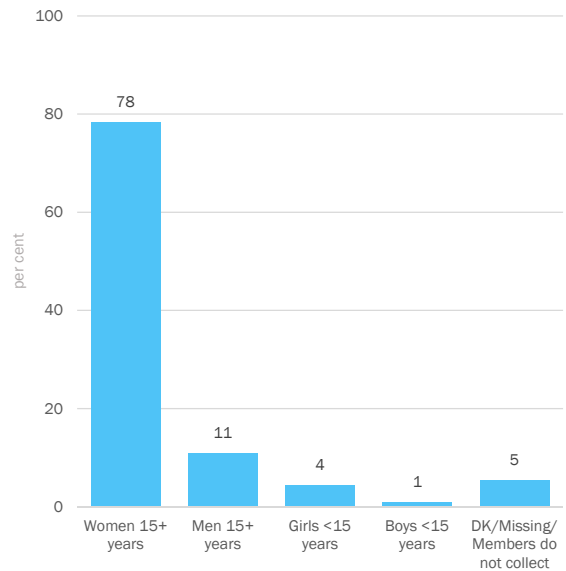
Accessibility of Drinking Water & Sanitation Facilities

Time Spent for Collecting Drinking Water by Household Without Drinking Water on Premises



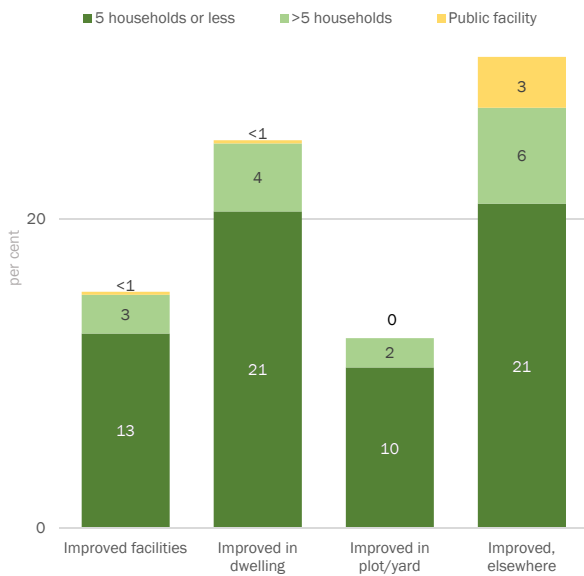
per cent of population by mean time person primarily responsible for water collection spends collecting water each day in households without water on premises

Who Primarily Collects Drinking Water for the Household



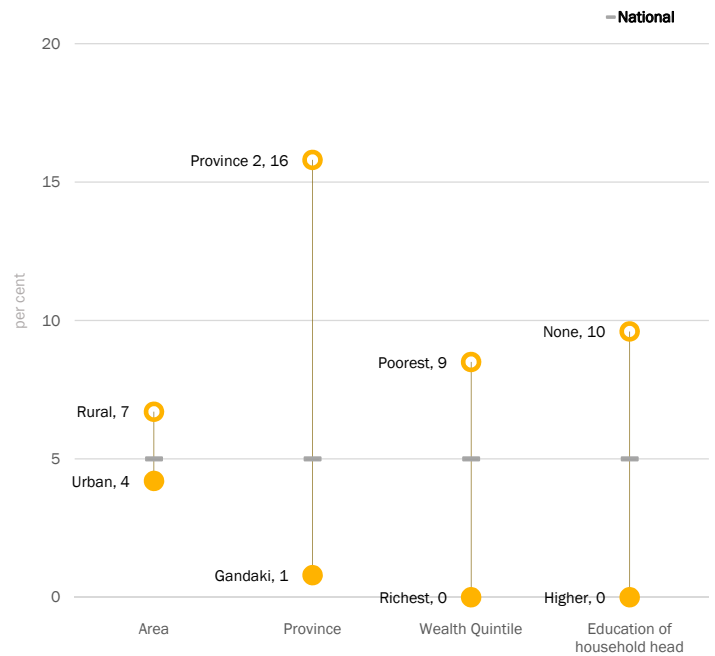
per cent of population by gender and age of person primarily responsible for collecting drinking water in households without water on premises

Sanitation Accessibility & Privacy



per cent of the population sharing improved sanitation facilities, by location of sanitation facility

Open Defecation



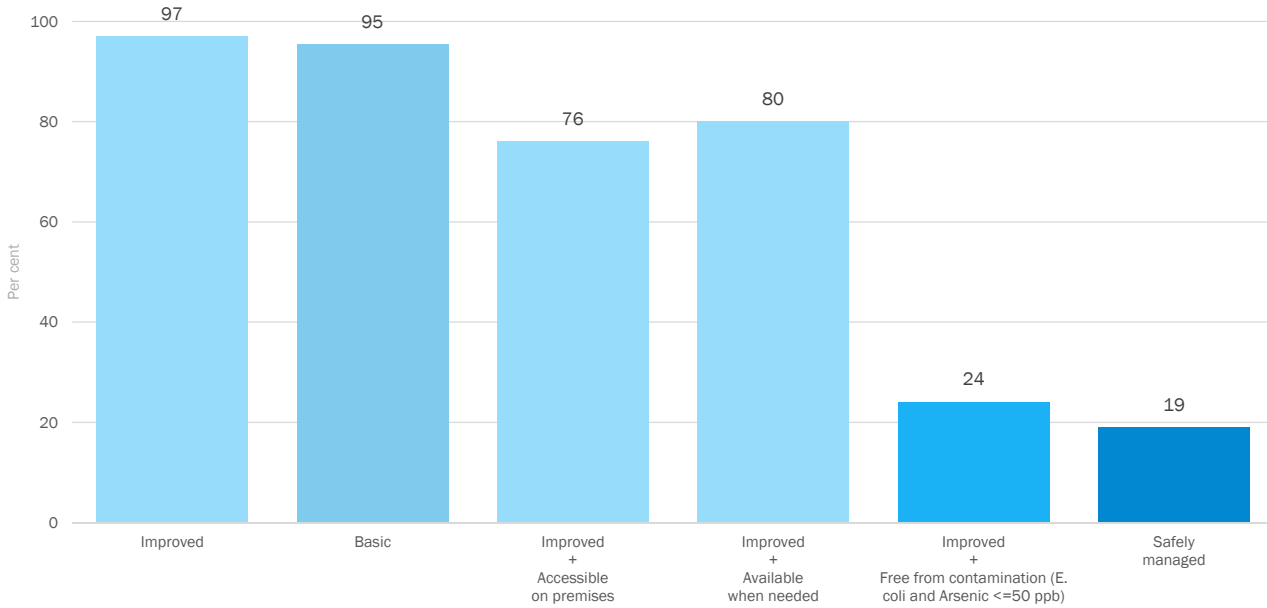
per cent of the population practising open defecation, by background characteristics

Key Messages

- Among households that do not have water on premises, most (60%) spend less than 30 minutes each day collecting water. Women and young girls (82%) are overwhelmingly responsible for water collection.
- Ninety-four per cent (94%) of the population in Nepal use improved sanitation facilities but only 11% are connected to sewers and 85% use on-site facilities such as septic tanks and improved pit latrines.
- Only 5% of household members in Nepal practice open defecation. However 16% of population in province 2 practice open defecation.
- The majority of households with on-site sanitation facilities safely disposed of excreta in-situ. On this basis, it is estimated that 61% of the population use safely managed sanitation services.
- Thirteen per cent (13%) of household members share improved sanitation facilities with 5 households or less while 3% of household members share improved sanitation facilities with 5 households or more.

Safely Managed Drinking Water Services: SDG 6.1.1

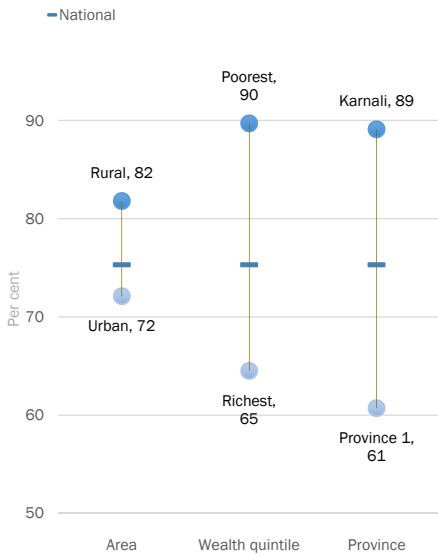
Improved, basic & safely managed drinking water



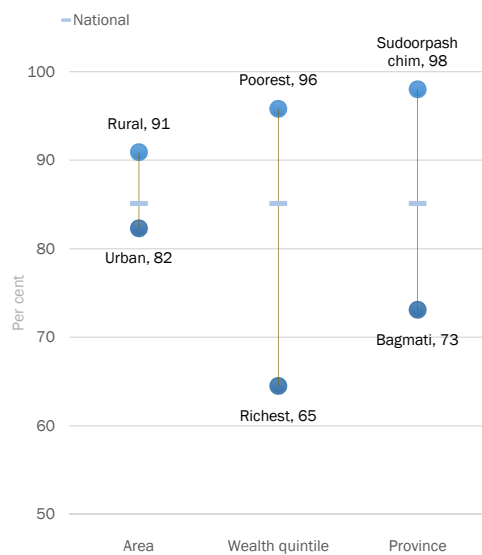
Per cent of population using improved, basic and safely managed drinking water services

Safely managed (SDG 6.1) are improved sources: accessible on premises, available when needed, free from contamination (both *E. coli* and Arsenic <=50 ppb, as per national standards)

Drinking Water Quality at Source



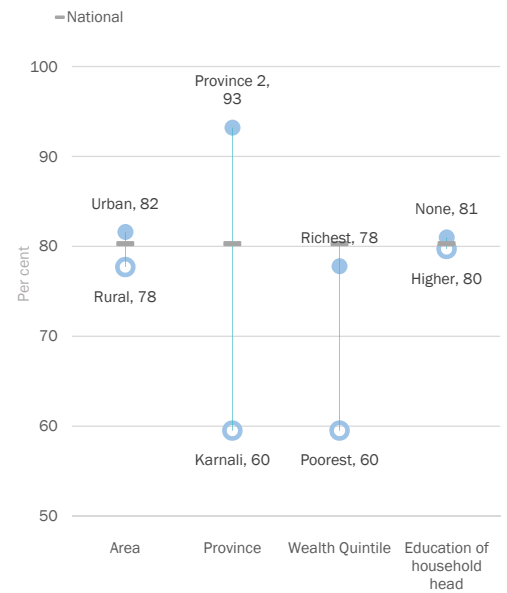
Drinking Water Quality at Household level



per cent of population using drinking water sources with *E. coli*. Water Quality Testing response rates for Source testing are 96%

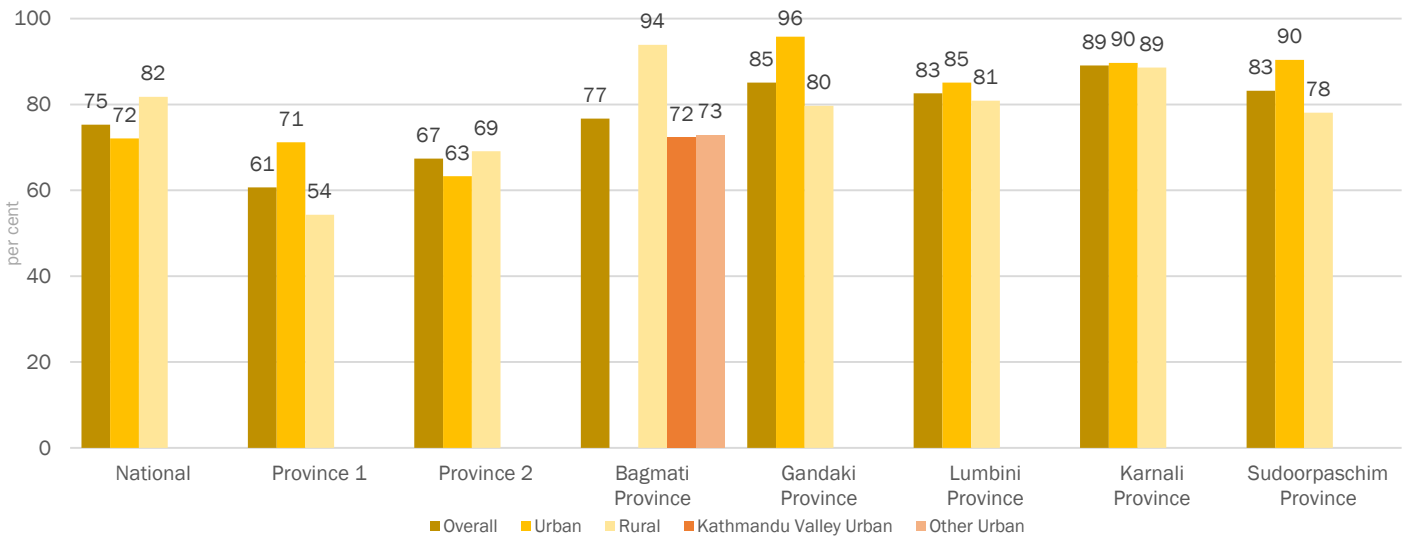
per cent of the population with *E. coli* in glass of drinking water in household drinking water. Water Quality Testing response rates for Household testing are 99%

Availability of Drinking Water

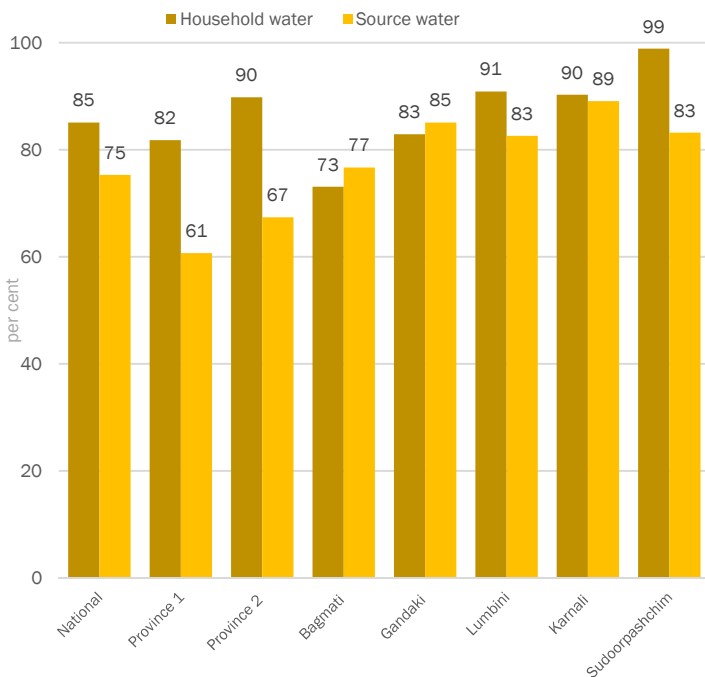


Per cent of population using drinking water sources with sufficient drinking water in the last month

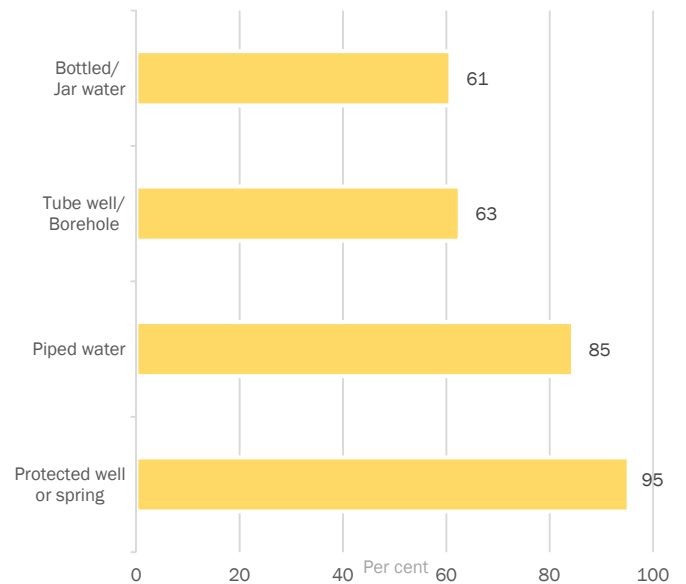
per centage of households with *E. coli* in source water



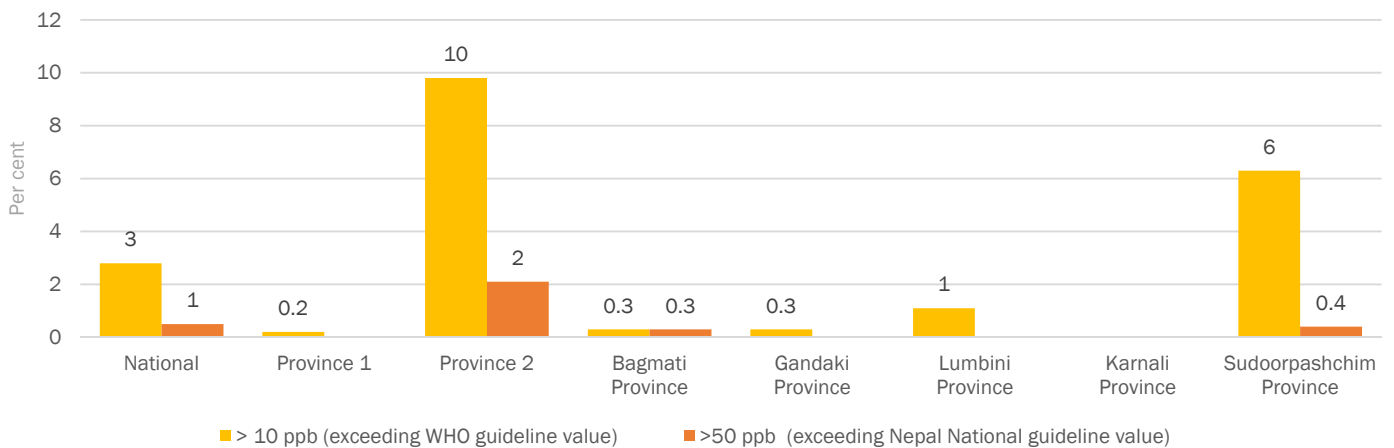
E. coli Contamination in Source and Household Water



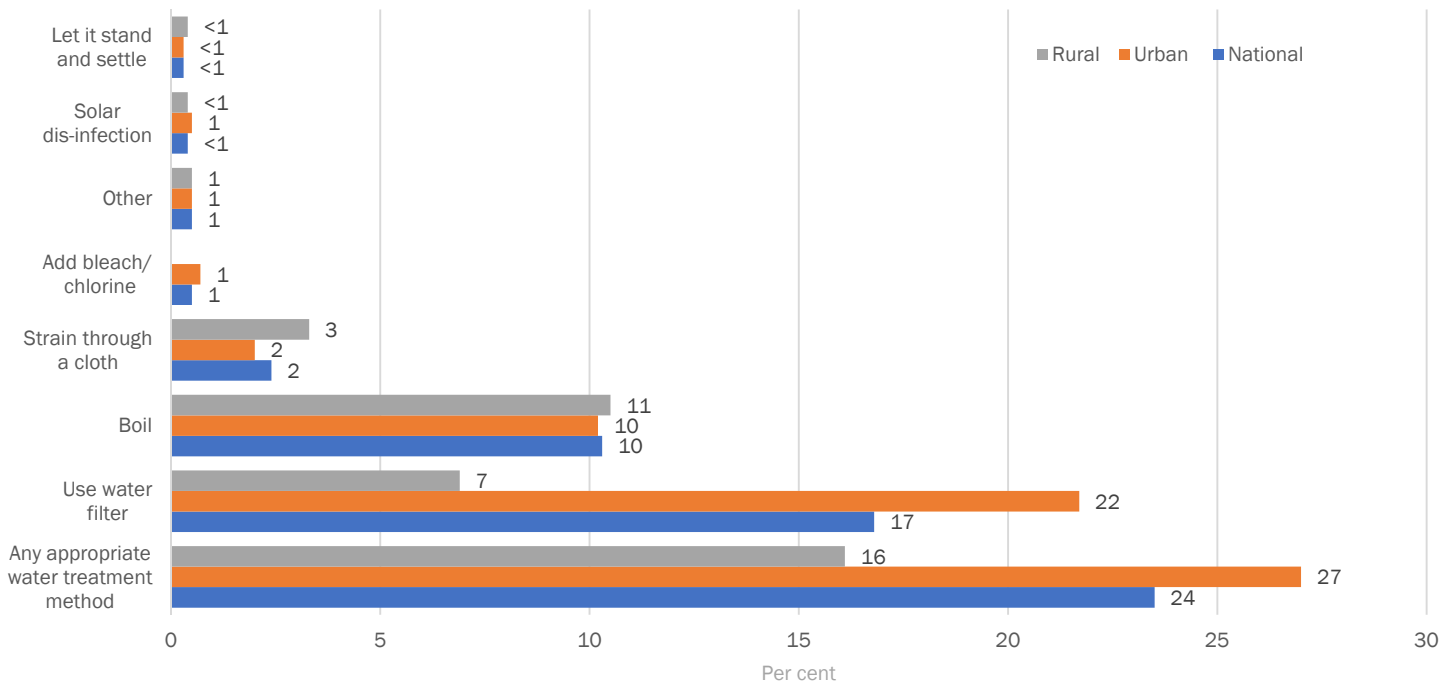
E. coli Contamination by source of drinking water



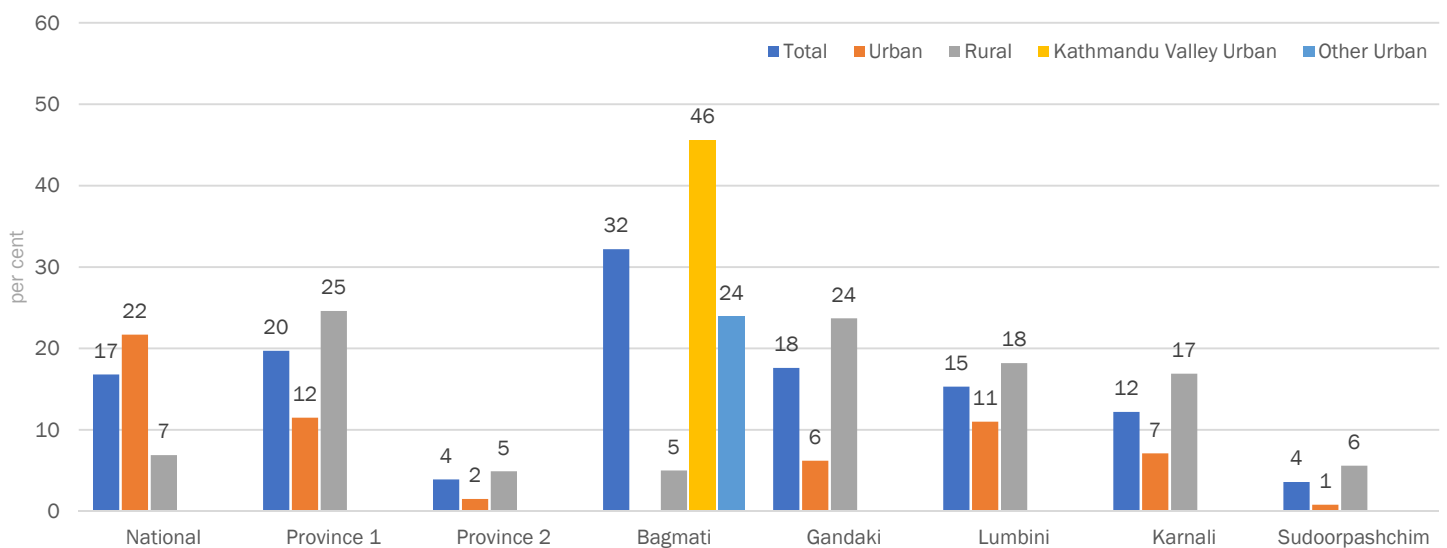
Household population with arsenic in water sources



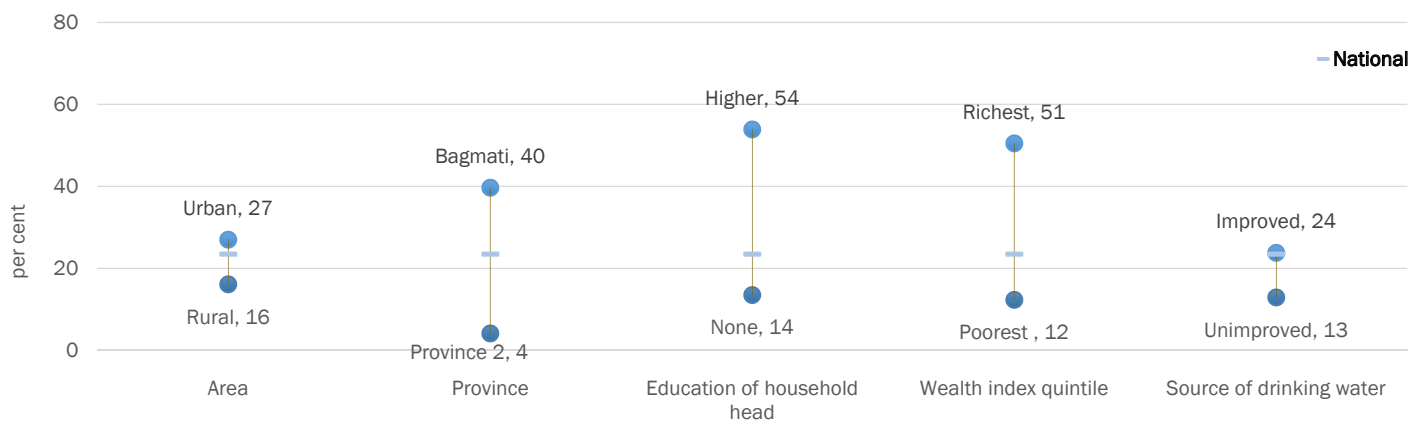
Water treatment method used in the household (use of multiple methods is possible)



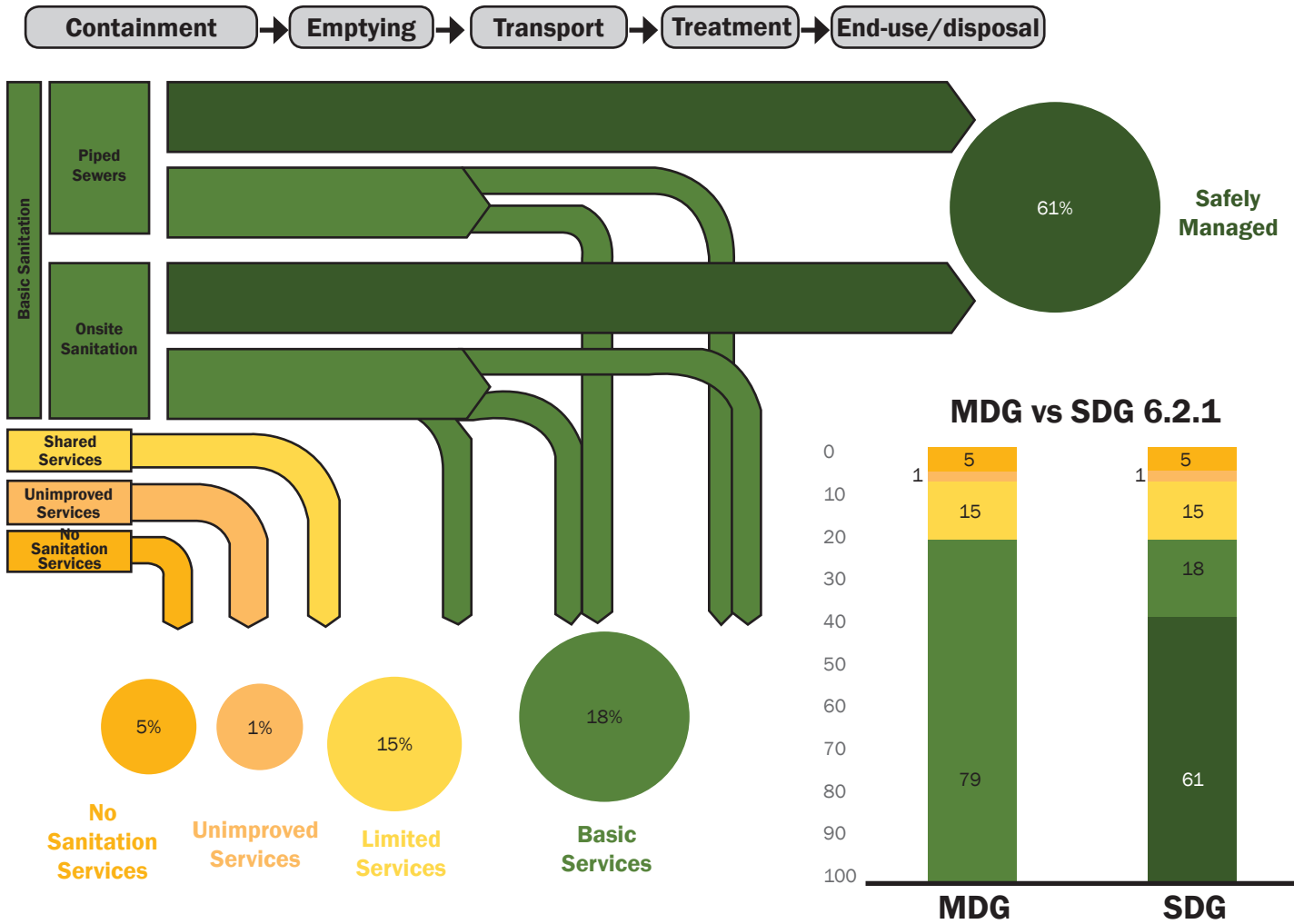
Household population using water filters to treat drinking water at the household level



Household members using any appropriate water treatment method



Sanitation Management Chain

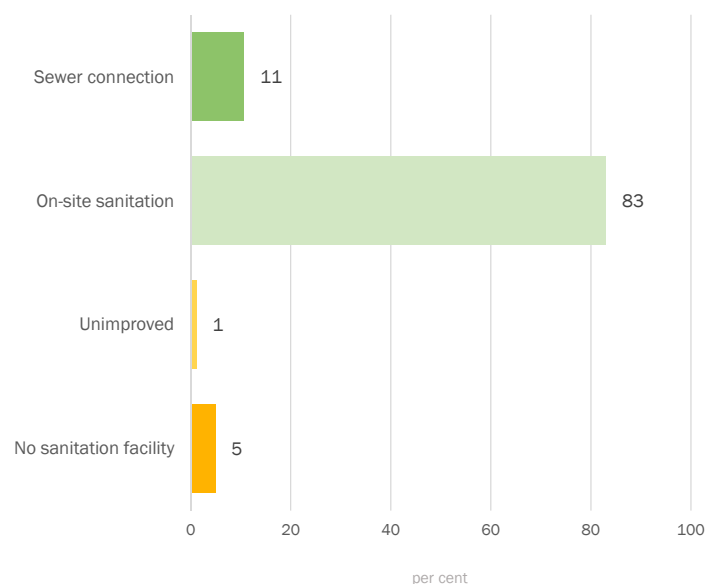


Unsafe discharge of faecal wastes

- Safely managed services
- Basic services
- Limited services
- Unimproved services
- No sanitation services

Safely Managed Sanitation Services: SDG 6.2.1

Types of Sanitation Facility



per cent of population by type of sanitation facility, grouped by type of disposal

Sewer connections include “Flush/pour flush to piped sewer system” and “Flush to DK where”

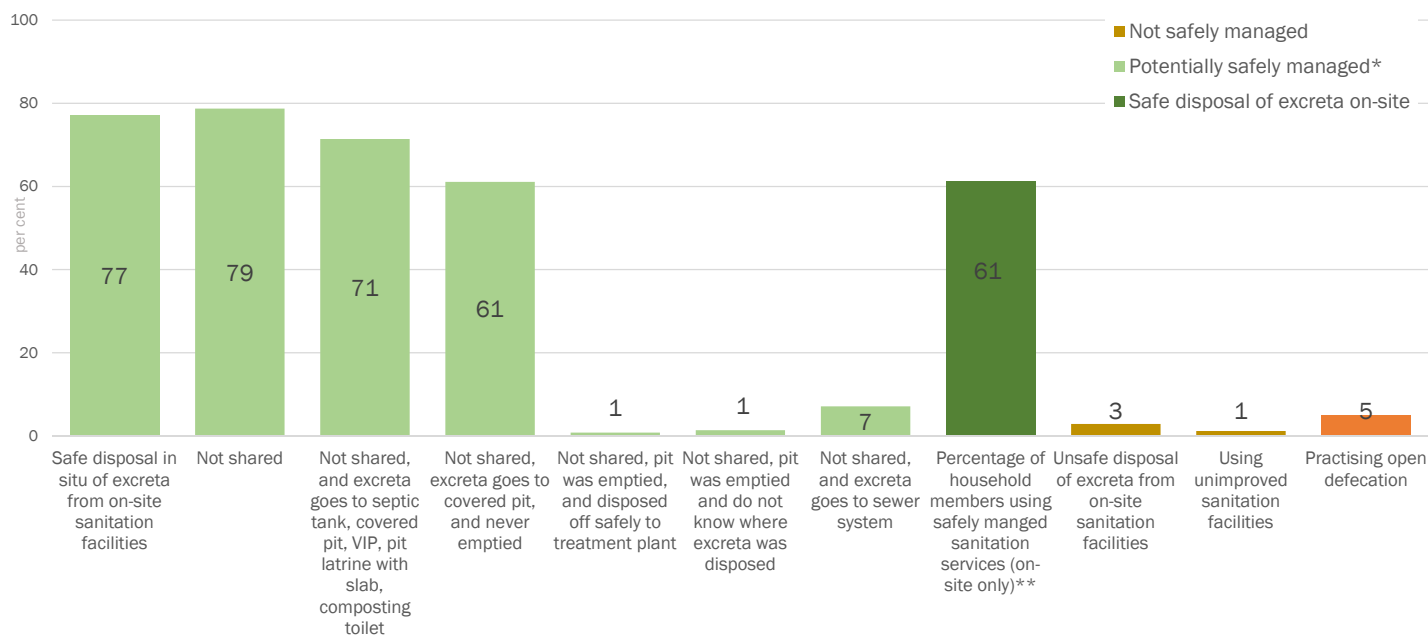
On-site sanitation facilities include “Flush/pour flush to septic”, “Flush/pour flush to latrine”, “Ventilated improved pit latrine”, “Pit latrine with slab” and “Composting toilet”

Types of Sanitation Facility by Region

Region	Sewer connection	On-site sanitation
National	11	83
Province 1	2	93
Province 2	1	82
Bagmati Province	39	59
Gandaki Province	8	91
Lumbini Province	1	94
Karnali Province	1	93
Sudoorpashchim Province	3	93

per cent of population using sewer connections and onsite sanitation, by region

Management of excreta from household sanitation facilities



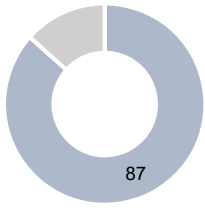
per cent of population by management of excreta from household sanitation facilities

*Additional information required to determine whether faecal sludge and wastewater is safely treated.

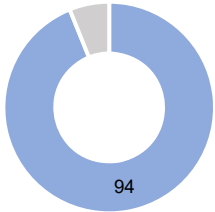
**As there is no information on the treatment of excreta for improved sanitation facilities, only those never emptied are considered as the indicator for safely managed sanitation services.

Safely managed sanitation services represents an ambitious new level of service during the SDGs and is the indicator for target 6.2. Safely managed sanitation services are improved facilities that are not shared with other households and where excreta are safely disposed of in-situ or transported and treated off-site. The MICS survey collected information on the management of excreta from on-site facilities. For households where excreta are transported off-site (sewer connection, removal for treatment), further information is needed on the transport and treatment of excreta to calculate the proportion that are safely managed.

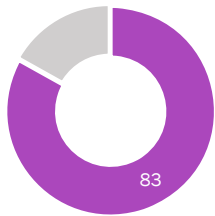
Menstrual Hygiene Management



Women with a private place to wash & change at home



Women with appropriate materials



Women with appropriate materials & a private place to wash & change at home

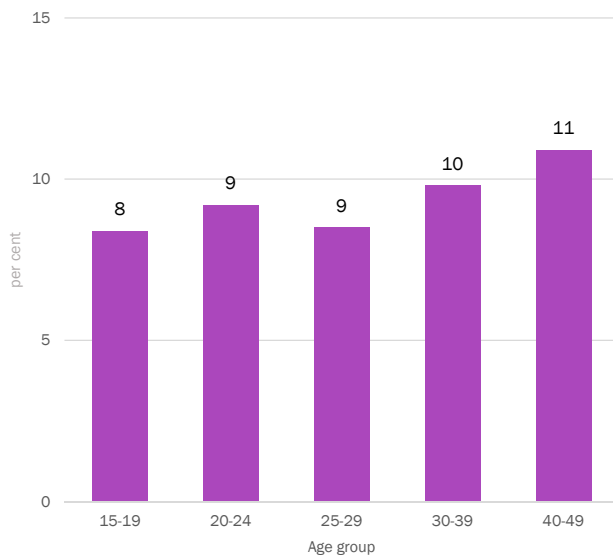
Denominator for all 3 indicators: women age 15-49 who reported menstruating in the last 12 months

Access to Appropriate Materials & Private Place to Wash & Change at Home



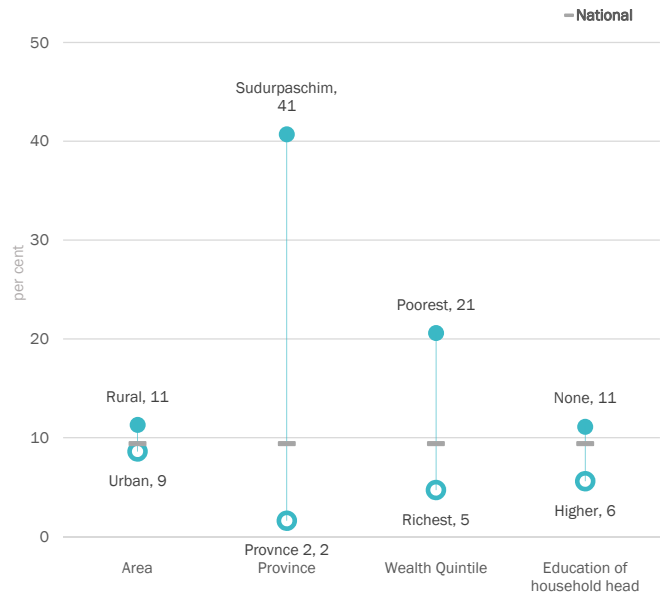
Per cent of women age 15-49 using appropriate menstrual hygiene materials with a private place to wash and change while at home, among women reporting menstruating in the last 12 months

Exclusion from Activities during Menstruation



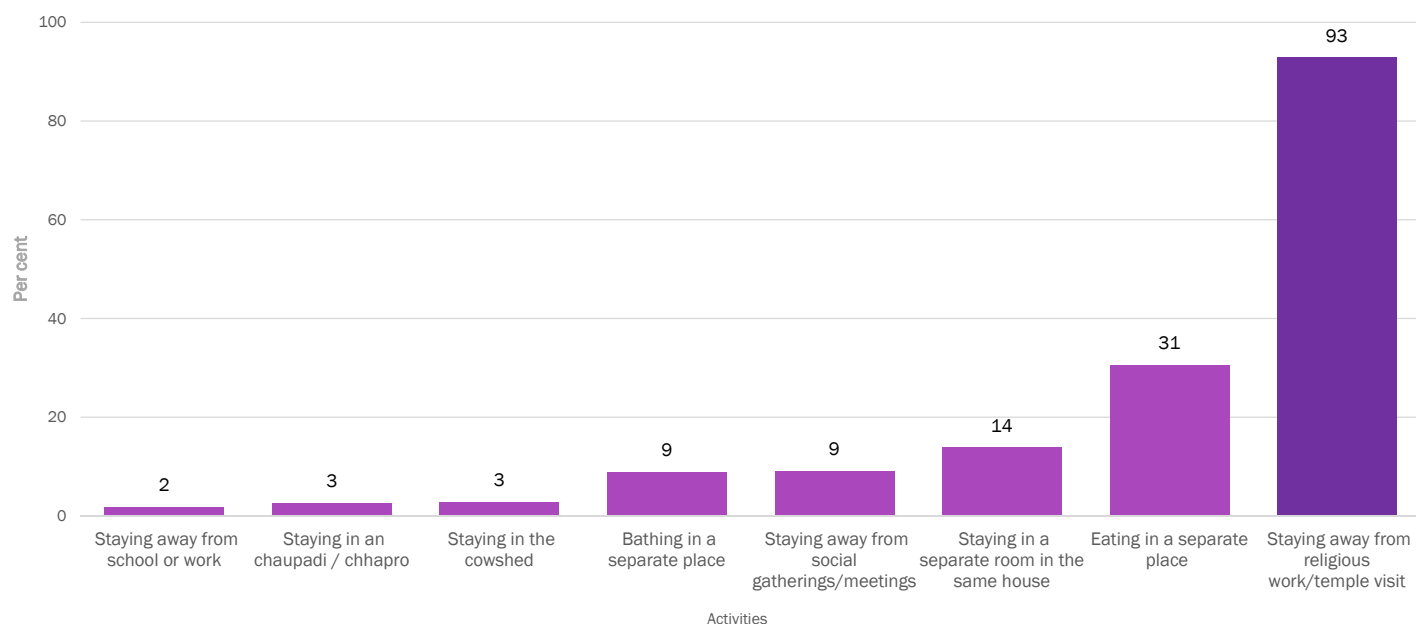
Per cent of women who did not participate in social activities, school or work due to their last menstruation in the last 12 months, by age, among women reporting menstruating in the last 12 months

Exclusion from Activities during Menstruation by Various Characteristics



Per cent of women who did not participate in social activities, school or work due to their last menstruation in the last 12 months, by residence, wealth quintile, education and region, among women reporting menstruating in the last 12 months

Exclusion from Activities during Menstruation



Provincial Data on Exclusion from Activities during Menstruation

Province	Staying in an chaupadi / chhapro	Staying in a separate room in the same house	Staying in the cowshed	Eating in a separate place	Bathing in a separate place	Staying away from school or work	Staying away from social gatherings/meetings	Staying away from religious work/temple visit
National	2.5	13.8	2.8	30.6	8.9	1.8	9.0	92.8
Province 1	0.5	2.3	0.3	21.9	1.2	0.5	15.0	92.3
Province 2	0.5	1.9	0.3	7.5	0.5	0.4	1.4	92.5
Bagmati Province	0.2	9.9	0.1	31.5	2.3	0.4	2.8	93.6
Gandaki Province	0.2	17.5	0.8	35.1	3.1	0.5	3.6	94.9
Lumbini Province	1.8	10.4	1.5	26.1	5.8	1.2	5.6	90.8
Karnali Province	10.2	41.1	18.9	70.9	28.1	2.8	17.7	93.8
Sudoorpashchim Province	17.4	59.7	16.1	71.5	62.6	13.8	39.5	93.7

The Nepal Multiple Indicator Cluster Survey (MICS) was carried out in 2019 by the Central Bureau of Statistics as part of the global MICS programme. Technical support was provided by the United Nations Children's Fund (UNICEF). UNICEF and Government of Nepal provided financial support.

The objective of this snapshot is to disseminate selected findings from the Nepal MICS 2019 related to Drinking Water, Sanitation & Hygiene (WASH). Data from this snapshot can be found in tables WS.1.1 to WS.4.2 in the Survey Findings Report.

Further statistical snapshots and the Survey Findings Report for this and other surveys are available on mics.unicef.org/surveys.