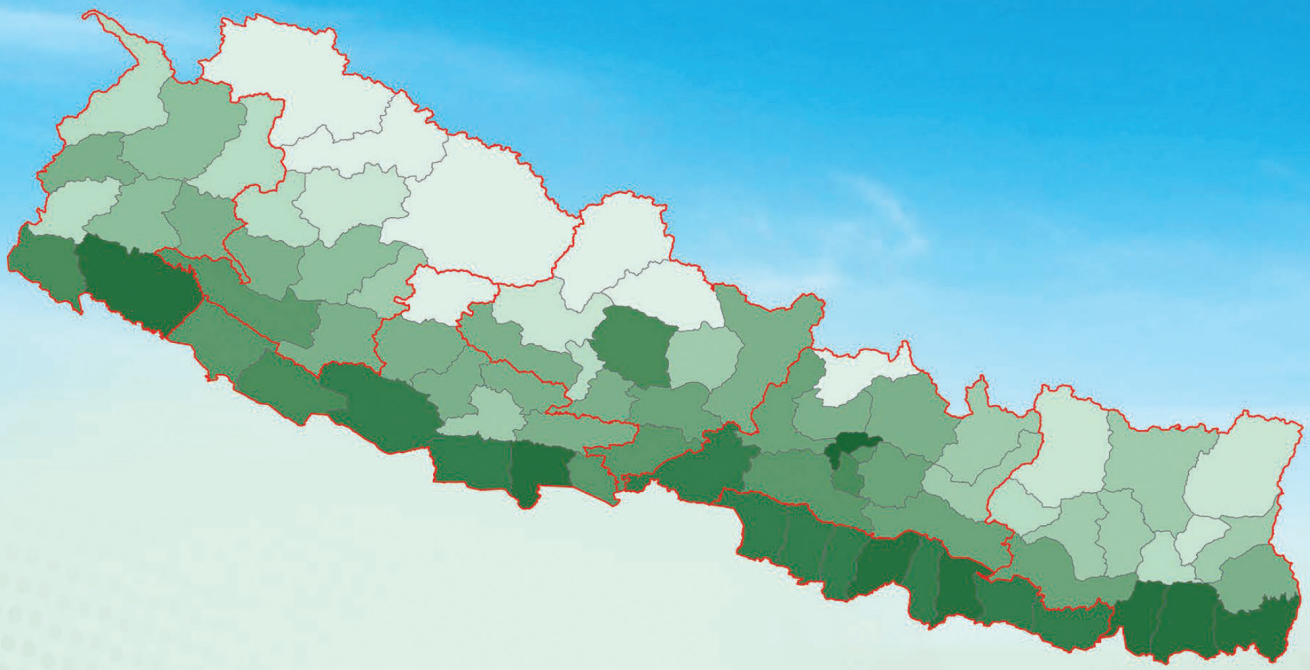
Thematic Report-XXII

National Population and Housing Census 2021

Water Supply and Sanitation Situation in Nepal



Government of Nepal
Office of the Prime Minister and Council of Ministers
National Statistics Office
Thapathali, Kathmandu

MY CENSUS
MY PARTICIPATION
NATIONAL POPULATION CENSUS 2021

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Foreword

The National Population and Housing Census (NPHC) is the only source that consistently provides demographic and housing data down to the lowest administrative unit, i.e., the Ward. To meet the needs of a broad range of users, we have included brief explanations of the data in our reports. Over the years, the National Statistics Office (NSO) has focused not just on statistical reports but also on valuable analytical ones that cater to a wide audience, both within and outside the country. The production and dissemination of quality statistics are not merely public goods but national resources in the data and information age.

Access to safely managed drinking water and sanitation is fundamental to public well-being and societal progress. Evaluating these conditions is essential not only as a core driver of socioeconomic advancement, but also as a foundation for strategic development planning. This report examines critical issues surrounding drinking water and sanitation services, highlighting their vital interlinkages with education, health, livelihoods, and broader social dimensions. The resulting insights will support policymakers in designing inclusive, equitable initiatives that widen opportunities, strengthen social cohesion and reduce regional disparities.

I am pleased to present the report *Water Supply and Sanitation Situation in Nepal*. Drawing on empirical data from the National Population and Housing Census (NPHC) 2021 and the Nepal Multiple Indicator Cluster Survey (NMICS) 2024/25, this publication delivers an in-depth analysis of drinking water access and sanitation practices. Crucially, the report introduces the calculation of water and sanitation equity indices across all 753 local levels, providing an objective, evidence-based benchmark to guide municipal planning, prioritize resource allocation, and foster inclusive development nationwide.

I extend my appreciation to all contributors for their dedication in bringing this important analysis to light. I am confident that these findings will guide policymakers and planners in shaping development strategies for a more prosperous and sustainable future.

I would like to specifically commend the staff of the Population Section for their tireless efforts in managing data, extending administrative support and reviewing the report. The Head of the Social Statistics Division at the NSO played a pivotal role in coordinating all activities, and I deeply appreciate his leadership and contributions. Special thanks are due to thematic experts Mr. Nebin Lal Shrestha and Mr. Keshab Kumar Gautam for their thorough data analysis and for articulating these critical findings. I also gratefully acknowledge the invaluable technical support extended by the United Nations Human Settlements Programme (UN-Habitat) and the UNICEF Country Office.

Lastly, I encourage constructive feedback from our users to improve future editions of this report.

October, 2026

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Preface

The publication of thematic and analytical reports based on census and national survey data is an important step in turning raw data into useful information. As the National Statistics Office (NSO) continues to improve the statistical system and address data gaps at all levels of Nepal, our main priority has been to make complex statistical findings easier to understand and use for evidence-based planning and decision-making

The report Water Supply and Sanitation Situation in Nepal is an important step in understanding the country's water and sanitation situation. It combines data from the National Population and Housing Census (NPHC) 2021 and the Nepal Multiple Indicator Cluster Survey (NMICS) 2024/25 to provide a clearer picture of water and sanitation status of the households and population. The report also develops water and sanitation equity indices for all 753 local levels, helping local governments identify gaps and inequalities. These findings can support municipalities in preparing their water and sanitation plans in line with national targets.

The successful completion of this study was made possible through strong technical coordination, careful data processing, and teamwork among the concerned institutions. I would like to sincerely thank the Population Section for its technical support and efforts in checking and verifying the data during the analysis and report preparation.

I would like to express my sincere thanks to everyone who contributed to this report. I also extend our appreciation to UN-Habitat and UNICEF for their valuable technical support and cooperation throughout this work.

I hope this report will be a useful resource for ministries, provincial authorities and local governments, development partners and civil society organizations working to improve access to safe drinking water and proper sanitation across Nepal. We welcome any suggestions and feedback to improve the quality of our future reports.

October, 2026

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AG	Annex table series (Aggregate tables for JMP Ladder – Water, Sanitation and Handwashing)
AS	Annex table series (Comparison tables for sanitation)
AW	Annex table series (Comparison tables for water)
CBS	Central Bureau of Statistics
CLTS	Community-Led Total Sanitation
COVID-19	Corona Virus Disease
DEGURBA	Degree of Urbanization
DWEI	Drinking Water Equity Index
EA	Enumeration Area
ECED	Early Childhood Education and Development
EI	Equity Index
HH	Household
HPCIDBC	High Powered Committee for Integrated Development of the Bagmati Civilization
JMP	Joint Monitoring Programme (WHO/UNICEF)
KTM	Kathmandu
KUKL	Kathmandu Upatyaka Khanepani Limited
LDWS	Lift Drinking Water System
MAE	Mean Absolute Error
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
NDWQS	National Drinking Water Quality Standards
NMICS	Nepal Multiple Indicator Cluster Survey
NPC	National Planning Commission
NPHC	National Population and Housing Census
NSO	National Statistics Office
NWASH-MIS	National Water Supply, Sanitation and Hygiene Management Information System
OD	Open Defecation

ODF	Open Defecation Free
PCA	Principal Component Analysis
PP	Percentage Points
RM	Rural Municipality
RMSE	Root Mean Square Error
SAE	Small Area Estimation
SDG	Sustainable Development Goal
SEI	Sanitation Equity Index
SM	Safely Managed
SMOSS	Safely Managed On-Site Sanitation
UM	Urban Municipality
UN	United Nations
UNICEF	United Nations Children's Fund
UN-Habitat	United Nations Human Settlements Programme
VIP	Ventilated Improved Pit (latrine)
VNR	Voluntary National Review
WASH	Water, Sanitation and Hygiene
WASH EI	WASH Equity Index
WHO	World Health Organization
WPI	WASH Performance Index
WS	Water Supply (MICS indicator code series)
WSS	Water Supply and Sanitation

कार्यकारी सारांश

खानेपानी, सरसफाइ र स्वच्छतातर्फको सङ्क्रमणकालः पहुँचदेखि सुव्यवस्थित सेवासम्म

खानेपानी, सरसफाइ र स्वच्छताका क्षेत्रमा आधारभूत स्तरको सुविधा प्रदान गर्ने पूर्वाधारको पहुँच विस्तार गर्नुपर्ने चुनौतीलाई नेपालले धेरै हदसम्म सम्बोधन गरिसकेको छ । आगामी दशकको लागि टड्कारो चुनौतीका रूपमा वर्तमान पूर्वाधारलाई सुरक्षित, विश्वसनीय, दिगो र समतामूलक सेवाजन्य पूर्वाधारमा रूपान्तरण गर्नु नै हो । यस्तो निष्कर्ष मूलतः तीनओटा कालखण्डमा विस्तारित प्रमाणहरूमा आधारित छ । यस प्रतिवेदनले ती तीनओटा कालखण्डलाई प्रतिनिधित्व गर्ने तथ्याङ्कीय मानहरूको तुलना नगरेर तीन फरक प्रश्नहरूको उत्तर प्रस्तुत गर्ने अभीष्ट राख्दछ ।

सन् २०११ र २०२१ को जनगणनाका आधारमा तयार गरिएको ऐतिहासिक आधाररेखाले नेपालको दीर्घकालीन संरचनागत रूपान्तरणलाई अभिलेखन गरेको छ । उदाहरणका लागि, शौचालय नहुने घरपरिवारको हिस्सा २०११ को ५३.२ प्रतिशतबाट २०२१ मा ४.५ प्रतिशतमा सीमित भएको छ । त्यस्तै सन् २०२१ सम्म आइपुग्दा अगाडिको ट्युबवेलको बाहुल्यतालाई पाइपजडित खानेपानी सुविधाले खानेपानीको प्रमुख स्रोतका रूपमा स्थान बनाएको छ । यस प्रतिवेदनले सन् २०१९ र २०२४/२५ को नेपाल बहुसूचक सर्वेक्षणलाई नेपालमा खानेपानी, सरसफाइ र स्वच्छताजन्य सेवाको गुणस्तर, सुरक्षा, र विश्वसनीयतामा पछिल्ला पाँच वर्षमा कसरी परिवर्तन भइरहेको छ भन्ने तथ्यलाई उजागर गर्न तथा पछिल्लो कालखण्डमा हासिल भएका उपलब्धिको लेखाजोखा गर्न प्रमुख आधारका रूपमा लिएको छ। साथै, उक्त क्षेत्रको वर्तमान अवस्था आँकलन तथा नीतिगत निष्कर्षका लागि यस प्रतिवेदनमा मूलतः सन् २०२४/२५ को सर्वेक्षणको नतिजा तथा सन्दर्भ समयलाई आधार मानिएको छ ।

खानेपानी, सरसफाइ र स्वच्छताको राष्ट्रिय मानतालिका

प्रमुख सूचक	वर्तमान अवस्था नेपाल बहुसूचक सर्वेक्षण २०२४/२५ (जनसङ्ख्याको प्रतिशत)	तथ्यले प्रतिविम्बित गरेको विषय
घरपरिसरमै उपलब्ध खानेपानी	९०%	आधारभूत पहुँच शतप्रतिशततर्फ उन्मुख ।
सुरक्षित तवरले व्यवस्थापन गरिएको खानेपानी सुविधा	४७.५%	पहुँच र सुरक्षित सेवामा ठुलो अन्तर विद्यमान नै रहेको अवस्था ।

प्रमुख सूचक	वर्तमान अवस्था नेपाल बहुसूचक सर्वेक्षण २०२४/२५ (जनसङ्ख्याको प्रतिशत)	तथ्यले प्रतिविम्बित गरेको विषय
सुधारिएको सरसफाइ	९२.८%	सरसफाइको पहुँचमा नेपालले ठुलो प्रगति गरेको अवस्था ।
सुरक्षित तवरले व्यवस्थापन गरिएको सरसफाइ सुविधा	३९.९%	सुरक्षित सरसफाइ अझै पनि अपरिपूर्त लक्ष्यका रूपमा रहेको ।
साबुन पानीले हात धुने व्यवहार	८६.४%, सन् २०१९ को ८०.७%	स्वच्छताको अवस्थामा सुधार आएको छ तथापि केही प्रदेशमा साबुनजन्य अन्तर विद्यमान नै छ ।
खुला स्थलमा दिसापिसाबको अवस्था	५.५%, सन् २०१९ को ५.०%	खुला दिशामुक्तका क्षेत्रमा दिगो उपलब्धि हासिल गर्न अझै सकिएको छैन र ठोस प्रयास अपेक्षित छ ।

तीनओटा सर्तहरु एकै साथ पपूरा भएको अवस्थामा सुरक्षित तवरले व्यवस्थापन गरिएको खानेपानी सुविधा प्राप्त भएको मानिन्छ ।यसको लागि सुधारिएको स्रोतको खानेपानी घरपरिसरभित्रै रहेको, आवश्यक परेको अवस्थामा पर्याप्त मात्रमा उपलब्ध हुने र इ-कोली ब्याक्टेरिया रहित हुनुपर्दछ ।राष्ट्रियस्तरमा ९० प्रतिशत जनसङ्ख्याको घरपरिसरभित्रै सुधारिएको खानेपानीमा पहुँच भएको, ७८.३ प्रतिशतलाई आवश्यक परेको बेलामा पानी पर्याप्त उपलब्ध भएको र ५३.९ प्रतिशतको खानेपानीको स्रोत इ-कोली ब्याक्टेरियारहित भएको पाइयो भने ४७.५ प्रतिशतको मात्र तीनओटै सर्तहरु पूरा भएको पाइयो ।बहुसूचक सर्वेक्षण २०२४/२५ अघिको १२ महिनाको अवधिमा खानेपानी अपर्याप्त थियो भन्ने जनसङ्ख्यामध्ये उक्त अपर्याप्तताको कारणमा लगभग समान अनुपातको स्रोतमा पहुँचयोग्य नभएको (४३.६ प्रतिशत) र स्रोत सञ्चालनमा नरहेको (४०.२ प्रतिशत, बागमतीमा ५४.१ प्रतिशतसम्म रहेको) देखिन्छ । त्यस्तै, खानेपानी सङ्कलनपश्चात् पानीको गुणस्तर घटेको देखिन्छ ।घरपरिवारमा प्रयोग गरिने खानेपानीमा इ-कोली पोजिटिभ देखिएका जनसङ्ख्या ६१.२ प्रतिशत पाइयो जब कि सोही पानीको स्रोतमा इकोलीको पोजिटिभ ४६.१ प्रतिशतको मात्र थियो ।

सुरक्षित रूपले व्यवस्थापन गरिएको सरसफाइको अवस्था हुन खानेपानीको जस्तै तीनओटा सर्तहरु पूरा भएको हुनुपर्दछ । घरपरिवारले सुधारिएको चर्पी प्रयोग गरेको, उक्त चर्पी अन्य घरपरिवारसँग साझा नगरिएको र दिसाजन्य मलमूत्र चर्पी रहेकै स्थानमा सुरक्षित भण्डारण भएको वा प्रशोधनका लागि सुरक्षित किसिमले ढुवानी भएको सर्तहरू एकैसाथ पूरा भएको अवस्थामा सुरक्षित रूपले व्यवस्थापन गरिएको सरसफाइ भएको बुझिन्छ ।

राष्ट्रियस्तरमा ९२.८ प्रतिशत जनसङ्ख्याले सुधारिएको चर्पी प्रयोग गरेको र ७९.९ प्रतिशतको चर्पी एकल प्रयोगमा रहेको पाइयो । चर्पी रहेकै स्थानमा दिसाजन्य मलमूल भण्डारण नगर्ने प्रकृतिका चर्पीको (जस्तैः सार्वजनिक ढलमा जोडिएका वा भण्डारण टंकी खाली गर्ने) हकमा मलमूत्रको सुरक्षित विसर्जन (सुरक्षित ढुवानी र प्रशोधन) भए नभएको अवस्था बहुसूचक सर्वेक्षणबाट निक्यौंल गर्न नसकिने भएकोले चर्पी रहेकै स्थानमा मलमूल भण्डारण गरी त्यहीँ विसर्जन गर्नेलाई मात्र सुरक्षित रूपले व्यवस्थापन गरिएको चर्पी प्रयोग गर्ने अन्तर्गत राखियो जसअनुसार यसप्रकारको जनसङ्ख्या ३९.९ प्रतिशत मात्र रहेको पाइयो । सुधारिएको र सुरक्षित व्यवस्थापन गरिएको बिचको ५२.९ प्रतिशत बिन्दु फरकमध्ये साझा चर्पी प्रयोग गर्ने १२.९ प्रतिशत र सुरक्षित भण्डारण नभएका वा प्रशोधनको अवस्था यकिन नभएका झण्डै दुईतिहाइ, अर्थात् ४०.० प्रतिशत देखिन्छ ।

राष्ट्रियस्तरको यस्तो चित्रण यस प्रतिवेदनले प्रस्तुत गरेको स्थानीय तहको अनुमानजन्य मोडलमा आधारित छ जुन खण्ड ५ मा दिइएको छ । यस मोडलमा खानेपानीसँग सम्बन्धित औसत निरपेक्ष भ्रमांश (Mean Absolute Error) १.५७ प्रतिशत विन्दु देखिएको छ भने सरसफाइका सन्दर्भमा यस्तो मान ३.६१ प्रतिशत विन्दु रहेको छ । मोडलमा खानेपानीको सहसम्बन्धगत मानाङ्क ०.९९ भन्दा बढी रहेको छ र यसले स्थानीय तहहरूका बिचमा विद्यमान विविधतालाई विश्वसनीय तवरले समेटेको पुष्टि गर्दछ ।

नीति तथा नियमनकारी संरचना

नेपालको संविधानको धारा ३५(४) ले स्वच्छ खानेपानी तथा सरसफाइमा प्रत्येक नागरिकको मौलिक हकलाई प्रत्याभूति गरेको छ भने खानेपानी तथा सरसफाइ ऐन २०७९ र खानेपानी तथा सरसफाइ नियमावली २०८० पनि थप कानुनी साधनका रूपमा रहेका छन् । राष्ट्रिय खानेपानी, सरसफाइ तथा स्वच्छता नीति २०८० ले ग्रामीण र सहरी क्षेत्रका पूर्ववर्ती बेग्लाबेग्लै नीतिलाई पहिलोपटक एकीकृत गर्दै राष्ट्रिय खानेपानी गुणस्तर मानक २०७९ का साथसाथै पानीको राष्ट्रिय गुणस्तर र जोखिम अनुगमन प्रणालीका लागि NWASH-MIS पनि अवलम्बन गरेको छ ।

दिगो विकास लक्ष्य प्राप्तिका लागि नेपालले आफैं तय गरेको मार्गचित्रका सन्दर्भमा मिश्रित प्रगति हासिल भएको देखिन्छ । राष्ट्रिय योजना आयोगले सन् २०२२ सम्मको लागि निर्धारण गरेको ५० प्रतिशत लक्ष्यको विपरीत केवल २५.८ प्रतिशत जनसङ्ख्याले सुरक्षित रूपले व्यवस्थापन गरेको खानेपानीमा पहुँच प्राप्त गरेको आयोगकै प्रशासनिक अनुगमनबाट देखिन्छ । उता आधारभूत खानेपानीमा पहुँचलाई हेर्दा सन् २०२२ सम्मको लागि निर्धारित ९०.२ प्रतिशत लक्ष्यको बदलमा ९६.४ प्रतिशत उपलब्धि हासिल भएको देखिन्छ । सन् २०२४/२५ को नेपाल बहुसूचक सर्वेक्षणको तथ्याङ्कका आधारमा हेर्दा सुरक्षित तवरले व्यवस्थापन गरिएको खानेपानी सुविधा प्राप्त जनसङ्ख्या राष्ट्रिय योजना आयोगले २०२२ को लागि प्रस्तुत गरेभन्दा उल्लेखनीय रूपले माथि रहेको देखिन्छ । खासमा, यसले सेवाको स्तर परिवर्तनको वस्तुगत अवस्थालाई भन्दा पनि मापन विधिमा रहेको भिन्नतालाई उजागर गरेको छ । यस प्रतिवेदनले नेपाल बहुसूचक सर्वेक्षणलाई परिच्छेद ३ भन्दा पछाडिका अरू परिच्छेदहरूको विश्लेषणका लागि तथ्याङ्कको आधिकारिक स्रोतका रूपमा ग्रहण गरेको छ ।

खानेपानी सुविधा

सन् २०११ यता नेपालमा खानेपानीका स्रोतहरूको बनावटमा संरचनागत परिवर्तन देखिएको छ । धारा वा पाइपजडित धाराको पानीले राष्ट्रियस्तरमै ट्युबवेलको पानीलाई पछाडि छाडेको छ जुन ४७.८ प्रतिशत घरपरिवारबाट ५७.० प्रतिशत घरपरिवारमा विस्तारित भएको देखिन्छ[1] । ट्युबेलमाथिको निर्भरता अघिल्लो

३५.१ बाट घटेर २९.८ प्रतिशत मा सीमित भएको छ भने सुधार नगरिएका स्रोतबाट पानी प्राप्त गर्ने घरपरिवार सन् २०११ बाट २०२१ मा लगभग आधाले घटेको (१४.६ प्रतिशतबाट ७.१ प्रतिशत) देखिन्छ ।

सन् २०१९ यता पानीमा पहुँच र पानीको विश्वसनीयता सँगसँगै अग्रसर भएको पाइँदैन । घरपरिसरभित्र उपलब्ध हुने खानेपानीको सन्दर्भमा अन्य सबै प्रदेशको तुलनामा कर्णाली प्रदेशले तीव्रतम पहुँच हासिल गरेको देखिन्छ । यस्तो वृद्धि सन् २०१९ बाट सन् २०२४/२५ मा पुग्दा ३७.९ प्रतिशत विन्दुले धनात्मक रहेको छ जब कि यसको उपलब्धतामा ह्रास आएको छ भने राष्ट्रियस्तरमै अधिकतम प्राकृतिक जोखिमयुक्त पनि छ । कर्णालीमा सुरक्षित तवरले व्यवस्थापन गरिएको पानीमा पहुँच भएको जनसङ्ख्या केवल २२.१ प्रतिशत रहेको छ । सुरक्षित तवरले व्यवस्थापन गरिएको खानेपानी प्रदेशस्तरमा निकै नै पृथक रहेको देखिन्छ । यो कर्णालीमा जनसङ्ख्याको २२.१ प्रतिशतदेखि ४४ प्रतिशत विन्दुको फरकसहित मधेसमा ६६.१ प्रतिशतसम्म रहेको छ र यस्तो विविधता राष्ट्रिय औसत मान मात्र प्रस्तुत गर्दा लुक्ने वा ढाकिने देखिन्छ ।

खानेपानी पर्याप्त उपलब्ध नहुनुका निर्दिष्ट कारणहरू पनि प्रदेशअनुसार फरक फरक देखिन्छन् । राष्ट्रियस्तरमा स्रोत सञ्चालनमा नरहनुले अनुपलब्धताको ४०.२ प्रतिशत हिस्सा ओगटेको छ भने यो बागमती प्रदेशमा ५४.१ प्रतिशत पुगेको छ । पहुँच नै नहुनु राष्ट्रियस्तरमा ४३.६ प्रतिशत छ भने यसको प्राधान्य क्रमशः कर्णाली, लुम्बिनी र मधेसमा देखिन्छ । पानी प्राप्त गर्ने खर्च बेहोर्न नसक्नु दोस्रो प्रमुख कारक रहेको र यो मधेस, सुदूरपश्चिम र गण्डकीमा उल्लेखनीय रहेको छ ।

पानीको गुणस्तर स्रोतबाट घरपरिवारले प्रयोग गर्ने बेलासम्म पुग्दा उल्लेखनीय रूपले क्षयीकरण भएको अवस्था छ । उही पानीको स्रोतमा इकोली पोजिटिभ दर राष्ट्रियस्तरमा ४६.१ प्रतिशत रहँदा घरपरिवारले प्रयोग गर्ने बेलासम्म पुग्दा सोही पानीको इकोली विद्यमानतादर ६१.२ प्रतिशत पाइएको छ । यस्तो अन्तर सबैभन्दा फराकिलो ट्युबवेलको पानीसँग सम्बन्धित छ जहाँ स्रोतमा २६.६ प्रतिशत इकोली भेटिएको छ भने घरपरिवारमा परीक्षण गर्दा ३२.४ प्रतिशत विन्दुले उच्च अर्थात् ५९.० प्रतिशत रहेको देखिन्छ । यसमा ट्युबवेलबाट पानी प्राप्त गरिसकेपछि कसरी व्यवस्थापन गरिन्छ भन्ने व्यवहार बढी जिम्मेवार रहेको अनुमान गर्न सकिन्छ । यसको विपरीत, पानीमा आर्सेनिकको घुलमिल व्यक्तिको बानी व्यवहारसँग भन्दा पनि भौगोलिक अवस्थितिका कारणले भएको मान्न सकिन्छ जसलाई सरसफाइ र स्वच्छतालक्षित कार्यक्रमबाट समाधान गर्न सकिदैन र यो तराईको भूमिगत पानीमा केन्द्रित रहेको देखिन्छ । विश्व स्वास्थ्य संगठनको ग्रहणयोग्य दर (Threshold) भन्दा माथि आर्सेनिकयुक्त पानी उपभोग गर्ने जनसङ्ख्या तराईमा ७.४ प्रतिशत रहेको देखियो जब कि हिमाली तथा पहाडी क्षेत्रमा ०.४ देखि ०.५ प्रतिशत रहेको पाइयो ।

पानी सङ्कलनको जिम्मेवारी निरन्तर रूपमा महिला तथा बालिकाहरूकै काँधमा रहेको देखिएको छ । पानी सङ्कलन गर्ने घरपरिवारका सदस्यमध्ये लगभग ७१.५ प्रतिशत व्यक्ति महिलाहरू नै रहेका छन् । यिनमा पनि २५ देखि ४९ वर्षका महिलाहरूको बाहुल्यता रहेको छ र राष्ट्रियस्तरमा हेर्ने हो भने उनीहरूले कुल पानी सङ्कलन गर्नेमध्ये ४४ प्रतिशत हिस्सा ओगटेका छन् । यस्तो लैङ्गिक अन्तर विद्यालय जाने उमेरका बालबालिकामा समेत विद्यमान

[1] राष्ट्रिय जनगणनाले खानेपानी र सरसफाइ सुविधाको पहुँचलाई घरपरिवारका तहमा प्रकाशित गरेको छ भने नेपाल बहुसूचक सर्वेक्षणले यी आँकडाहरू व्यक्ति अर्थात् जनसङ्ख्याअनुसार प्रकाशन गरेको छ ।

छ । पन्ध्रदेखि १९ वर्षसम्मका बालबालिकामध्ये केटाहरूभन्दा सोही उमेर समूहका तीनगुणा बढी केटीहरूले पानी सङ्कलन गर्ने गरेको देखिन्छ । यो विषमता कर्णाली प्रदेश र हिमाली क्षेत्रमा अत्यधिक छ । यसै भूगोलमा पहुँच र विश्वसनीयताको बिचको अन्तर पनि सबैभन्दा धेरै रहेको पाइएको छ ।

सरसफाइ र स्वच्छताको अवस्था

सन् २०१९ को सेप्टेम्बरमा गरिएको खुला दिसामुक्त नेपालको घोषणाले शौचालय नभएका घरपरिवारको हिस्सा तीव्र रूपले घटेको छ । सन् २००१ मा शौचालय नभएका घरपरिवार ५३.२ प्रतिशत रहेकोमा सन् २०२१ मा आइपुग्दा यो मान ४.५ प्रतिशतमा सीमित रहेको देखिन्छ । नेपाल बहुसूचक सर्वेक्षणले खुला दिसामुक्त घोषणा पूर्ण रूपमा दिगो हुन नसकेको देखाएको छ । राष्ट्रियस्तरमा खुला दिसा गरिने अवस्था सन् २०१९ को ५.० प्रतिशत बाट सन् २०२४/२५ मा झिनो वृद्धि भई ५.५ प्रतिशत पुगेको छ । यस प्रकारको अवनति खास खास भौगोलिक क्षेत्र र समूहमा केन्द्रित देखिएको छ जो लुम्बिनीको अर्धसहरी क्षेत्रमा दोब्बरभन्दा पनि बढी (५.० बाट १३.० प्रतिशत), मधेशको ग्रामीण क्षेत्रमा (११.५ बाट १९.४ प्रतिशत) र अति विपन्न वर्गमा (८.५ बाट १२.७ प्रतिशत) ले व्याप्त छ ।

सुधारिएको सरसफाइको विस्तार सन् २०२४/२५ सम्ममा जनसङ्ख्याको ९२.८ प्रतिशत पुगेको छ । यसमध्ये केवल ३९.९ प्रतिशत जनसङ्ख्याले मात्र सुरक्षित तवरले व्यवस्थापन गरेको सरसफाइमा पहुँच प्राप्त गरेका छन् । काठमाडौं उपत्यकाको सहरी क्षेत्रमा उल्लेखनीय रूपले ९९.४ प्रतिशत जनसङ्ख्याको सुधारिएको सरसफाइमा पहुँच प्राप्त भएको भए तापनि १४.३ प्रतिशत को मात्र सुरक्षित तवरले व्यवस्थित सरसफाइमा पहुँच पुग्न सकेको देखिन्छ र यसो हुनुमा ढल निकासको सञ्जाल कारक रहेको छ किनकि यसबाट विसर्जित दिसाजन्य मलमूत्रको कसरी प्रशोधन गरिन्छ भन्ने तथ्य यकिन गर्न सर्वेक्षणको सीमीततले गर्दा सकिदैन ।

चर्पीको बनोटको कारणले पनि भण्डारण गरिएको दिसाजन्य मलमूत्र भरिएर वा संरचना फुटेर/भत्किएर पोखिने जोखिम रहन्छ । फ्लस जोडिएको सेप्टिक ट्याङ्क भरिएर पोखिने जोखिम ३.६ प्रतिशत देखिन्छ भने फ्लस जोडिएको एकल खाल्टे संरचना (cesspool) मा यस्तो जोखिम दोब्बरभन्दा पनि अधिक अर्थात् ९.१ प्रतिशत देखिन्छ । अर्कातिर, भरिएर पोखिन सक्ने सम्भावनालाई समेत दृष्टिगत गरी बनाइएका दुईओटा खाडलयुक्त चर्पीहरूमा एकल खाल्टे चर्पीको तुलनामा पोखिने गुञ्जायस दोब्बरभन्दा बढी नै देखिएको छ । सुविचारित उद्देश्यका बाबजुद यसप्रकारका निचोडले थप अनुसन्धानका लागि दिशानिर्देश गरेको छ ।

सन् २०१९ देखि सन् २०२४/२५ सम्ममा साबुन-पानीले हात धुने व्यवहारमा सबैभन्दा उच्च समतामूलक प्रगति हासिल भएको देखिएको छ । साबुन र पानीले हात धुने सुविधा सम्पन्नताको सबैभन्दा विपन्न पञ्चांशमा पनि तीव्रतम रूपमा बढोत्तरी भएको अवस्था छ । पछिल्लो पाँच वर्षमा यस्तो बढोत्तरी ४९.८ प्रतिशत बाट ७०.१ प्रतिशत मा पुगेको छ । यस सूचकमा सबैभन्दा पछाडि रहेका कर्णाली र सुदूरपश्चिम प्रदेशमा क्रमशः २६.६ र ३२.१ प्रतिशत विन्दुले सुधार भएको देखिन्छ ।

स्थानीय तहको अनुमान र समताजन्य निचोड

यस प्रतिवेदनले देशका ७५३ ओटै स्थानीय तहका खानेपानी र सरसफाइको अवस्था अनुमानका लागि एक तथ्याङ्कीय मोडल प्रस्तुत गर्दै त्यसको परीक्षणसमेत गरेको छ र आधारभूत विषमतालाई सम्बोधन गर्ने प्रयास गरेको छ । नेपाल बहुसूचक सर्वेक्षणले राष्ट्रिय र प्रादेशिक तहको तथ्याङ्क प्रस्तुत गरेको भए तापनि प्रत्येक स्थानीय तहका लागि यो तथ्याङ्कीय दृष्टिले प्रतिनिधित्वमूलक रहेको छैन । यसबाट स्थानीय तहहरूलाई लक्षित योजना तर्जुमा र कार्यान्वयनका लागि कुनै प्रमाण उपलब्ध हुन सकेको अवस्था थिएन ।

गाउँपालिका र नगरपालिकाहरूलाई सामान्य किसिमले वर्गीकरण नगरेर यस प्रतिवेदनले ७५३ ओटै स्थानीय तहहरूलाई सघनता र क्षेत्रगत प्रकृतिअनुसार चारओटा रणनीतिगत समूहमा समूहीकृत गरेर तत् तत् स्थानीय तहका खानेपानी, सरसफाइ र स्वच्छतामा रहेका अन्तरलाई प्रस्तुत गरेको छ । देशका ५७ ओटा (७.६%) स्थानीय तहहरूले सङ्गिन प्रकारको खानेपानी, सरसफाइ र स्वच्छता विषमता सामना गरिरहेका छन् र जसका लागि दुवै क्षेत्रमा एकैसाथ तत्काल समन्वयकारी हस्तक्षेप अपरिहार्य छ । त्यस्तै ४२४ (५६.३%) ओटा स्थानीय तह समाविष्ट सबैभन्दा ठुलो समूहलाई जोखिम समूहमा पहिचान गरिएको छ जसमध्ये २७७ (३६.८%) पालिकामा खानेपानी नै प्रमुख व्यवधान रहेको छ भने १४७ (१९.५%) पालिकामा सरसफाइ प्रमुख बाधक रहेको छ । बाँकी २७२ (३६.१%) पालिकाहरूले मध्यम वा उच्च उपलब्धिलाई देखाएका छन् । यसबाट कार्य समापनभन्दा पनि लाभहरूलाई समष्टितर्फ लैजाने अवसर विद्यमान रहेको सङ्केत मिल्दछ ।

स्थानीय तहसम्मको विश्लेषणबाट खानेपानी र सरसफाइका क्षेत्रमा भएको वञ्चितीकरण प्रदेशगत रूपमा अक्सर भिन्नभिन्न र परस्पर विरोधी ढाँचाहरूबाट प्रभावित रहेको देखिन्छ । मधेस र गण्डकी प्रदेशमा यस्तो भिन्नता निकै नै टड्कारो देखिएको छ । मधेसका ८०.१ प्रतिशत (१३६ मध्ये १०९ ओटा) पालिका सरसफाइमा प्राथमिकताप्राप्त (P2B) छन् भने केवल दुईओटा पालिका खानेपानी प्राथमिकताप्राप्त (P2A) रहेका देखिन्छन् । गण्डकीमा यो ढाँचा बिलकुलै विपरीत रहेको छ । त्यहाँ खानेपानी प्राथमिकताप्राप्त (P2A) पालिका ५२.९ प्रतिशत (८५ मध्ये ४५) रहेका छन् जब कि सरसफाइ प्राथमिकताप्राप्त पालिक शून्य रहेका छन् , अर्थात् कुनै पनि छैनन् ।खानेपानी तथा सरसफाइको क्षेत्रगत उपलब्धिका दृष्टिले कर्णाली प्रदेशमा मिश्रित WASH समता सूचक सबैभन्दा न्यून अर्थात् ०.६३५ रहेको छ भने मधेसमा यस्तो सूचकको मान ०.६५९ रहेको देखिन्छ । पूर्वाधारको अभावप्रेरित गहनता कर्णाली प्रदेशमा व्याप्त रहेको देखिन्छ जहाँ सङ्गीन र एकीकृत प्रयासअपेक्षित WASH अन्तर (P1) विद्यमान रहेका पालिका १८ ओटा छन् भने सुदूरपश्चिम प्रदेशमा यस्ता पालिका १५ ओटा रहेका छन् । कर्णालीको डोल्पा जिल्लाका शे फोक्सुण्डो गाउँपालिका राष्ट्रियस्तरमै पहिलो क्रममा र त्यसपछि दोस्रोमा डोल्पाकै छार्का ताङसोङ रहेका छन् । मुगुको मुगुम कार्मारोङ गाउँपालिकाले पछाडिबाट तेस्रो स्थान लिएको छ ।

यस प्रतिवेदनको WASH समता सूचकले नेपालमा पहिलोपटक स्थानीय तहसम्म व्याप्त वञ्चितीकरण पहिचान गर्नका लागि स्तरीकृत र तुलनायोग्य औजार प्रस्तुत गरेको छ जसबाट आगामी दिनमा यी विषमता साँघुरिँदै जानेछन् वा छैनन् भन्ने सङ्केत गरेको मात्र छैन अपितु भविष्यमा तयार गर्नुपर्ने राष्ट्रिय स्तरको WASH Performance Index तयारीका लागि पानीको गुणस्तर, सेवाको विश्वसनीयता र स्वच्छतालाई समेटेर स्थानीय तहसम्म उपलब्ध हुनसक्ने अति महत्त्वपूर्ण सूचकका लागि एक आधारशीलाका रूपमा रहेको पनि छ ।

सिफारिस

यस प्रतिवेदनले सातओटा विभिन्न रणनीतिक सुधारहरूलाई प्रस्ताव गरेको छ जुन निष्कर्ष खण्डमा समाविष्ट छ । तथ्यमा आधारित खानेपानी, सरसफाइ तथा स्वच्छतासम्बन्धी योजनाको सुदृढीकरणका लागि राष्ट्रियस्तरको योजना र बजेट तर्जुमामा सेवा मात्र पुगेको भन्दा पनि सुरक्षित तवरले व्यवस्थापन गरिएको तथ्याङ्क आवश्यक पर्दछ । यसका लागि रणनीतिक वर्गीकरणका बिचमा गहनताको पहिचानदेखि अनुगमन कार्यसम्मका पाँच तहको शृङ्खला वाञ्छित रहन्छ । सबैभन्दा बढी वञ्चितीकरणमा परेका पालिका र जनसङ्ख्यालक्षित लगानीका लागि प्रदेशस्तरीय औसतभन्दा स्थानीय तहअनुसारको समता सूचकको अङ्कको उपयोग जरुरी हुन्छ र यसले वित्तीय हस्तान्तरणलाई सिधै पालिकास्तरमा पुऱ्याउन सहजता सिर्जना गर्दछ । सुरक्षित तवरले व्यवस्थापन गरिएको सेवातर्फको सङ्क्रमणलाई निर्णायक हिसाबले द्रुततर बनाउनका लागि भण्डारण, प्रशोधन, पुनर्स्थापनतर्फ प्राथमिकता केन्द्रित गर्नुपर्दछ न कि नयाँ नयाँ संरचना निर्माणमा मात्र ।खानेपानी, सरसफाइ तथा स्वच्छताको एकीकृत अनुगमनलाई संस्थागत गर्नका लागि यी समता सूचकहरूलाई एकैपटकका लागि मात्र सीमित नगरी समय समयमा अद्यावधिक गरिनुपर्दछ । त्यस्तै, अनुगमनका साधनहरूलाई बृहत्तर राष्ट्रिय WASH Performance Index तयारी गर्ने दिशामा समेत प्रवृत्त गराउनुपर्दछ ।समतालक्षित वित्तीय लगानीमार्फत असमानता न्यूनीकरणमा फरक सामर्थ्यगत र लैङ्गिकउत्तरदायी आधार लिइनुपर्दछ । सङ्घ, प्रदेश र स्थानीय तहका सरकारको खानेपानी, सरसफाइ र स्वच्छतासम्बन्धी निकायगत काम र कर्तव्यलाई स्पष्ट पार्ने सवालमा कुनै एकले पनि यस क्षेत्रसँग सम्बन्धित कार्यसम्पादनमा पर्याप्त जनशक्ति उपलब्ध रहेको उल्लेख गरेको पाइँदैन । नेपालको जनगणना, नेपाल बहुसूचक सर्वेक्षण र NWASH-MIS बाट उत्पत्ति भएको तथ्याङ्कको एकीकृत संरचना निर्माणका लागि निकायगत समन्वय बहाल हुनुपर्दछ जसले यस्तो तथ्याङ्कको आपूर्तिमा भएको रिक्तता र परम्परागत तथ्याङ्क मिलान कार्यलाई सम्बोधन गर्न सक्नेछ ।

नेपालको खानेपानी, सरसफाइ र स्वच्छता क्षेत्र एकप्रकारले एउटा घुम्तीनजिक पुगेको छ भन्न सकिन्छ । विगत दुई दशकदेखि यस क्षेत्रको पूर्वाधारमाथि उठाइएको प्रश्न सार्थक रूपले सम्बोधन भएको अवस्था छ । आगामी दशकको लागि उठ्न सक्ने अर्को प्रश्न भनेको नेपालले विद्यमान पूर्वाधारको जगमा सुरक्षित रूपले व्यवस्थापन गरिएको, भरपर्दो र समतामूलक ढङ्गले सबै नागरिकसम्म सेवा प्रवाह गर्न सक्छ कि सक्दैन भन्ने नै हुनसक्नेछ ।

EXECUTIVE SUMMARY

NEPAL'S WASH TRANSITION: FROM ACCESS TO SAFELY MANAGED SERVICES

Nepal has largely addressed the challenge of expanding basic WASH access. The defining challenge of the next decade is converting that infrastructure access into safe, reliable, sustainable, and equitable services.

This finding rests on evidence spanning three distinct time horizons, which this report treats as answering different questions rather than as directly comparable data points. The historical baseline, drawn from the National Population and Housing Census 2011 and 2021, documents Nepal's long-term structural transformation. For example, households without a toilet fell from 53.2 percent in 2001 to 4.5 percent in 2021, and piped water overtook tubewells as the dominant source nationally in 2021. MICS 2019 and MICS 2024/25 track how service quality, safety, and reliability have changed over the past five years, and form this report's principal evidence base for assessing recent progress. Current status, drawn from MICS 2024/25 specifically, is the principal reference point for every policy conclusion in this report.

National Wash Scorecard

Key Indicator	Current Status - MICS 2024/25 (% of population)	What the evidence tells us
On-premises drinking water	90.0%	Basic access is now near-universal
Safely managed drinking water service	47.5%	A major gap remains between access and safe service
Improved sanitation	92.8%	Nepal has made major progress in sanitation access
Safely managed sanitation service	39.9%	Safe sanitation remains a major unfinished agenda
Handwashing with water and soap	86.4% , up from 80.7% (2019)	Hygiene conditions have improved, though a soap-specific gap remains in some provinces
Open defecation	5.5% , up from 5.0% (2019)	The ODF gain has not been fully sustained and needs consolidated follow-up

Where safely managed water status falls short, reported insufficiency is split almost evenly between a source that is not accessible (43.6 percent) and one that is not functional (40.2 percent, rising to 54.1 percent in Bagmati), while household water tests positive for E. coli far more often than water from the same source, 61.2 against 46.1 percent.

Where safely managed sanitation status falls short, the constraint is overwhelmingly containment and treatment rather than sharing. Nationally, sharing between households accounts for only 12.9 percentage points of the shortfall, while containment or treatment failure accounts for 40.0 points, roughly three-quarters of the total gap.

This national picture is supported by this report's own local-level estimation model, described in Chapter 5. The model achieved a national mean absolute error of 1.57 percentage points for drinking water and 3.61 percentage points for sanitation, with correlation coefficients above 0.99 for water, confirming the model reliably captures real variation across local levels.

Policy and Regulatory Framework

Nepal's constitution guarantees the right to clean drinking water and sanitation under Article 35(4), given legal effect through the Water Supply and Sanitation Act 2079 (2022) and the Water Supply and Sanitation Regulation 2081 (2024). The National Water Supply, Sanitation and Hygiene Policy 2080 (2023) unified previously separate rural and urban sector policies for the first time. Nepal has adopted National Drinking Water Quality Standards (2022) and set up NWASH-MIS, the national information system for monitoring the sector.

Tracked against Nepal's own SDG roadmap and Sixteenth Plan targets, progress is mixed. NPC's own administrative monitoring places safely managed drinking water coverage at 25.8 percent in 2022 against a 50 percent target, a substantial shortfall, while basic water supply coverage has tracked ahead of target, reaching 96.4 percent in 2022 against a 90.2 percent target. This report's MICS-based safely managed water estimate for 2024/25, 47.5 percent, is considerably higher than NPC's 2022 figure, reflecting a difference in measurement approach rather than a confirmed change in service conditions. This report treats MICS as the authoritative data source for safely managed status from Chapter 3 onward.

Drinking Water Services

Nepal's water source composition has shifted structurally since 2011. Tap or piped water overtook tubewells as the dominant source nationally, rising from 47.8 to 57.0 percent of households[1], while tubewell reliance fell from 35.1 to 29.8 percent and unimproved source use roughly halved, from 14.6 to 7.1 percent between the census periods 2011 - 2021.

Access and reliability have not moved together since 2019. Karnali recorded the fastest on-premises access gains of any province, +37.9 percentage points between 2019 and 2024/25, while its availability fell and it now records the highest natural hazard exposure and the lowest safely

[1]Population census has published access to dinking water and sanitation facilities at the household level whereas MICS has published these figures at the individual/population level.

managed water coverage in the country, 22.1 percent of population. Safely managed coverage varies sharply by province, from 22.1 percent in Karnali to 66.1 percent in Madhesh, a 44-point spread concealed by the national average.

The specific reason water is unavailable also differs by province. Nationally, source non-functionality accounts for 40.2 percent of reported insufficiency, rising to 54.1 percent in Bagmati. Source inaccessibility as the reason for unavailability is at 43.6 percent at national level, and this dominates in Karnali, Lumbini, and Madhesh. Affordability is a substantial secondary factor in Madhesh, Sudurpashchim, and Gandaki.

Water quality deteriorates substantially between source and household. Household drinking water tests positive for E. coli far more often than water from the same source, 61.2 against 46.1 percent of the population nationally, and this gap is widest for tube well users specifically, rising from 26.6 to 59.0 percent, a 32.4-point increase attributable likely to handling and storage practices after collection. Arsenic contamination, by contrast, is geographic rather than behavioural, concentrated in Tarai groundwater, reaching 7.4 percent of the population above the WHO threshold against 0.4 to 0.5 percent in Mountain and Hill areas, and cannot be addressed through sanitation or hygiene interventions.

Water collection continues to fall overwhelmingly on women and girls. Almost 71.5 percent of household members who collect water are female, concentrated among women aged 25 to 49, who alone account for 44.0 percent of all collection nationally. This gap is present even among school-age children, with girls aged 15 to 19 collecting water at roughly three times the rate of boys the same age, and is most pronounced in Karnali and the Mountain belt, the same geographies already identified as having the largest access and reliability gaps.

Sanitation and Hygiene Status

Nepal's national Open Defecation Free declaration in September 2019 followed a rapid structural decline in households without a toilet, from 53.2 percent in 2001 to 4.5 percent of the households in 2021. MICS shows that declaration of ODF has not been fully sustained: open defecation has risen marginally at the national level from 5.0 in 2019 to 5.5 percent in 2024/25, with slippage concentrated in Madhesh rural, more than doubling from 11.5 to 19.4 percent, Lumbini Peri-urban, and the Lowest wealth quintile.

Improved sanitation coverage reached 92.8 percent of the population by 2024/25, but only 39.9 percent of the population receives safely managed sanitation. Kathmandu Valley Urban illustrates this gap most noticeably: 99.4 percent improved coverage and just 14.3 percent safely managed, driven by a sewer network whose treatment cannot be confirmed.

Facility design materially affects containment risk: flush-connected cesspools overflow at more than double the rate of septic tanks, 9.1 against 3.6 percent, and twin-pit latrines, designed specifically to prevent overflow through alternating use, overflow more than single-pit latrines, a counter-intuitive finding this report flags for further investigation.

Handwashing shows the most equitable progress of any indicator in this report between 2019 and 2024/25. Facility availability with water and soap rose fastest among the Lowest wealth quintile, from 49.8 to 70.1 percent, and in Karnali and Sudurpashchim, the two provinces that started furthest behind, rising by 26.6 and 32.1 percentage points respectively.

Local-Level Estimation and Equity Findings

This report develops and validates a statistical model to estimate water and sanitation service indicators for all 753 local levels, addressing a fundamental gap: while MICS produces reliable national and provincial data, it is not statistically representative at the individual municipality level, leaving local levels without the evidence needed for targeted planning.

Rather than simply ranking municipalities, this report classifies all 753 local levels into four strategic categories based on the severity and sectoral nature of their WASH gap. Fifty-seven local levels (7.6 percent) face Critical Integrated WASH Gaps requiring immediate, coordinated support across both sectors at once. A further 424 (56.3 percent), the largest single group nationally, are classified as At Risk, split between 277 (36.8 percent) where drinking water is the principal constraint and 147 (19.5 percent) where sanitation is the principal constraint. The remaining 272 (36.1 percent) show moderate progress or high achievement, representing an opportunity to consolidate gains rather than a completed task.

This local-level analysis finds that water and sanitation deprivation are frequently driven by different, even opposing, provincial patterns. Madhesh and Gandaki illustrate this divergence most sharply: 80.1 percent (109 out of 136) of Madhesh's local governments are classified as Sanitation Priority (P2B) against just two as Drinking-Water Priority (P2A). In Gandaki, the pattern is completely reversed, with 52.9 percent (45 out of 85) classified as Drinking-Water Priority (P2A) against zero Sanitation Priority local levels. Karnali records the lowest mean composite WASH performance of any province with a Mean WASH EI of 0.635, followed closely by Madhesh at 0.659. The severity of the infrastructure deficit is further underscored by the fact that the highest numbers of Critical Integrated WASH Gap (P1) local levels are concentrated in Karnali (18) and Sudurpashchim (15), led by the lowest-scoring local levels nationally including Shey Phoksundo, and Chharka Tangsong of Dolpa district and Mugum Karmarong in Mugu district of Karnali.

This report's WASH Equity Indexes are intended as Nepal's first standardized, comparable tools for identifying where inequality is most severe at the municipal level and tracking whether it narrows over time, and are proposed as the foundation for a future National WASH Performance Index incorporating water quality, service reliability, and hygiene and inclusion measures as these become available at the local level.

Recommendations

This report proposes seven strategic reforms, developed in full in the concluding chapter. Strengthening evidence-based WASH planning requires safely managed status, not coverage, to become the primary indicator in national planning and budgeting, following a consistent five-step diagnostic sequence from identifying severity through to monitoring movement between strategic categories. Targeting investment to the most deprived municipalities and population means using municipal-level equity index scores, not provincial averages, to directly guide fiscal transfers.

Accelerating the transition to safely managed services entails a decisive shift in funding toward containment, treatment, and rehabilitation, rather than new construction alone. Institutionalizing integrated WASH monitoring involves turning the equity indexes into recurring, not one-off, monitoring tools, and evolving them over time into a broader National WASH Performance Index. Reducing inequalities through equity-focused financing points to differentiated affordability and gender-responsive investment criteria. Clarifying institutional roles across federal, provincial, and local government responds to this report's finding that not a single one of Nepal's 753 local governments currently reports adequate human resource capacity for WASH functions. Integrating Nepal's Census, MICS, and NWASH-MIS data architecture depends on standing inter-agency coordination to close the manual reconciliation and data gaps this report itself had to work around.

Nepal's WASH sector stands at a turning point. The infrastructure question that has defined the sector for the past two decades has substantially been answered. The question that will define the next decade is whether Nepal can convert that infrastructure into a safely managed, reliable, and equitably distributed service for all of its people.

CHAPTER 1

INTRODUCTION

1.1 Background and Rationale

Access to water and sanitation is a fundamental right protected under Article 35(4) of the Constitution of Nepal, 2015. Nepal has made strong progress on basic access to improved drinking water and sanitation, including achieving national Open Defecation Free (ODF) status in 2019. The Sustainable Development Goals, however, require a further shift: from basic infrastructure presence toward safely managed services, a fundamentally different and more demanding standard concerned with the reliability, safety, and quality of the service delivered, not only whether a facility exists.

Nepal's own data systems are not yet fully aligned to measure this shift. The National Population and Housing Census (NPHC) 2021 records only the type of water source or toilet facility present in a household. It does not measure collection time, water quality, availability, sharing, or how faecal sludge is disposed of. As a result, the census confirms high basic infrastructure coverage nationally, while household surveys such as MICS 2024/25 show that a substantial share of this basic access does not meet the safely managed standard required under SDG 6.1 and 6.2.

This report primarily draws on the technical depth of MICS, which alone among Nepal's data sources can verify whether the infrastructure access shown by the census actually corresponds to the JMP service ladder, from basic to safely managed, required under the SDGs. Administrative data from NWASH-MIS is incorporated as a supplementary source where available, though its coverage across municipalities and indicators remains incomplete at present, and this report treats it as a secondary line of evidence to be strengthened over time, not yet a full triangulation partner to MICS and the census. Building on this foundation, this report develops, for the first time, a validated statistical model estimating these service levels for all 753 local governments individually. Since responsibility for WASH service delivery shifted to local governments under the 2015 Constitution, this evidence base is intended to complement NWASH-MIS established at local governments to support directly in formulating WASH plans and allocating budgets toward upgrading existing infrastructure into genuinely safe and reliable systems.

1.2 Objectives of the Report

The primary objective of this thematic report is to analyze Nepal's WASH progress over time, focusing on trend analysis, equity assessment, policy alignment and local-level estimation.

Specific objectives include:

i. To examine trends in drinking water sources and sanitation facilities over time.
ii. To assess disparities across geographic, socio-economic, and demographic groups.
iii. To evaluate WASH indicators in relation to national policies, the Sixteenth Plan, and SDG 6 targets.
iv. To integrate multiple data sources to better capture service quality.

1.3 Data Sources and Methodology

This report uses NPHC 2011 & 2021, and MICS 2019 & 2024/25 data sources to evaluate the transition of Nepal's WASH sector from "basic" infrastructure coverage to "safely managed" service delivery. Each source contributes what the others cannot, and their combined use produces a more complete and reliable picture than any one dataset alone.

The report primarily utilizes quantitative and descriptive techniques to document the comparative status of WASH sector indicators from the available data sources in the chapters dedicated to individual sectors and analyzes the trend of indicators wherever possible. The report most importantly adopts a synthetic approach to estimate the local-level wash equity indicators by integrating MICS 2024/25 and NPHC 2021 microdata.

National Population and Housing Census (NPHC)

The National Population and Housing Census (NPHC), conducted in 2011 and 2021 by the Central Bureau of Statistics (now National Statistics Office - NSO), serves as the primary and universal denominator for this report. The census enumerated all households across Nepal's 77 districts, 753 local governments, and 6,743 wards. It is the only data source with complete national coverage at every administrative level, making it indispensable for geographic analysis, subnational comparisons, and trend analysis between the two census years.

For drinking water, the census records the main source used by each household. Tap or piped water inside and outside house compound, tubewell or handpump, covered well or Kuwa, spout water, river or stream, jar or bottled water, and other are the answer categories. It also records sex of household head, caste and ethnicity, household head education level, housing quality in terms of foundation, floor, wall and roof of the building, and asset ownership. For sanitation, it records toilet facility type and waste disposal practices. However, it does not have questions for measuring availability of handwashing facility as regards to hygiene.

The census has one fundamental limitation for WASH analysis: it measures infrastructure presence, not service quality. As regards to drinking water, it records what type of source a household uses but cannot record whether that source is functional, whether water is available reliably, how far

the household must travel to collect it, or whether the water delivered is free from contamination. A household connected to a nearly non-functional or partially-functional water supply system and one receiving continuous clean water are counted identically. The same limitation applies to sanitation, though even more narrowly: the census asks a single question on toilet facility type, and remains silent on where that facility is located, whether it is shared with other households, and how the excreta it collects is managed, contained, or treated. A household with its own safely contained toilet and one sharing an overflowing pit with several neighbouring households are, again, counted identically. For this reason, census data supports analysis of access patterns, geographic distribution, and infrastructure trends, but must be complemented by other sources for service quality and safely managed coverage assessment.

Multiple Indicator Cluster Survey (MICS)

The Nepal Multiple Indicator Cluster Survey, conducted in 2019 and 2024/25 by the National Statistics Office in collaboration with UNICEF, is the primary source for water quality and service-level analysis in this report. MICS 2019 selected 12,800 households across 512 enumeration areas, while MICS 2024/25 selected 12,960 households across 540 enumeration areas. Both rounds were designed to produce reliable estimates at the national, provincial and analytical domain level with rural-urban disaggregation, and selected socio-economic characteristics.

Unlike the census, MICS asks about collection time, on-premises access, and water unavailability episodes, in addition to source type. Critically, it incorporates a water quality testing module in which field teams test water samples for E. coli separately at the point of collection and at the point of use, the stored drinking water in the household container. Both rounds also incorporated arsenic field testing.

For sanitation, MICS closes the same gaps left open by the census. It records a more detailed set of facility categories than the census's single question, and asks specifically whether the facility is shared with other households, where it is located, how excreta is disposed of, and whether that disposal is safe. Where a facility requires emptying, MICS records who emptied the containment and where its contents were disposed of. It also asks whether excreta has leaked from the containment due to flooding, overflow, or structural collapse, allowing this report to distinguish adequately contained facilities from those that only appear safe on the basis of facility type alone.

Together, these modules make MICS the only instrument in this report capable of generating safely managed drinking water and sanitation estimates under SDG indicators 6.1.1 and 6.2.1. MICS also constructs a household wealth index using Principal Component Analysis on asset and housing quality variables, enabling wealth quintile disaggregation of access and quality indicators. As with other national surveys conducted in Nepal, MICS has one critical geographic limitation: it

is designed for national, provincial, and analytical domain-level estimates only. Even district-level disaggregation is not statistically valid given the sample size, since the number of households within any individual district is too low to produce estimates with acceptable confidence intervals.

This raises an obvious question for this report's purpose. If MICS's sample cannot support reliable estimates even for Nepal's 77 districts, how can this report produce estimates for the 753 local governments, a unit smaller and more numerous still? The answer is that this report does not attempt to produce local-level estimates by further dividing the MICS sample, nor by fitting a predictive model to household characteristics. Doing either would only compound the same statistical problem that already rules out district-level disaggregation. Instead, this report applies a transition probability framework. Within each of MICS's 15 analytical domains, the conditional probability that a household falls into a given JMP service ladder category, safely managed, basic, limited, unimproved, or open defecation/surface water, is calculated directly from MICS, for each harmonized Census facility category. These domain-specific transition probabilities are then applied directly to the actual Census household counts recorded in each category, for every local level nested within that domain, converting the census's known, complete facility-type counts into estimated JMP service-ladder distributions for each of Nepal's 753 local governments.

This approach was chosen specifically because WASH service delivery responsibility shifted to Nepal's 753 local governments under the 2015 Constitution, making local governments the level at which most WASH planning and budgeting decisions are now made, a level neither data source can serve on its own. MICS measures service quality with the depth this report requires, but not at the geographic scale local governments need. The census reaches every local government directly, but asks only a single question each on water source type and toilet type, with no information on collection time, water quality, availability, sharing, or excreta management. The transition probability framework is the mechanism that lets each source do what it does well, without asking either to do what it cannot.

This report combines the two through the transition probability framework described above, producing local-level estimates that could not be obtained from either data source alone: MICS provides the depth of measurement, and the census provides the geographic completeness neither source has on its own. The full statistical methodology, including validation results, is presented in Chapter 5.

A note on wealth index comparability: MICS and the census each have their own wealth index. MICS builds its index from household assets and housing quality, using principal component analysis (PCA). The census also records assets and housing quality, and NSO has used the same method to build a similar index for official use. NSO has also used this index in other thematic reports.

The two indices are built separately, from different data. A wealth quintile in the census is therefore not the same group as a wealth quintile in MICS. For this reason, this report does not compare wealth-based figures across the two sources in numbers. It reports each source on its own and compares only the direction and pattern, for example whether access improves as wealth rises.

NWASH MIS (Ministry of Water Supply)

The National WASH Management Information System (NWASH MIS), managed by the Department of Water Supply and Sewerage Management under the then Ministry of Water Supply (now Ministry of Infrastructure Development), is Nepal's primary operational monitoring platform for the WASH sector. Developed with World Bank's financial and technical assistance, it holds scheme-level inventory and functionality data across Nepal's local governments, including water supply technology type, population served, functional status, and water quality test results where available. The system is also designed to record georeferenced digital data on water supply, sanitation, and hygiene-related infrastructure, including its governance, managerial, and financial aspects. Field enumerators use Android-based mobile applications to record georeferenced structural and management-related data, which is uploaded to a central server, analyzed, and displayed on the web portal: nwash.gov.np (MoWS, GoN, 2024).

NWASH-MIS data is treated in this report as indicative rather than definitive at the local government level, since data completeness varies by reporting capacity and the system's rollout remains incomplete nationally. As of the most recent available system data, approximately 61 percent of local governments had completed WASH data collection and approximately 53 percent had completed a WASH Plan, with the remainder unregistered, in progress, or not yet started (NWASH-MIS, accessed August 2026). The same system shows that not a single one of Nepal's 753 local governments currently reports adequate human resource capacity for WASH functions, with all 753 recorded as "No Data" on this specific indicator. Given this incompleteness, NWASH-MIS figures are used in this report only for triangulation and contextual corroboration where independently useful, and are not relied upon as a primary or standalone data source for any finding in this report. MICS and the National Population and Housing Census remain the report's primary evidentiary basis throughout.

Data Harmonization and Quality Evaluation

All datasets are cleaned for inconsistencies prior to analysis. Variables are standardized into uniform categories to ensure comparability across different years and survey types. Source-type categories from the NPHC and MICS are mapped to the JMP improved and unimproved classification and to the five-rung service ladder where the data permits. Where category definitions differ across instruments, for example, the treatment of spout water and jar or bottled water, these differences are noted explicitly in the relevant sections. Socioeconomic variables are harmonized to the extent possible across sources, with methodological differences clearly documented. Geographic identifiers are standardized to the post-2017 federal administrative structure of seven provinces, 77 districts, and 753 local governments throughout.

A note on urban-rural disaggregation: MICS 2019 and 2024/25 disaggregate urban and rural areas using two classification systems, Nepal's administrative classification of local levels (Metropolitan City, Sub-Metropolitan City, Municipality, and Rural Municipality) and the Degree of Urbanization (DEGURBA) classification, which reclassifies wards[2] into Urban, Peri-urban, and Rural **(NSO/ UNHABITAT Nepal, 2024)** categories[3]. This report presents data disaggregated by both systems where appropriate, and specifies which classification is in use wherever the two would otherwise be ambiguous.

1.4 Structure of the report

This report is organized into seven chapters, followed by a set of statistical annexes.

Chapter 2, Policy and Regulatory Framework, sets out Nepal's constitutional, legal, and policy commitments on water and sanitation, situates them against global and regional benchmarks, and identifies the specific policy questions the remainder of this report is designed to answer.

[2]Lowest administrative area of local levels in Nepal

[3]Nepal's administrative classification, adopted after the introduction of federalism in 2015, divides the country's 753 local levels into four types, 6 Metropolitan Cities, 11 Sub-Metropolitan Cities, 276 Municipalities, and 460 Rural Municipalities, classifying the first three as urban and the last as rural. Because this system does not necessarily reflect actual settlement density or built-up character, the National Statistics Office, in collaboration with UN-Habitat Nepal, adopted the Degree of Urbanization (DEGURBA) methodology, an internationally standardized approach endorsed by the UN Statistical Commission and developed jointly by the European Commission, UN-Habitat, FAO, ILO, OECD, and the World Bank. This reclassifies Nepal's wards, the country's smallest administrative unit, into Urban, Peri-urban, and Rural categories based on population size, population density, built-up area, and geographic contiguity, using GIS and census data, and has been applied to both the 2011 and 2021 Census. See National Statistics Office (2024) Degree of Urbanization in Nepal. Available at: https://censusresults.nsonepal.gov.np/downloads/degree-urbanization-report?type=report

Chapter 3, Drinking Water Services, and Chapter 4, Sanitation and Hygiene Status, present national and provincial findings from NPHC and MICS, tracing access trends since 2011, decomposing the gap between basic access and safely managed status, and examining water quality, excreta containment, natural hazard disruption, and the gendered burden of water collection.

Chapter 5, Local-Level Estimation Methodology and Model Validation, presents the statistical model developed to estimate water and sanitation service levels for all 753 local governments individually, and validates its performance against observed MICS data at the national, provincial, and analytical domain level.

Chapter 6, Local-Level WASH Performance, Equity and Strategic Prioritization, applies this model to classify every local government into one of four strategic categories based on the severity and sectoral nature of its WASH gap, and translates these findings into a practical decision-support framework for federal, provincial, and local planning.

Chapter 7, Conclusion and Recommendations, synthesizes the evidence from all preceding chapters into Nepal's WASH outlook and sets out strategic reforms for national policy, investment, and monitoring.

The Annexes provide synopsis of filed validation results, full disaggregated statistical tables from census and MICS, and WASH equity indices for local levels along with their status in JMP service ladder.

CHAPTER 2

POLICY AND REGULATORY FRAMEWORK

2.1 Global and Regional Context

Water and sanitation are closely interconnected. Demand for improved water services is rising with global population growth and urbanization, which creates ongoing challenges in managing sanitation in both urban and rural settlements. National policies on water and sanitation are, to some extent, guided by regional and global frameworks, and economic instability, the rising cost of living, and the increasing effects of climate change, such as extreme weather events and growing migration pressures, have made the global WASH situation more challenging (WHO, 2025). There is a recognized need to strengthen sanitation monitoring and management globally, particularly through better classification of faecal sludge treatment and improved data collection on safely managed on-site sanitation (SMOSS), also known as non-sewered sanitation, which is expanding more rapidly than sewered sanitation systems worldwide (WHO, 2025).

Global water and sanitation access improved between 2015 and 2024, but billions remained underserved. Access to safely managed drinking water services rose from 68 to 74 percent of the global population, safely managed sanitation from 48 to 58 percent, and basic hygiene access from 66 to 80 percent over this period. Despite this progress, an estimated 2.2 billion people still lacked safely managed drinking water, 3.4 billion lacked safely managed sanitation, and 1.7 billion lacked basic hygiene facilities at home in 2024 (UN, 2025a).

Within Asia, progress has been highly uneven across sub-regions. Southern Asia, the sub-region that includes Nepal, has seen safely managed drinking water coverage rise from 59.4 percent in 2010 to 76.7 percent in 2024, and safely managed sanitation rise from 30.7 to 57.6 percent over the same period, a substantial improvement, but one that still leaves roughly one in four people in the sub-region without safely managed drinking water and more than two in five without safely managed sanitation[4] (UN, 2025b). Rural areas continue to lag behind urban ones on drinking water

[4]This UN Statistical Yearbook compilation separately lists Nepal's own safely managed drinking water coverage at 16.5 percent in 2024, on an apparent declining trend since 2010. This figure is inconsistent with, and considerably lower than, this report's own directly computed MICS 2024/25 estimate of 47.5 percent (Chapter 3), and also sits well outside the range suggested by Nepal's South Asian peers in this same table. This report treats the discrepancy as a data lag or interpolation artefact in the compiled international database rather than a reflection of Nepal's actual current status, and does not use this table's Nepal-specific figures anywhere in this report. The Southern Asia regional aggregate above is not materially dependent on any single country's figure and is used as sub-regional context only.

specifically, at 73.0 percent against 82.5 percent in 2024, though the rural-urban pattern reverses for sanitation, where rural coverage (60.6 percent) has overtaken urban coverage (52.8 percent), reflecting the more rapid expansion of on-site sanitation systems in rural settlements across the sub-region.

Global and regional benchmarks do not always translate directly to national standards, since levels of socio-economic development vary widely across regions and countries, and comparisons are only meaningful where circumstances are genuinely comparable. Section 2.5 returns to this point directly, situating Nepal's own progress against a small set of South Asian countries facing broadly similar development conditions.

2.2 Constitutional and legislative foundations

The Constitution of Nepal recognizes access to clean drinking water and sanitation as a fundamental right of every citizen. Under Article 35, the right to health includes the assurance of safe drinking water and proper sanitation services (Article 35:4), and the Constitution separately guarantees the right to live in a clean and healthy environment, placing a clear obligation on the state to safeguard public health and environmental quality. Responsibility for fulfilling these rights is constitutionally distributed across federal, provincial, and local governments through a system of exclusive and concurrent powers, promoting decentralized governance and coordinated service delivery. Realizing these rights in practice, however, depends on supportive sectoral laws, policies, plans, budget allocations, and targeted interventions.

The Water Supply and Sanitation Act 2079 (A.D. 2022) gives legal effect to this constitutional right, explicitly guaranteeing every citizen's right to access clean water supply and sanitation (Section 3). Sub-section 2 of Section 3 further specifies the right to: (a) easy and accessible access to clean water supply, (b) adequate, clean, and quality water supply on a regular basis, and (c) easy and accessible access to quality sanitation services (GoN, 2022). The Act emphasizes ensuring access to clean water supplies without compromising adequacy, safety, or quality.

The Water Supply and Sanitation Regulation 2081 (A.D. 2025), enacted following the Act, provides the practical guidelines for its implementation. It defines the specific roles of federal, provincial, and local governments in delivering and managing water supply and sanitation services, and covers licensing of service providers, service standards, and consumer protection measures, strengthening the overall system for ensuring safe, reliable, and equitable access nationally (GoN, 2025).

UN Resolution 64/292: The human right to water and sanitation

1. Recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights.

2. Calls upon States and international organizations to provide financial resources, capacity-building, and technology transfer through international assistance and cooperation, particularly to developing countries, in order to scale up efforts to provide safe, clean, accessible, and affordable drinking water and sanitation for all.

United Nations
108th Plenary meeting
28 July 2010

Note: The box captures only relevant summary of the declaration

2.3 Latest WASH Related Policies, Standards and Guidelines

The Government of Nepal approved the National Water Supply, Sanitation and Hygiene Policy in 2080 (A.D. 2023), aligned with the constitutional rights described above and with SDG 6. The policy's vision is *"safe, reliable, and equitable access to drinking water, sanitation services, and hygiene,"* with a mission to achieve the sector's Sustainable Development Goals, ensuring universal access to safe drinking water and sanitation services by the year 2100 (BS).

The policy identifies the sector's core challenges directly. Climate change, along with other natural and human-induced factors, has reduced water sources and damaged supply infrastructure, resulting in declining availability and frequent service disruptions. As a result, drinking water and sanitation services have not yet become adequately safe, reliable, and sustainable. At the same time, unequal access, rapid and unplanned urbanization, and poor waste management associated with growing settlements have increased pollution in rivers, water bodies, and the surrounding

environment. In response, the policy emphasizes the role of public, private, and cooperative sectors in resource mobilization and public welfare, and underscores the need to expand equitable access to adequate, safe drinking water, sanitation, and hygiene for all. Its implementation strategy explicitly prioritizes the assured supply of quality water, as well as promotion of hygiene facilities ranging from individual households to public infrastructure, and control of water pollution more broadly (MoWS, GoN, 2023).

Recognizing that infrastructure and access alone do not guarantee safe drinking water, the Government of Nepal has also endorsed National Drinking Water Quality Standards 2079 (NDWQS) accompanying Implementation and Monitoring Guidelines. The quality standards clearly identifies the threshold for physical parameters (turbidity, colour, taste and odour, pH, electrical conductivity), chemical parameters (including iron, arsenic, manganese, ammonia, fluoride, chloride, sulphate, nitrate, and copper), and microbiological parameters, with E. coli as the key indicator of faecal contamination. The guideline also requires additional parameters such as total dissolved solids, calcium, lead, cadmium, chromium, cyanide, mercury, nitrite, and total coliform bacteria, to be tested based on local risk and relevance. These Standards apply to all drinking water systems, whether managed by federal, provincial, or local government, and, also cover tanker-based suppliers and community or consumer managed systems (MoWS, 2022).

Issued by the Ministry of Health and Population under the Public Health Service Act 2075, the National Drinking Water Quality Surveillance Guideline 2082 acts as the enforcement arm and independent verification mechanism to ensure public water supplies meet the legal benchmarks set by the National Drinking Water Quality Standards 2079. This operational framework establishes fieldwork protocols for health authorities to actively monitor physical, chemical, and biological water parameters. It mandates risk-based water sampling and integrated sanitary inspections to proactively identify pollution vectors that threaten these established standards. By decentralizing surveillance responsibilities across federal, provincial, and local government tiers, the guideline ensures consistent regional oversight. It requires health officials to cross-verify that water suppliers are properly executing their internal Water Safety Plans. When water testing reveals a breach of the allowable limits defined in the 2079 Standards, it triggers early warning protocols to minimize waterborne disease outbreaks. The guideline also dictates rapid response mechanisms for monitoring water safety during public health emergencies (EDCD/MoHP, 2024).

Sanitation is governed under the same overarching National Water Supply, Sanitation and Hygiene Policy 2080 (2023) described above, rather than a separate sanitation-specific policy. The Policy's vision, mission, and 2100 BS universal access target apply equally to sanitation as to water.

For technical standards, the Government of Nepal has issued National Standards for Domestic Wastewater Effluent 2019, setting enforceable discharge limits for treated wastewater released into rivers, ponds, and other water bodies. Complementing this, the Institutional and Regulatory Framework for Human/Faecal Sludge Management in Nepali Cities, 2074 BS (2017) assigns local governments, urban and rural municipalities alike, responsibility for developing faecal sludge management plans, treatment mechanisms, and operational guidelines across the full sanitation service chain, containment, emptying, transport, treatment, and end-use, in coordination with supporting national ministries.

Beyond the standards already covered, Nepal has also developed dedicated sector-wide plans to guide sanitation over the longer term. The Water Supply, Sanitation and Hygiene Sector Development Plan (SDP) 2016–2030, sets out a 15-year roadmap for the sector, aiming to sustain the ODF achievement and move Nepal toward the SDG 6 targets for safely managed sanitation. This plan has since been revised into a 20-year successor, the SDP 2024–2043 (draft), extended specifically to reflect Nepal's federal structure and the roles of provincial and local governments in sanitation service delivery. Together with the National Standards for Domestic Wastewater Effluent, the Institutional and Regulatory Framework for Human/Faecal Sludge Management (2017), and the Total Sanitation Guidelines, these plans are meant to give Nepal a complete policy chain, from national vision down to technical standards and local implementation.

Unlike drinking water, however, sanitation currently lacks a dedicated national surveillance or inspection guideline equivalent to the National Drinking Water Quality Surveillance Guideline 2082. An independent 2024 assessment of Nepal's water and sanitation governance found that, beyond the wastewater effluent standards themselves, the country lacks specific guidelines and standards for sanitation inspection (Prajapati, J.R., 2023). This gap is consistent with this report's own findings elsewhere: NWASH-MIS captures only asset-level information for sanitation and treatment facilities. Strengthening this specific regulatory and monitoring gap is among the reforms this report's concluding chapter recommends.

2.4 The Sixteenth Plan and Sustainable Development Goal 6

The Sixteenth Plan

The Sixteenth Plan (2024/25–2028/29) includes a dedicated chapter on planned, sustainable, and resilient urbanization and settlements. It acknowledges, among other issues, the inadequate management of sewerage systems, solid waste disposal, and access to improved drinking water sources. It envisions potable water supply in all provincial capitals and major urban centers, highlighting the need for co-financing, cost-sharing, and cost-recovery mechanisms to expand services ((NPC/GoN, 2024b), p. 128, 132).

The Plan sets two targets for drinking water access by 2028/29. It aims to raise “basic” access to 99 percent of the population, up from 94.9 percent in 2022/23 (p.229), and to expand access to “improved” facilities to 45 percent of households, up from 25.8 percent[5] (NPC/GoN, 2024b), p. 14). The same plan mentions 25.8 percent population with “improved” access as the performance of fiscal year 2022/23 (p.10). Looking further ahead, Nepal’s Long-Term Vision 2100 sets a target of 95 percent of the population with “improved” access by 2043/44 (Fifteenth Plan, p. 30) from its baseline of 21.0 percent in 2018/19. Reviewing these targets shows several inconsistencies in how the indicators are defined.

- **The same baseline appears under two measures.** The 25.8 percent baseline is attributed to both household-level and population-level access (Sixteenth Plan, p. 10 & 14). These are different measures and should not share a figure.

- **The measures change between targets.** The framework uses population-based measures for “basic” access and household-based measures for “improved” access, which makes the targets hard to compare and track.

- **The targets are modest and set no safely managed goal.** Neither the Sixteenth Plan nor the Fifteenth Plan’s long-term vision sets a target for safely managed drinking water, even by 2043/44. Safely managed is the standard used for SDG 6.1, and it is where Nepal is furthest from universal coverage, at 47.5 percent in MICS 2024/25. Nepal’s SDG roadmap does set safely managed targets (Table 2.1), so the periodic plans should be aligned with them.

The Sixteenth Plan outlines parallel targets for the sanitation sector, aiming to advance "basic" sanitation access to 99 percent of population by 2028/29 (up from 95.5 percent in 2022/23) and expand "safely managed" sanitation to 65 percent (up from 61 percent in 2022/23) over the same period. ((NPC/GoN, 2024b), p. 134). A critical review reveals a different, and arguably more serious, set of problems than those found in the water targets. These are:

- **The sanitation baseline uses a more lenient measure than the latest survey.** The Plan’s stated 2022/23 baseline of 61 percent safely managed sanitation is 21.1 percentage points above the 39.9 percent found by MICS 2024/25. This difference does not show a fall in service, because the two figures are measured differently. The 61 percent is very close to MICS 2019’s 61.1

[5]The 25.8 percent baseline for “improved” facilities is numerically close to NPC’s reported safely managed figure for 2022 (25.81 %, Table 2.1) by Voluntary National Review 2024. The Sixteenth Plan does not describe the two as the same measure, and this report does not treat them as the same.

percent, which suggests the Plan's baseline may rest on the same lenient rule. Under that rule, containment adequacy was not assessed, and an on-site facility that had never been emptied was counted as safely contained. MICS 2024/25 added a stricter question (WS11D) that excludes facilities where excreta had been released through overflow, flooding, or structural collapse in the previous 12 months. This report treats the 2024/25 figure as a new, stricter baseline that cannot be compared directly with the 2019 figure (Chapter 4). The Plan's 65 percent target for 2028/29 therefore appears to have been set on the older, more lenient measure, and is not directly comparable with the measure used in the latest survey.

- **The sanitation target has no long-term horizon.** The Sixteenth Plan sets a safely managed sanitation target of 65 percent by 2028/29, up from 61 percent in 2022/23. If the 65 percent were applied to the current measure, the gain needed from MICS 2024/25's 39.9 percent would be at most about 25 points, rather than 4 points the Plan appears to expect. The target should be restated on the current measure. The Plan also looks no further ahead. The Fifteenth Plan (p. 30) sets a drinking water target for 2043/44, but there is no equivalent for sanitation. Sanitation planning is therefore bounded by the 2028/29 target alone, with nothing beyond it.

The SDG Water and Sanitation Targets

Nepal's Sustainable Development Goals Status and Roadmap: 2016–2030 report prepared by National Planning Commission has enlisted targets for drinking water and sanitation (SDG 6) for 2019, 2022, 2025, and 2030 with 2015 baseline. The key indicators related to SDG 6.1.1 and 6.2.1 are summarized in Table 2.1.

Table 2.1 Baseline and targets for key water and sanitation SDG indicators

SDG	Indicators	Baseline	Targets				Progressa		MICS 2024/25
		2015	2019	2022	2025	2030	2019	2022	
6.1.1	Proportion of population using safely managed drinking water services (%)	15	35	50	65	90	25	25.81	47.5
	Population using basic water supply coverage (%)	87	90.2	92.6	95	99	88	96.4	
	Household with access to piped water supply (%)	49.5	60.3	68.4	76.5	90			
	Households with E.coli risk level in household water≥1 cfu/100ml (%)	82.2	60.3	43.8	27.4	1			
	Households with E.coli risk level in source water ≥ 1 cfu/100ml (%)	71.1	52.1	37.9	23.7	1			

SDG	Indicators	Baseline	Targets				Progressa		MICS 2024/25
		2015	2019	2022	2025	2030	2019	2022	
6.2.1	Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water (%)	30a	46a	62a		90a	61.1	61.1	39.9
	Basic sanitation coverage (%)	82	86.5	89.9	93.3	99	89.9	95.5	
	Households using improved sanitation facilities that are not shared (%)	60	69.3	78.7	85.7	95			
	Proportion of population using latrine (%)	67.6	75.7	83.8	90	98			
	Urban households with toilets connected to sewer systems/proper FSM (%)	30	46	62	74	90			

Source: (NPC/GoN, 2017), Sustainable Development Goals Status and Roadmap: 2016-2030, p. 56. a – Voluntary National Review 2024, National Planning Commission

Table 2.1 shows mixed progress against the corresponding targets. NPC's own progress monitoring places safely managed drinking water service coverage at 25 percent in 2019 and 25.8 percent in 2022, against targets of 35 and 50 percent respectively, a substantial shortfall ((NPC/GoN, 2024a), p. 109). This safely managed figure is considerably lower than the 47.5 percent safely managed water coverage this report establishes for 2024/25 using MICS data (Chapter 3). However, the two figures are not directly comparable because NPC's tracked progress reflects an earlier administrative monitoring approach, while this report's safely managed estimates are calculated directly from MICS household survey data testing on-premises access, availability, and water quality (including E. coli presence) at the household level, and consistent with the JMP definition. Because MICS 2024/25 utilizes all three safely managed criteria rigorously, this report treats MICS as the authoritative source for safely managed status from this point forward, and the apparent gap between the NPC and MICS figures should be read as a difference in measurement approach. This does not necessarily reflect a real change in service conditions between 2022 and 2024/25.

The same Voluntary National Review report 2024 records safely managed sanitation services for 2019 and 2022 at 61.1 percent against targets of 46 and 62 percent. The document does not mention any target for it for 2025 and includes handwashing with soap and water in the safely managed indicator which should have been tracked separately. Comparing with 47.5 percent in safely managed water and 39.9 percent in safely managed sanitation achieved by 2024/25, the SDG targets set for 2030 (Table 2.1: both 90 percent) seem unachievable as we are just half way through in 2024/25.

2.5 Comparative status in South Asia

As Section 2.1 noted, global and regional benchmarks are only meaningful where national circumstances are genuinely comparable. This section situates Nepal directly against a small set of South Asian countries facing broadly similar development conditions, using the same UN Statistical Yearbook compilation of WHO/UNICEF JMP data introduced earlier. Table 2.2 presents a comparative picture of key water and sanitation indicators among selected South Asian countries.

Table 2.2 Safely managed drinking water and sanitation coverage, selected South Asian countries, 2024 (percent of population)

Country	Water service (% of population)		Sanitation service (% of population)	
	Basic	Safely managed	Basic	Safely managed
Sri Lanka	43.3	46.9	95.0	NA
India	19.3	76.4	20.6	62.8
Bangladesh	39.7	59.1	30.3	37.3
Nepal	77.2	47.5*	32.6	39.9*
Pakistan	45.7	45.0	NA	NA
Bhutan	34.0	65.6	37.4	49.5

Data Sources (UN, 2025b): United Nations UN Water: https://sdg6data.org/index.php/en/tables
5 - This UN compilation separately lists Nepal at 16.5 percent for drinking water and 53.4 percent for sanitation; see
** - This report's own MICS 2024/25 estimate (Chapter 3 and Chapter 4) rather than the UN's compilation figure for Nepal.*

On safely managed drinking water, Nepal's own verified figure of 47.5 percent places it closely with Sri Lanka (46.9 percent) and Pakistan (45.0 percent), while India, Bhutan, and Bangladesh each report meaningfully stronger performance. On safely managed sanitation, Nepal's 39.9 percent sits below every other country with an available figure in this comparison with India and Bhutan reporting notably higher coverage, except Bangladesh. Sri Lanka and Pakistan's national sanitation totals are not available in this source.

Since these figures are drawn from different national data collection systems, methodologies, definitions, reporting practice and reference periods may differ across countries, and this comparison should be read as indicative of relative regional standing rather than as a precise, methodologically uniform ranking.

2.6 Policy questions addressed by this report

As Section 2.1 noted, global and regional benchmarks are only meaningful where national circumstances are genuinely comparable. This section situates Nepal directly against a small set of South Asian countries facing broadly similar development conditions, using the same UN Statistical Yearbook compilation of WHO/UNICEF JMP data introduced earlier. Table 2.2 presents a comparative picture of key water and sanitation indicators among selected South Asian countries.

1. Is Nepal on track to meet its SDG 6 and Sixteenth Plan targets for water and sanitation? Chapter 3 and Chapter 4 assess current coverage and safely managed status directly against the targets established in Table 2.1 and the Sixteenth Plan targets described in Section 2.4.

2. Beyond coverage, are Nepal's water and sanitation services actually safely managed? Chapters 3 and 4 show that nearly universal improved coverage does not translate into equivalent safely managed status, and identify where the gap is largest.

3. Which specific dimension of service, physical access, availability, water quality, or excreta containment, is driving the shortfall in each province? Chapters 3 and 4 decompose the safely managed gap by underlying cause, since the appropriate policy response differs depending on which dimension is failing.

4. Which population groups and local governments continue to be left behind? Chapters 3 and 4 examine disparities by wealth quintile, education level, and geography. Chapter 5 extends this analysis to all 753 local governments, moving beyond simple ranking to classify each one into a strategic category based on the severity and sectoral nature of its WASH gap, Critical Integrated WASH Gap, Drinking Water Priority, Sanitation Priority, or Progress/Sustain, identifying disparities and their principal cause that provincial and national averages alone cannot reveal.

[6] This UN compilation separately lists Nepal's safely managed drinking water at 16.5 percent and safely managed sanitation at 53.4 percent for 2024, both inconsistent with this report's own directly computed MICS 2024/25 estimates. This report treats these discrepancies as data lag or interpolation artefacts in the compiled international database rather than a reflection of Nepal's actual current status, and does not use this table's Nepal specific figures anywhere in this report.

CHAPTER 3

DRINKING WATER SERVICES

Nepal's constitution guarantees the right to clean drinking water under Article 35(4), and the country has committed to provide safely managed drinking water services for all by 2030 under SDG Target 6.1. This chapter analyzes not only whether Nepal has expanded water infrastructure, but how well that infrastructure actually performs, whether it is accessible at the household level, and water it provides is available when needed, and safe to drink. It draws on the dataset from National Population and Housing Census (NPHC) 2011 and 2021, the Multiple Indicator Cluster Survey (MICS) 2019 and 2024/25. Taken together, these sources offer a more complete understanding of Nepal's water situation than any one of them can provide in isolation, and allow this chapter to move beyond coverage statistics to assess service performance directly.

This chapter proceeds in six stages. Section 3.1 details concepts and classification of water sources adopted globally and in Nepal's context. Section 3.2 traces trends in coverage since 2011, establishing the starting point against which service performance is then assessed. Section 3.3 examines on-premises access and availability when needed, including the specific reasons water supply fails, whether due to non-functional infrastructure, inaccessibility, affordability, or natural hazard disruption. Section 3.4 examines water quality, covering both faecal and priority chemical contamination. Section 3.5 combines access, availability, and quality into the safely managed indicator, Nepal's most complete measure of service performance. Section 3.6 sets out the policy implications.

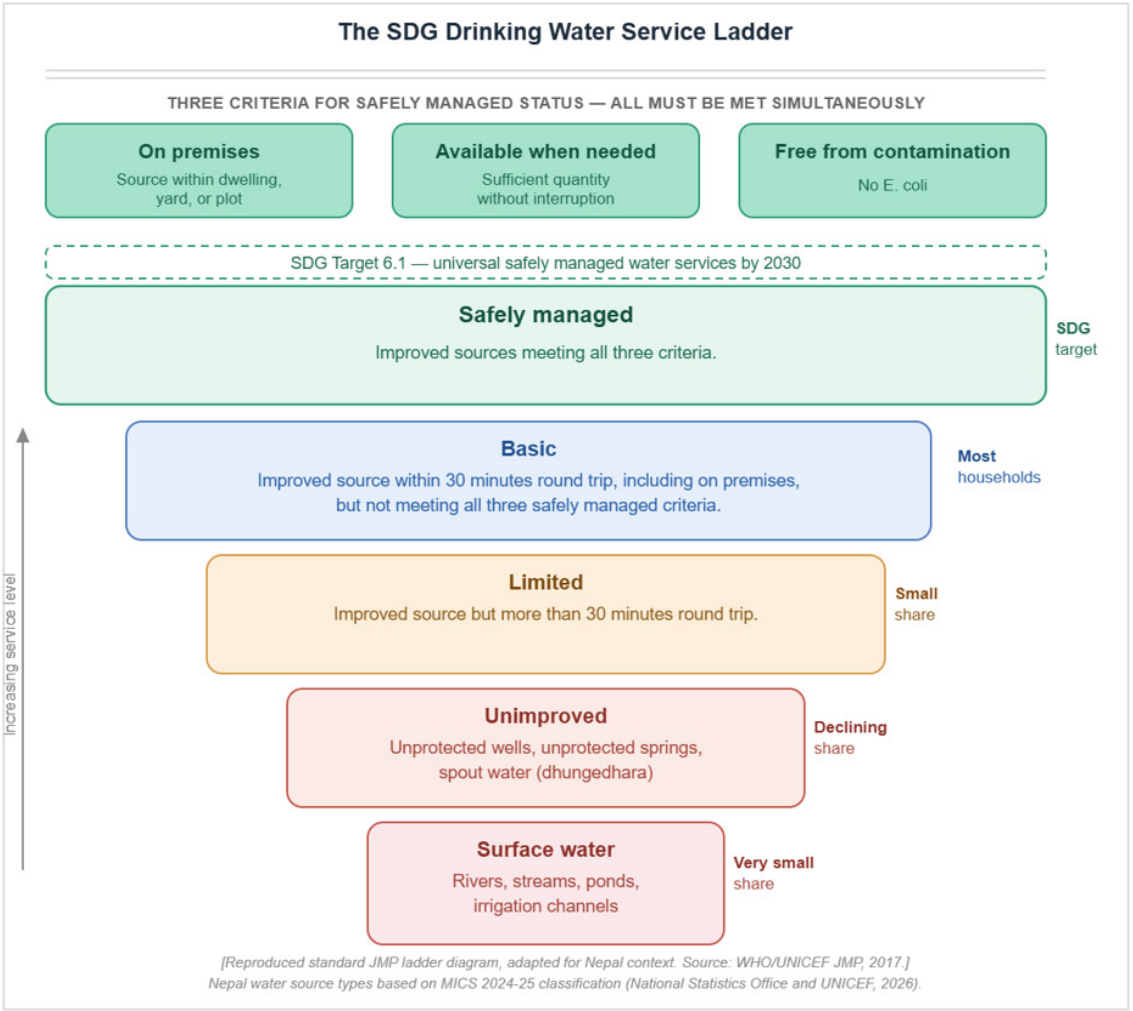
3.1 Drinking water sources: concepts, classification and Nepal's context

Access to safe drinking water is tracked globally through a classification system developed by the WHO/UNICEF Joint Monitoring Programme (JMP). From 2000, the JMP used a binary improved/unimproved distinction as a proxy for safety at source. JMP methodology assumes improved or protected sources as those which, by nature of their design and construction, have the potential to deliver safe water as opposed to unimproved or unprotected sources. The improved sources use protected or engineered[7] physical infrastructure to ensure safety as opposed to unimproved sources. However, the assumption that protected sources provide safe water is just a proxy rather

[7] In the context of WASH (Water, Sanitation, and Hygiene), engineered infrastructure refers to purpose-built, technically designed physical systems and structures that are constructed to collect, treat, store, convey, and distribute water — or to safely manage sanitation and hygiene — as opposed to relying on naturally occurring or minimally modified sources. Engineered systems are designed to reliably reduce contamination and protect public health. They require technical design, capital investment, operation and maintenance, and institutional management.

than a guarantee. They may deliver contaminated water unless it is tested and verified as safe. In 2017, the JMP expanded the framework to reflect the requirements of the Sustainable Development Goals. Unimproved sources were divided into surface water and unimproved. Improved sources were divided into three service levels: safely managed, basic and limited. A safely managed service requires water from an improved source that is located on the premises, available when needed, and free from fecal and priority chemical contamination. If an improved source does not meet all three of these conditions but can be reached within a 30-minute round trip including the queueing to collect water, it is classified as a basic service. Beyond 30 minutes, it is classified as limited. This five-stage service ladder is now the standard framework for monitoring SDG Target 6.1 (Figure 3.1). The distinction between basic and safely managed is the central measurement challenge for Nepal in the SDG period.

Figure 3.1 The JMP SDG service ladder for drinking water - from surface water to safely managed, and the three criteria for safely managed status.



Improved[8] water sources include piped water, boreholes, tubewells, protected wells, protected springs, rainwater collection, and packaged or delivered water. However, though packaged and bottled water is classified as improved, this is excluded from the safely managed category because its quality assurance depends entirely on the producer(WHO/UNICEF JMP, 2018). Unimproved sources include unprotected dug wells, unprotected springs, and surface water drawn directly from rivers, streams, ponds, or irrigation channels(UNICEF DATA, 2026). Surface water is the lowest category, drawn directly from open sources with no physical protection against contamination.

Within the improved category, there is an internal hierarchy of expected safety and all improved sources do not offer equivalent protection. Piped water from a treated and well managed supply system is the only source type that can reliably meet all three additional criteria for safely managed status. Because it is the only category incorporating a multi-barrier treatment chain before water reaches the household(WHO/UNICEF JMP, 2018). Tube wells and boreholes reduce surface contamination risk compared to shallow dug wells but offer no protection against geogenic chemical contamination(Bain et al., 2014), which is especially the case in Nepal's Tarai belt. Protected springs and rainwater harvesting carry relatively low microbial risk when well-maintained. Protected dug wells and covered wells offer structural protection against surface contamination only, with safety depending entirely on local groundwater quality.

In Nepal, these source types correspond to a range of physical infrastructure spread across the country's three ecological zones. In hill and mountain zones, gravity-fed piped schemes have been the most common form of rural water supply for several decades(MoWS, 2024). Water is drawn from a protected spring or stream located at a higher elevation than the village or settlement and flows downhill through a pipeline to household taps or communal water points, without the need for pumping. These schemes are cost-effective and widely used where reliable spring sources are available at sufficient elevation. However, spring or stream sources in many hill and mountain districts have been depleting over time especially due to drought, insufficient rainfall, deforestation, land use change, and the effects of climate variability(NSO, 2024). Lift Drinking Water Systems (LDWS) are increasingly being installed where gravity schemes are no longer feasible. An LDWS pumps water from a river or groundwater source below and lifts it up to a storage tank at a higher elevation, from where it is distributed to households. LDWS are increasingly popular in Nepal's formidable mountain and hill regions(TKP, 2022). Nepal's census does not distinguish whether the source is gravity-fed scheme or LDWS, rather both of them are recorded as tap or piped water and classified as improved sources. In the Tarai belt, the flat terrain makes gravity-fed schemes impractical across most of the region. Tubewells and boreholes are therefore the dominant water supply infrastructure. In many secondary towns across the Tarai and Hill urban centres, various water utilities[9] of varying scale manage water supply systems through pressurized distribution

[8] For Nepal's context, refer to Annex B and C for questions related to household source of drinking water in NPHC and MICS, and classification of categories into improved and unimproved groups.

[9]For example, Kathmandu Upatyaka Khanepani Limited (KUKL) in the Kathmandu Valley, and Water Supply Management Boards and Nepal Water Supply Corporation systems in Hill and Tarai districts including the Water Users Committee.

networks. Urban piped systems are the only source category with the structural capacity to meet all the criteria for safely managed service, but their actual performance depends heavily on the reliability of supply, condition of the distribution network, and the adequacy of treatment(WHO/UNICEF, 2004).

3.2 Trends in Drinking Water Access

Nepal has made considerable progress in expanding improved water source coverage over the past decade and a half. The NPHC 2021 recorded 92.9 percent of non-institutional households using improved sources, up from 85.4 percent in NPHC 2011 (Table 3.1). Reliance on unimproved sources fell by half with reductions across all subcategories, which is a positive indicator for public health. However, the fact that over 473,177 households still relying on unimproved sources in 2021 highlights that challenges remain, particularly for those who still use "river/stream" and "other[10]" source of water which are thought to be more serious.

Within the improved category, tap and piped water became the dominant source, rising from 47.8 to 57.0 percent of households. This reflects a sustained structural shift in Nepal's primary domestic water infrastructure toward piped systems.

The 2021 census also recorded jar and bottled water as a separate category for the first time, used by 4.6 percent of households nationally, which is concentrated overwhelmingly in the three districts of Kathmandu Valley where 84.6 percent of all jar water users nationally reside. As this category was not isolated in the 2011 census, a direct comparison is not possible.

Table 3.1 Main Source of drinking water by type of infrastructure, NPHC 2011 – 2021

Main source of water/ Infrastructure	Households in census year			
	NPHC 2011		NPHC 2021	
	Number	Percent	Number	Percent
Improved source	**4,629,214**	**85.4**	**6,187,664**	**92.9**
Tap/Piped[11] water	2,591,379	47.8	3,794,861	57.0
Tubewell/Handpump	1,904,965	35.1	1,982,180	29.8
Covered well/Kuwa	132,870	2.4	102,235	1.5
Jar/Bottled	-	-	308,388	4.6

[10] As per the census 2021 enumeration manual, "Other" source of water includes water from dam, pond, and delivered water such as "water tanker", etc. The dam and pond water should have different category which is in fact "surface water". As regards to water delivered from a tanker, its quality depends on the source from where it is filled, which is not noted separately in the census 2021. So, it appears that two different kind of sources have been lumped into a single code under "Other" in this question in NPHC 2021.

[11] Tap/pipe inside or outside a house or house-compound are merged into this category for ease of comparison.

Main source of water/ Infrastructure	Households in census year			
	NPHC 2011		NPHC 2021	
	Number	Percent	Number	Percent
Unimproved source	**794,083**	**14.6**	**473,177**	**7.1**
Uncovered well/Kuwa	255,658	4.7	141,857	2.1
Spout water	311,394	5.7	262,044	3.9
River/Stream	60,580	1.1	23,827	0.4
Other	166,451	3.1	45,449	0.7
Total	**5,423,297**	**100**	**6,660,841**	**100**

Table 3.2 presents a comparative overview of access to improved drinking water sources between census 2011 and 2021 across various areas where noticeable changes occurred over the period. The mountain zone recorded the highest rate of tap water consumption among all ecological regions. Tarai had the improved sources higher than the national figure though nearly six in 10 households used Tube-well or hand pump in 2021.

Table 3.2 Main Source of drinking water by type of infrastructure and source, NPHC 2011 – 2021

Region / Category	Improved source % of households		Main water source type in 2021	Remarkable change 2011-2021
	2011	2021		
National Average	85.4	92.9	Tap / Piped (57.0%)	Unimproved water sources were cut in half (from 14.6% to 7.1%).
Mountain Belt	77.3	87.5	Tap / Piped (87.0%)	Maintained the highest structural reliance on piped infrastructure.
Hill Belt	78.6	90.1	Tap / Piped	• Tap/Piped remains dominant • Jar/bottled water is a prominent source (9.7%) due to Kathmandu Valley being categorized as Hill belt.
Tarai Belt	93.3	96	Tube-well / Hand-pump (58.1%)	• Groundwater remains dominant • tap/piped usage increased from 19.3 percent to 35.8 percent • Jar water usage is minimal (0.7%).
Karnali Province	63.6	82.7	Tap / Piped (80.1%)	Achieved the largest regional reduction in unimproved source usage.

Region / Category	Improved source % of households		Main water source type in 2021	Remarkable change 2011-2021
	2011	2021		
Sudurpashchim Province	81.8	91.2	Tap / Piped (53.3%)	Improved water source access expanded past 90% of the households but reliance on tube-well still at 37.1 percent in 2021, a slight drop from 39.8 percent in 2011.
Metropolitan Cities	84.7	95.4	Tap / Piped (57.6%)	• Massive commercial shift • 21.6 percent of households now rely on Jar/Bottled water • Reliance of tap/piped water decrease from 60.1 percent to 57.6 percent.
Rural Municipalities	83.5	92.2	Tap / Piped (62.6%)	• Unimproved water usage fell sharply from 16.5 percent to 7.8 percent • Tap/Piped water usage highest among other groups (metro, sub-metro and urban municipalities).

Differences between urban and rural areas also stand out in the Table 3.2. While tap/piped water remained the primary source in metropolitan areas, commercial water consumption relying on jar or bottled water rose to 21.6 percent by 2021. This suggests growing concerns related to coverage, reliability, or quality of municipal supplies in urban centers as well as affordable price per jar for middle income households, and especially for households in higher and highest wealth quintiles. Above sixty percent of the households in rural municipalities use tap/piped water in 2021 which is highest among other groups (metro, sub-metro and urban municipalities). Data shows that there is uneven changes during a decade among Provinces, ecological belts and urban/rural areas (For details: Table AW.1). Table AW.1 shows that, by DEGURBA categories, about one in ten rural households and one in twenty urban and Peri-urban households used unimproved sources of drinking water in 2021 — a marked decline from 2011, consistent with the national trend of unimproved use falling by half over the same period. By type of municipality, 4.6 percent of households in metropolitan cities and 6 percent in sub-metropolitan cities used unimproved sources of water in 2021.

MICS data extend this picture. Table 3.3 presents the consolidated picture across all data sources. Nationally, improved source use reached 98.2 percent of the population in MICS 2024-25, up from 97.1 percent in MICS 2019. Both of NPHC and MICS data sources confirm the same directional story: access to improved sources has approached universality. The remaining 1.8 percent using unimproved sources by MICS 2024-25 represents a tiny but marginalized group of people of great concern, predominantly in remote rural areas of Karnali and among the Lowest wealth quintile as regards to having access to improved sources of water (Table AW.3 and Table AW.4).

Table 3.3 **Percentage of population or households using improved drinking water sources, by province, ecological belt and area of residence, NPHC (2011- 2021) and MICS (2019 - 2024/25)**

Area/Category	% of households using improved sources		% of population using improved sources		Change shown by NPHC 2011-2021 (Percentage points)	Change shown by MICS 2019-2024/25 (Percentage points)
	NPHC 2011	NPHC 2021*	MICS 2019*	MICS 2024/25		
National	85.4	92.9	97.1	98.2	7.5	1.1
Province						
Koshi	89.0	95.6	97.1	97.9	6.6	0.8
Madhesh	92.7	95.3	97.7	99.0	2.6	1.3
Bagmati	81.3	91.9	97.3	98.5	10.6	1.2
Gandaki	85.2	90.9	96.5	98.6	5.7	2.1
Lumbini	88.7	94.1	98.2	98.4	5.4	0.2
Karnali	63.6	82.7	94.2	93.9	19.1	-0.3
Sudurpashchim	81.8	91.2	95.4	98.2	9.4	2.8
Ecological Belt						
Mountain	77.3	87.5	98.2	96.0	10.2	-2.2
Hill	78.6	90.1	95.5	97.7	11.5	2.2
Tarai	93.3	96.0	98.4	99.0	2.7	0.6
DEGURBA categories						
Urban		94.7	98.9	99.5		0.6
Peri-urban		95.6	97.5	98.9		1.4
Rural		88.5	95.0	96.3		1.3

** These two figures are not comparable, as the figures for NPHC are based on households while they are based on population for MICS. But, even if we figure out these proportions for NPHC in terms of population, NPHC 2021 values are consistently lower than that of MICS 2019 for all areas. This is because the CENSUS and MICS have classified water sources differently into improved and unimproved groups. For example, census treats "spout water" as unimproved which is basically "spring" sources as used by MICS, while MICS classify "protected spring" and "unprotected spring" into improved and unimproved sources respectively. MICS estimates may also carry sample-size limitations that a full census count does not.*

Provincial and geographic variation in improved source coverage narrowed considerably across the census period. Karnali recorded the largest absolute census gain, rising 19.1 percentage points between NPHC 2011 and 2021, yet performed the least by all the four data sources. Karnali and the Mountain belt both recorded a marginal decline in improved sources between the two MICS rounds which is against the trend shown by the two census rounds for these two areas.

District-level tap/piped water access – NPHC 2011/2021

Providing safely managed drinking water to every household is a priority across all tiers of government. As mentioned earlier, the most abundantly used source of water is different in different geographical belts. However, as treated tap or pipe water sits at the top of the improved source hierarchy in terms of safety, tracking its progress carries particular significance for planning purposes.

Bottom ten districts in access to tap/piped water

Table 3.4 shows sharp rise in the proportion of households using tap/piped water across all of the lowest-performing bottom-ten districts over the decade. A comparison of decadal progress reveals real variation in pace. For instance, Bardiya has nearly tripled its progress over the last ten years, while Kanchanpur has exactly doubled its figures. Even though the same ten districts remained at the bottom of the national ranking over the decade, the rate at which they improved varied considerably.

Table 3.4 Bottom 10 districts with and without access to tap/piped (inside and outside) water, number and percentages of households, NPHC 2011-2021

Bottom ten in NPHC 2011					Bottom ten in NPHC 2021					Remained in bottom ten in 2021?	Rank based on number of households not using tap/ pipe) in 2021
Rank 2011	District	% of total hhld. using tap or pipe	Number of hhld. using tap or pipe	Number of hhld. not using tap or pipe	Rank 2021		% of total hhld. using tap or pipe	Number of hhld. using tap or pipe	Number of hhld. not using tap or pipe		
1	Saptari	1.7	2,009	119,055	1	Saptari	4.6	6,735	140,081	Yes	3
2	Siraha	5.5	6,446	111,483	2	Dhanusa	15.6	27,644	149,447	Yes	2
3	Rautahat	7.0	7,428	99,224	3	Siraha	15.7	23,321	125,228	Yes	5
4	Bardiya	7.4	6,184	76,963	4	Kanchanpur	19.4	21,610	89,557	Yes	9
5	Kanchanpur	9.6	7,851	74,283	5	Sarlahi	25.7	42,331	122,493	Yes	6
6	Kapilbastu	10.2	9,334	81,930						No, exited	
7	Sarlahi	11.8	15,630	117,173	6	Rautahat	26.8	36,748	100,277	Yes	7

Bottom ten in NPHC 2011					Bottom ten in NPHC 2021					Remained in bottom ten in 2021?	Rank based on number of households not using tap/ pipe) in 2021
Rank 2011	District	% of total hhld. using tap or pipe	Number of hhld. using tap or pipe	Number of hhld. not using tap or pipe	Rank 2021		% of total hhld. using tap or pipe	Number of hhld. using tap or pipe	Number of hhld. not using tap or pipe		
8	Kailali	12.9	18,430	123,983	7	Morang	26.9	73,084	199,076	New,entrant	1
9	Dhanusa	13	17,939	120,286	8	Bardiya	28.2	30,008	76,277	Yes	10
10	Mahottari	14.1	15,672	95,626	9	Mahottari	30.2	41,701	96,185	Yes	8
					10	Kailali	30.9	60,512	135,360	Yes	4
Total			**106,923**	**1,020,006**				**363,694**	**1,233,981**		
						Kapilbastu	31.1%	37,863	83,998		

The absolute numbers of households without piped water make this inequality concrete and give it planning significance. In 2021, Morang, new entrant to the bottom ten list in 2021, had the highest (199,076) number of households without tap or piped water among the bottom ten, though it came seventh in the rank by proportion of not having pipe. Kailali, despite in the tenth position by percentage of having pipes, is fourth largest by absolute number of households not having pipes. Together, the ten bottom districts in 2021 account for nearly one and a quarter million (1,233,981) households without tap or piped water. This is a scale of deprivation that percentage figures alone do not convey, and it represents the most concentrated geographic gap in the country which might have emerged due to, for example, investment gap or other un/known factors like structural bottlenecks, public choices, or behavioral aspects.

Kapilbastu is the only district to exit the bottom ten in 2011, growing from 9,334 to 37,863 piped households and reaching 31.1% coverage. However, 83,998 households in Kapilbastu still lack piped water in 2021, so its exit from the list reflects faster growth relative to other lagging behind districts rather than a resolution of its access challenge.

Dhanusa warrants specific attention. It was ninth in 2011 bottom ten but fell to second place in the 2021 ranking in terms of proportion of households using pipe – with 149,447 households without piped water – the second largest number of households among bottom-ten district. Its percentage coverage moved only from 13.0% to 15.6% which is the slowest proportional growth among all the districts examined and it suggests that household growth far outpaced piped water growth over the decade in this district.

Morang's entry into the bottom ten stands out for a different reason. With 73,084 piped households at 26.9% coverage and 89,195 without piped access, Morang is a high-population district where the scale of the unserved population is large in absolute terms even though its percentage coverage is not the lowest. Its inclusion in the 2021 bottom ten reflects the concentration of underperformance in densely populated Tarai districts where total household numbers are high.

A comparison of the household figures without access to piped water in 2011 and 2021 also reveals that the absolute number of households without piped water has not fallen in several districts despite coverage gains. In Saptari, it increased from 119,055 to 140,081 households –an increase of about 21,000 households. Similarly, Kailali grew from 123,983 to 135,360 households, Kanchanpur from 74,283 to 89,557. In these districts, household formation outpaced piped water expansion, meaning that in absolute terms more households were without piped water in 2021 than in 2011, even as the percentage coverage improved.

All ten of the lowest-performing districts on piped water access in both the 2011 and 2021 censuses are located in the Tarai belt, of which six are concentrated in Madhesh Province alone. This is not a random underperformance, because even the bottom twenty districts in tap/pipe water coverage in both census years belong to the Tarai belt. Though access to piped water in overall Tarai belt has nearly doubled from 19.3 percent to 35.8 percent households over the decade (Table 3.2), tubewell remains the default for nearly six in ten households (58.1%) in this belt and there might be more reasons that are specific for this. This pattern is consistent with known structural factors affecting the belt, including the accessibility and low cost of shallow groundwater relative to piped infrastructure, and affordability constraints on connection, though a full causal analysis is beyond the scope of this report (Chitrakar, Knight and Bartnik, 2024; MoWS, 2024).

Top Ten Districts in Access to Tap/Piped Water

The top ten districts with the highest tap and piped water coverage given in Table 3.5 present a stark geographic contrast to the bottom ten given in Table 3.4. Every top-ten district in both 2011 and 2021 is a hill or mountain district, while every bottom-ten district is a Tarai district.

Table 3.5 Top Ten Districts with Access to Tap/Piped Water, NPHC 2011 and 2021

District and percentage of total households with access to tap or pipe						
NPHC 2011 Top Ten			NPHC 2021 Top Ten			
District	Rank	% of Total Households	District	Rank	Remained in top ten?	% of total households
Manang	1	97.6	Manang	1	Yes	98.2
Kaski	2	92.3			Slacked	81.5

District and percentage of total households with access to tap or pipe						
NPHC 2011 Top Ten			NPHC 2021 Top Ten			
District	Rank	% of Total Households	District	Rank	Remained in top ten?	% of total households
Mustang	3	91.6			Slacked	90.2
Taplejung	4	90.5	Taplejung	2	Yes	96.5
Baglung	5	88.8			Slacked	91.7
Solukhumbu	6	88.8	Solukhumbu	4	Yes	94.9
Gulmi	7	88.6	Gulmi	3	Yes	95.2
Lamjung	8	88.1			Slacked	91.7
			Panchthar	5	New entrant	94.3
			Parbat	6	New entrant	94.1
Rasuwa	9	87.9	Rasuwa	7	Yes	93.7
Nuwakot	10	87.6			Slacked	87.8
			Darchula	8	New entrant	93.7
			Terhathum	9	New entrant	93.2
			Dolakha	10	New entrant	92.9

Manang, Taplejung, Solukhumbu, Gulmi, and Rasuwa districts maintained their top ten status in both the census years. Mustang, Baglung, and Lamjung slacked from the top ten list despite having above 90 percent tap or pipe. Kaski's decline from 92.3 percent to 81.5 percent is the most notable, driven largely by the growth of jar and bottled water. Nuwakot, the last member in the top ten list did not grow much (from 87.6% to 87.8%) to maintain its top ten position in 2021.

The concentration of hill and mountain districts at the top of this ranking should be read with some caution. In this terrain, gravity-fed schemes are the natural, low-cost option, since elevation gradients let water reach households without pumping. These are recorded as tap or piped water irrespective of whether or not the water is treated. This is the same dynamic that explains tubewell dominance in the Tarai, just working in reverse. A shallow water table there makes tubewells the cheapest option, so the Tarai underperform on a ranking that only counts piped water. Steep terrain in the hills and mountains makes gravity-fed piped systems the cheapest option instead, so this region outperforms on the same ranking. There is also a measurement problem within the piped water category itself. The census records tap or piped water as one category, whether it comes from a fully treated, metered utility connection like KUKL in Kathmandu Valley, or a small community-managed gravity scheme with no water quality monitoring. Two districts can

report identical piped water coverage while the water itself differs sharply in safety. A study of five untreated gravity-fed schemes in Mid-Western Nepal found that only 7 percent of tap samples met international microbial water quality guidelines before any water safety management was introduced. It rose to only 50 percent after eight months of a risk-based monitoring intervention, indicating that a "piped" classification alone says little about safety unless active management is in place (Tosi Robinson et al., 2018). In short, this ranking reflects what is cheapest to build given the local terrain, and what type of source a household uses, not how well that source is managed or how safe the water actually is.

Districts with Declining Tap/Piped Water Access

Table 3.6 gives household and tap/pipe-using household growth ratios for six districts. In each district, the absolute number of tap/pipe-using households rose over the decade, so the percentage decline reflects new households outpacing piped infrastructure expansion rather than a loss of existing service. However, since the census compares stocks at two points in time rather than tracking the same households, it cannot rule out some individual connections being lost within that net increase.

Table 3.6 Growth Ratio of Total Household and Tap/Piped Household, 2011 and 2021

District	Total household				Household with piped water			
	2011	2021	HH growth ratio	New HH formed	2011	2021	Piped HH growth ratio	New HH with pipe connection
Kathmandu	435,544	542,892	1.25	107,348	270,037	298,591	1.11	28,554
Lalitpur	109,505	140,130	1.28	30,625	75,121	78,893	1.05	3,772
Bhaktapur	68,557	108,406	1.58	39,849	53,406	66,670	1.25	13,264
Kaski	125,459	160,416	1.28	34,957	115,799	130,739	1.13	14,940
Mugu	9,600	12,430	1.3	2,830	7,229	7,781	1.08	552
Mustang	3,305	3,606	1.09	301	3,027	3,253	1.08	226

Table 3.6 shows most extreme case for Bhaktapur where total households grew by 58 percent against 25 percent growth in tap/pipe-using households, with 39,849 new households formed but only 13,264 gaining connections. Lalitpur shows the weakest response in the Valley marking 28 percent household growth against just 5 percent connection growth, with 30,625 new households against only 3,772 newly connected. In Kathmandu, 107,348 new households formed but only 28,554 gained connections, with most of the remainder turning to jar water. In Mugu and Mustang, the picture is fundamentally different. In Mugu, of approximately 2,830 new households formed over the decade, only 552 received piped connections. Over the period, when total household grew by thirty percent, piped households grew by meager eight percent in Mugu. The remaining

new households were absorbed almost entirely by spout water, which rose from 17.2 percent to 34.1 percent over the decade (Table AW.2). In this period, the total reliance on unimproved sources in Mugu increased from 24.5 percent to 37.4 percent, meaning more than one in three households were using unimproved sources by 2021. New households that could not access piped water turned to the nearest unimproved source which is the only available option in a remote mountain district with no commercial water market. In Mustang, both the household growth ratio and the tap/piped household growth ratio are almost identical at 1.09 and 1.08 respectively, and the 1.4 percentage point decline is negligible for a district of only 3,606 total households.

Table 3.7 lists above six districts where the proportion of households using tapor piped water fell between 2011 and 2021, together with their 2021 use of jar or bottled water.

Table 3.7 Districts Exhibiting Negative Growth in Tap/Piped Water Access

District	Percent of Households Using Tap/Piped Water			Households with Jar or Bottled Water, 2021	
	2011	2021	Percent point change	Number	Percent
Kathmandu	62.0	55.0	-7.0	190,687	35.1
Lalitpur	68.6	56.3	-12.3	44,242	31.6
Bhaktapur	77.9	61.5	-16.4	25,999	24.0
Kaski	92.3	81.5	-10.8	18,587	11.6
Mugu	75.3	62.6	-12.7	1	0.0
Mustang	91.6	90.2	-1.4	1	0.0

In Kathmandu, Lalitpur, Bhaktapur, and Kaski, the gap between household growth and piped infrastructure growth was filled almost entirely by jar and bottled water. Kathmandu recorded the highest jar water dependency nationally with 190,687 households at 35.1%, Lalitpur with 44,242 households at 31.6%, Bhaktapur with 25,999 at 24.0%, and Kaski with 18,587 at 11.6%. The three Kathmandu Valley districts alone account for 260,928 jar water using households which is 84.6% of the entire national total of 308,388. Adding Kaski raises this to 279,515 households, or 90.6% of national jar water use concentrated in just four districts. The remaining 28,873 jar water households (just 9.4% of the national total) are spread across all other 73 districts. The higher jar water figures in these four districts may reflect two distinct groups of households. The first are new households in rapidly urbanizing Peri-urban wards that turned to commercial water because piped infrastructure had not yet reached them. The second are existing piped households that supplemented or replaced tap water with jar water due to quality and reliability concerns.

The census data cannot establish why new household formation outpaced piped connections in the districts presented in 4.6. This would require further investigation to determine if this reflects

the location of new housing construction relative to existing water supply networks or the tenure status of new households, or other factors, which is beyond the scope of this report.

These coverage gains from census data describe how many households have gained access to an improved source. The coverage expansion does not necessarily ensure the delivery of safely managed water services. The remainder of this chapter tests that distinction directly. Section 3.3 examines whether water source is accessible, and whether water is actually available when needed and why it sometimes is not, and Section 3.4 examines whether it is safe to drink. Coverage is therefore treated here as the starting point for this chapter's analysis while tracking Nepal's transition from infrastructure expansion to delivering safely managed water services.

3.3 Access to improved sources on-premises and availability when needed

On-premises access is the first criterion for safely managed status: the water source must be located within the dwelling, yard, or plot of the household. A source that requires any travel outside the household boundary does not meet this criterion regardless of its quality or proximity (WHO and UNICEF (JMP), 2018)). In Nepal's context, the two dominant on-premises source types specific to geographic locations are piped connections in Hill and Mountains and tubewells or boreholes in Tarai. The NPHC neither inquired about the location of the water source nor the availability of water when needed. It only classified piped water within or outside household premises but it did not obtain the location of other type of sources.

Availability when needed is the second criterion for safely managed status: the water must be available when needed. The MICS availability indicator is derived from the binary question WS7, which asks whether there was any time in the last month when the household did not have sufficient drinking water (NSO/UNICEF, 2026) p. 662). As such a single episode of insufficiency classifies the household as lacking availability, with no distinction between a brief maintenance shutdown and a longer scheme failure. The two survey rounds also have different seasonal profiles: MICS 2019 fieldwork ran from May to November 2019, capturing monsoon and early post-monsoon conditions, while MICS 2024/25 ran from December 2024 to May 2025, covering the dry season, including its most acute pre-monsoon months. A further limitation is that WS7 does not distinguish between insufficiency caused by system failure and insufficiency arising from a scheme's designed mode of operation. Many gravity-fed and LDWS schemes in Nepal's hill and mountain areas supply water on a fixed schedule rather than continuously. One documented case in Kavre district, for instance, operates on just one hour of supply in the morning and one in the evening (Dongol, Khadka and Kharel, 2016). Though this is not a case for generalizatiom, a household relying on such a schedule has little buffer against any single day of unusually high

demand, meaning even a well-functioning scheme of this kind may generate a reported episode of insufficiency over the survey reference period. For these reasons, the figures that follow should be read as directional rather than precise, and the scale of the scheduling effect nationally cannot be determined from the data available here.

Table 3.8 presents on-premises access and availability figures together with natural hazard affected rates derived from a newly introduced module on disruption caused by natural hazards in MICS 2024/25. This table shows that on-premises access rose almost everywhere over the two MICS periods while availability moved in the opposite direction. Overall, availability fell by 2 percentage points even as access rose by 13.1 points. This divergence is consistent with the finding that 13.4 percent of the population reported their water supply being disrupted by a natural hazard in the preceding 12 months.

Geographic variation follows a consistent pattern. Tarai leads at 93.2 percent on-premises access, consistent with the prevalence of household tube wells in flat-terrain communities. Karnali shows the pattern most sharply: the largest access gain of any province (+37.9 points) coincided with falling availability and the highest hazard exposure, at 34.8 percent. However, yet Karnali remains the lowest on-premises access province with 77.3 percent population. Mountain areas show an almost identical profile with a 23.1 percentage points access gain, falling availability, and hazard exposure of 34 percent, nearly tied with Karnali for the highest in the table, consistent with Karnali's population being concentrated in Mountain and Hill terrain. The largest absolute gain in on-premises access in Mountain is likely driven by the accelerated deployment of gravity-fed piped schemes and, increasingly, solar-powered lift systems in remote communities (MoWS, 2024). Despite such a massive on-premises access gain, it has the highest residual gap: nearly one in four Mountain residents (23.7%) still lacks on-premises access in 2024/25.

Gandaki recorded the third largest on-premises access gain of any province (+17.9 percentage points), but also the steepest fall in availability (-11.2 percentage points). Its hazard exposure (18 per cent) was also above the national average. Rural areas show the same combination at the DEGURBA level with a 25 percentage points access gain against falling availability and 26.6 percent hazard exposure, nearly three times the urban rate. The lowest wealth quintile demonstrates the main exception to this pattern: it combined a strong access gain (+31.5 percentage points) with rising availability (+5.1 percentage points), even though its hazard exposure, at 24.7 percent, remained well above the highest quintile's 8.7 percent.

Table 3.8 Percentage of population with on-premises access to improved drinking water sources, availability when needed, and source affected by hazard: by province, ecological belt, DEGURBA classification, and wealth quintile, MICS 2019 and 2024/25

Area	Improved sources (%)		On-premises access (%)		Availability in sufficient quantities (%)*		Change in "on-premises" (Percent pts.)	Change in "availability" (Percent pts.)	Affected by at least one hazard (%) 2024/25
	2019	2024/25	2019	2024/25	2019	2024/25			
	i	ii	iii	iv	v	vi	iv - iii	vi - v	
National	97.1	98.2	76.9	90.0	80.3	78.3	13.1	-2.0	13.4
Area of residence									
Urban	97.3	98.9	80.4	92.0	81.6	80.2	11.6	-1.4	10.7
Rural	96.7	96.8	69.7	86.1	77.7	74.3	16.4	-3.4	18.7
Province									
Koshi	97.1	97.9	88.4	93.3	82.8	79.1	4.9	-3.7	13.0
Madhesh	97.7	99.0	82.8	93.2	93.2	88.5	10.4	-4.7	2.7
Bagmati	97.3	98.5	74.2	88.7	70.8	73.1	14.5	2.3	20.1
KTM Valley Urban	98.0	99.0	77.2	90.1	64.5	77.9	12.9	13.4	9.6
Gandaki	96.5	98.6	74.7	92.6	80.1	68.9	17.9	-11.2	18.0
Lumbini	98.2	98.4	84.2	91.5	89.4	87.3	7.3	-2.1	5.0
Karnali	94.2	93.9	39.4	77.3	59.5	54.5	37.9	-5.0	34.8
Sudur pashchim	95.4	98.2	59.8	83.2	67.3	73.3	23.4	6.0	19.7
Ecological Belt									
Mountain	98.2	96.0	53.2	76.3	58.2	55.3	23.1	-2.9	34.0
Hill	95.5	97.7	67.7	87.9	67.4	71.1	20.2	3.7	20.4
Tarai	98.4	99.0	88.2	93.2	94.8	87.7	5.0	-7.1	4.5
DEGURBA categories									
Urban	98.9	99.5	83.6	92.0	78.7	79.9	8.4	1.2	9.5
Peri-urban	97.5	98.9	87.7	92.5	93.1	88.1	4.8	-5.0	5.5
Rural	95.0	96.3	59.5	84.5	67.9	64.5	25.0	-3.4	26.6

Area	Improved sources (%)		On-premises access (%)		Availability in sufficient quantities (%)*		Change in "on-premises" (Percent pts.)	Change in "availability" (Percent pts.)	Affected by at least one hazard (%) 2024/25
	2019	2024/25	2019	2024/25	2019	2024/25			
	I	ii	iii	iv	v	vi	iv - iii	vi - v	
Municipality categories									
Metro politan City	99.1	99.5	81.7	92.0	72.6	83.7	10.3	11.1	6.2
Sub-Metro politan	98.7	98.5	91.6	94.8	94.4	89.8	3.2	-4.6	3.7
Urban Munici pality	96.7	98.9	78.7	91.1	81.8	78.4	12.4	-3.4	12.4
Rural Munici pality	96.7	96.8	69.7	86.1	77.7	74.3	16.4	-3.4	18.7
Wealth index quintile									
Lowest	91.9	94.7	45.4	76.9	59.5	64.6	31.5	5.1	24.7
Lower	97.5	98.5	74.7	90.1	84.4	77.2	15.4	-7.2	14.1
Middle	98.5	98.6	85.3	91.8	90.02	81.6	6.5	-8.4	11.1
Higher	98.7	99.6	90.2	93.8	89.9	84.5	3.6	-5.4	8.4
Highest	98.8	99.6	89.0	96.1	77.8	83.4	7.1	5.6	8.7

Table source: Table AW.3 and Table AW.4

By municipality type, Metropolitan Cities recorded a rare case of both access and availability improving together, while Sub-Metropolitan and Urban Municipalities saw availability decline despite continued access gains, a pattern most pronounced in Sub-Metropolitan areas (−4.6 points) despite comparatively low hazard exposure (3.7 percent), suggesting a cause other than natural hazard disruption. Rural Municipalities present a different case where the largest access gain of any category (+16.4 points) came alongwith a decline in availability (−3.4 points), but here hazard exposure is higher, at 18.7 percent of population which is more than five times Sub-Metropolitan's rate. This indicates natural hazard disruption to be a more plausible contributor to any episode of water unavailability in sufficient quantities when needed in Rural Municipalities.

Figure 3.2 Scatterplot[12] of on-premises access versus availability when needed, by province, ecological belt and DEGURBA classification, MICS 2024/25.

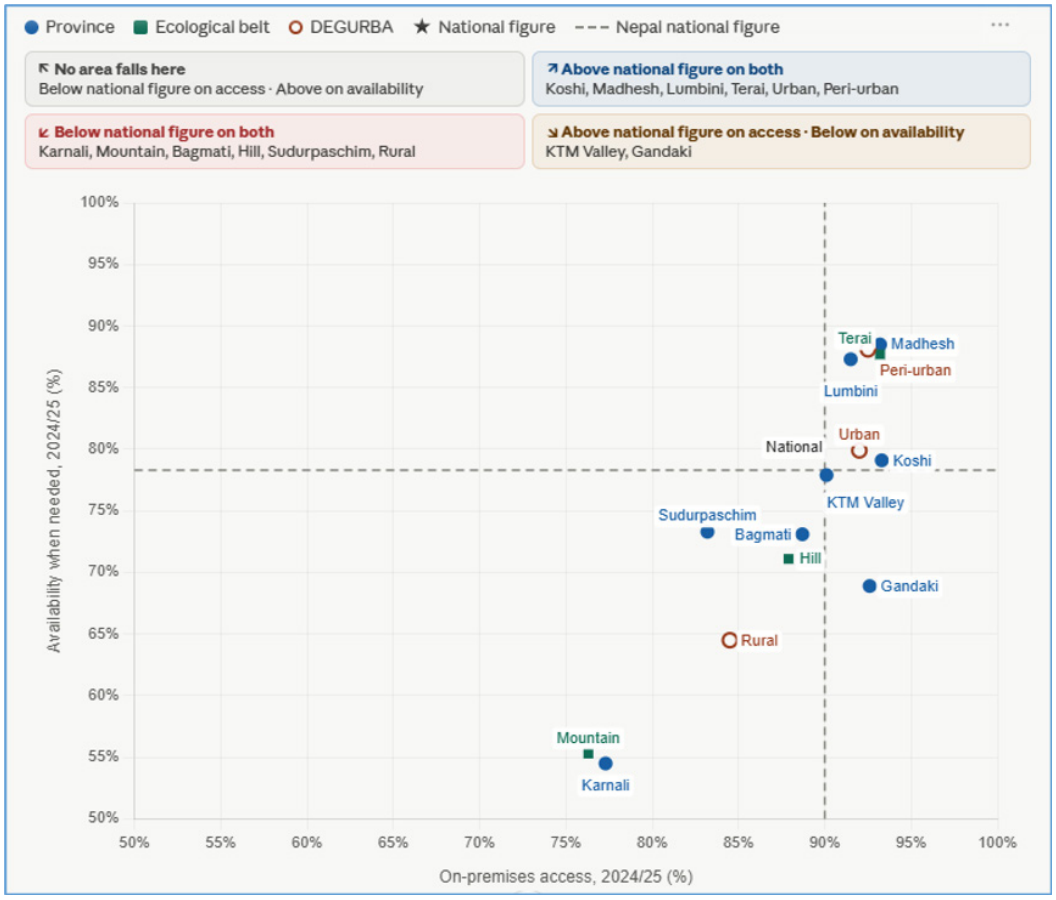


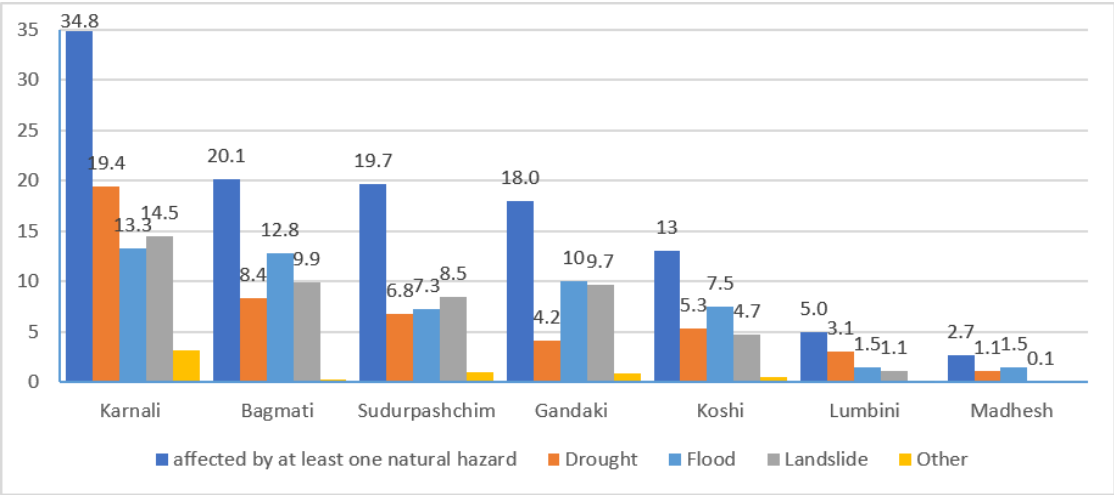
Figure 3.2 plots the scatterplot relationship between the two main indicators: on-premises access and availability. This scatterplot divides Nepal's provinces, ecological belts, and DEGURBA categories into four quadrants against the national reference lines of 90.0 percent access and 78.3 percent availability. Figure 3.2 displays some pattern visually: Koshi, Madhesh, Lumbini, Tarai, Urban, and Peri-urban areas cluster above the national line on both indicators, while Karnali and Mountain sit furthest below on both. The overall pattern reinforces the chapter's core finding that access and availability are not moving together.

[12] Note: The two indicators have different source references. On-premises access measures sources within the dwelling, yard, or plot only, and availability measures quantity sufficiency from any source. The quadrants show the joint position of each area on two independent sector performance indicators and do not represent a household-level comparison. The reference lines are at the Nepal national figures of 90.0% access and 78.3% availability, dividing the chart into four analytical quadrants.

Natural Hazard Disruption

MICS 2024/25 includes for the first time a module on natural hazard disruption of water supply, providing nationally representative data. Nationally, 13.4 percent of population had their water supply disrupted by at least one natural hazard in the preceding 12 months, with flood, drought, and landslide each contributing roughly equally at the national level (AW.7 and Table AW.8).

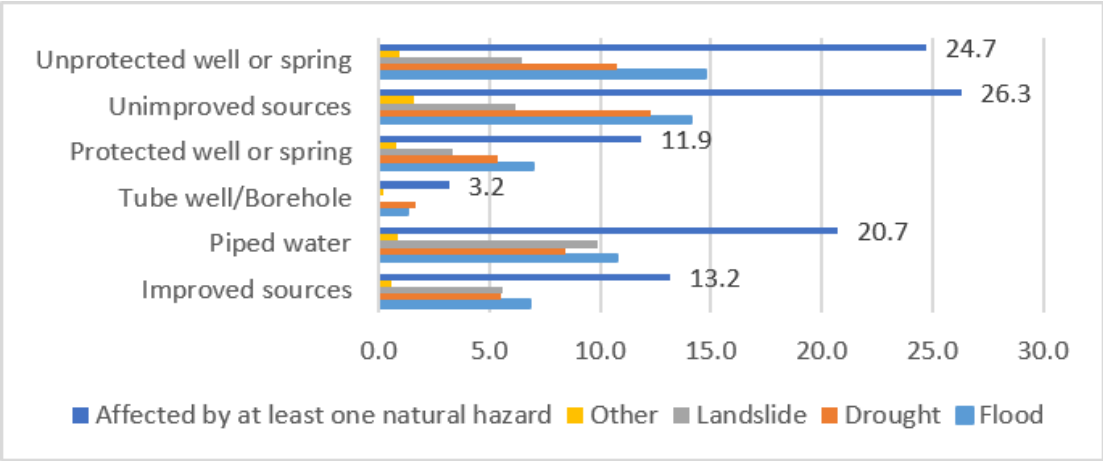
Figure 3.3 Percentage of population whose water sources were affected by natural hazards in the last 12 months, by province and hazard type, MICS 2024/25



Karnali records the highest provincial hazard exposure at 34.8 percent, with drought as the dominant hazard at 19.4 percent (Figure[13] 3.3). Hazard exposure follows the same provincial pattern as the availability deficit, and the Table 3.8 above presents the two figures side by side. The Peri-urban of Karnali hit hardest from drought at 41.3 percent (Table AW.8). Rural areas are hit harder by floods, landslides, and drought, which directly accounts for the sharp availability decline despite strong access gains. Madhesh records the lowest provincial affected rate at 2.7 percent, consistent with the stability of its deep groundwater systems.

[13] Source: Table Aw. 7 and Table Aw. 8.

Figure 3.4 Percentage of population whose water sources were affected by natural hazards in the last 12 months by source type, MICS 2024/25.



Hazard exposure differs sharply by source type: piped water systems recorded a 20.7 percent affected rate, more than six times the 3.2 percent rate for tube wells and boreholes (Figure 3.4 and Table AW.7).

Hazard exposure also reinforces wealth inequality: the Lowest quintile faces 24.7 percent affected rate, nearly three times the rate for the Highest quintile (Table 3.8).

3.3.1 Reasons for water unavailable in sufficient quantities when needed

Physical access to an on-premises source does not guarantee that water is available when needed. Table 3.8 showed that on-premises access and availability have moved in different directions since 2019, rising and falling respectively, and that this divergence is most pronounced in exactly the areas that have made the fastest access gains, Karnali and the Mountain belt. As Section 3.3 noted, these figures should be read as directional rather than precise, given the binary design of the WS7 question and the differing seasonal timing of the two survey rounds. With that limitation in mind, this section examines why the availability is failing with the help of MICS question WS8 which asks households that experienced any insufficiency to identify the main reason for the last such episode.

The four reasons captured by WS8: i) source not functional, ii) source not accessible, iii) water too expensive, and iv) water not available, are conceptually distinct and carry fundamentally different

policy implications. Their provincial and geographic distribution helps clarify the availability picture with more precision than the binary WS7 indicator alone can offer.

Before presenting the findings it is important to establish what each category means in Nepal's operational context. NSO and UNICEF, 2024 do not describe each reason in detail. However, from the available information in the survey's enumeration manual, the reasons are defined as follows. Source not functional means, the household has a designated water source such as a tap/pipe connection, tube well, or spring but that source has ceased to deliver water due to infrastructure failure due to a broken pump, a burst or blocked distribution pipe, a damaged intake, a depleted storage tank, or a collapsed spring structure. The problem is operational, and what is absent is maintenance, repair, or climate resilience. Source not accessible, by contrast, means the household does not have a reliably reachable dedicated source in the first place, i.e., no individual connection exists, the nearest water point requires more than 30 minutes to reach, or has difficult terrain to reach the source. This may also include cases where a shared source has restricted access, for example due to ownership or social barriers, though the enumeration manual does not itself specify this. The problem here is one of coverage and reach rather than operational failure. Water not available refers specifically to seasonal source depletion, where the source itself yields insufficient water. Water too expensive means the household has access to a source, whether an individual connection or a shared point, but did not draw sufficient water from it because the cost of doing so, whether a per-unit tariff, a connection fee, or a private vendor's price, exceeded what the household was able or willing to pay at the time. The infrastructure and physical access are both present but the constraint is affordability. These four categories are not interchangeable symptoms of the same problem: the first describes deterioration of existing service for connected households, the second describes a residual coverage gap for unconnected or inadequately served households, the third describes the source itself running short and the fourth describes a cost barrier despite adequate physical infrastructure. The JMP has long recognized that physical access to an improved source and reliable service delivery are distinct dimensions of water security that must be monitored and addressed separately (WHO and UNICEF, JMP, 2017).

Table 3.9 and Figure 3.5 show that source not functional and source not accessible together account for 83.8 percent of all reported insufficiency or unavailability in the preceding 12 months. Source not functional, also defined here as a synonym for "Operation and Maintenance (O&M)" failure, dominates in Bagmati, Koshi, and Sudurpashchim. Physical access gaps dominate in Karnali, Lumbini, and Madhesh. Affordability barriers are concentrated in Madhesh, Sudurpashchim, and Gandaki. The unspecified "Other" reason is also reported mostly in Lumbini and Karnali.

Table 3.9 Percentage of population with reported reasons of drinking water insufficiency, by province and source type, MICS 2024/25

Area / Source type	Source not functional (%)	Source not accessible (%)	Water not available (%)	Water too expensive (%)	Other (%)
National	40.2	43.6	0.4	6.5	8.0
Area of residence					
Urban	38.6	43.0	0.6	7.1	8.9
Rural	42.5	44.5	0.1	5.5	6.7
Province					
Koshi	47.2	36.3	1.5	1.7	10.3
Madhesh	13.4	59.5	0.0	18.2	5.4
Bagmati	54.1	38.3	0.4	3.7	5.7
Kathmandu Valley Urban	47.2	33.0	1.4	6.0	12.3
Gandaki	37.4	41.5	0.0	11.1	10.0
Lumbini	27.7	52.8	0.0	2.0	16.0
Karnali	29.2	53.3	0.4	2.3	14.3
Sudurpashchim	50.6	32.6	0.0	12.6	1.9
Ecological belt					
Mountain	53.1	38.5	0.5	4.6	2.8
Hill	43.1	44.0	0.5	4.4	7.5
Tarai	29.2	44.9	0.1	11.3	11.2
DEGURBA categories					
Urban	38.9	44.8	0.8	3.8	7.6
Peri-urban	27.4	46.9	0.0	11.7	13.6
Rural	46.4	41.6	0.3	5.4	5.8
Municipalities					
Metropolitan City	34.4	52.0	0.7	1.9	11.0
Sub-Metropolitan City	28.1	54.9	0.0	3.7	11.4
Urban Municipality	40.0	40.8	0.6	8.0	8.4

Area / Source type	Source not functional (%)	Source not accessible (%)	Water not available (%)	Water too expensive (%)	Other (%)
Municipalities					
Rural Municipality	42.5	44.5	0.1	5.5	6.7
Type of Source					
Improved sources	40.7	43.2	0.4	6.6	7.7
Piped water	45.8	40.3	0.4	5.0	6.9
Tube well / Borehole	18.5	54.4	0.0	16.4	10.0
Protected well or spring	23.0	55.8	0.0	0.0	21.2
Unimproved sources	21.6	56.1	0.0	3.7	18.7
Figures may not sum to 100 due to rounding and DK/missing responses not shown in the table. Source: Table AW.5, Table AW.6					

The reasons for reported water insufficiency differ sharply by source type. At the national level, piped water is the only source type where operational failure outweighs inaccessibility, while tube wells and protected wells or springs both show inaccessibility as dominant by a wide margin. Provincial source-type composition (Table 3.10) explains this pattern in some provinces. Bagmati (71.0 % piped), Koshi (55.1 %), and Sudurpashchim (63.8 %) are majority-piped and show source not functional - “O&M” failure as dominant, consistent with the source-type pattern. Madhesh, at 80.5 percent tube well reliance, the highest in the country, shows the strongest inaccessibility dominance of any province (59.5 %), also consistent. However, Karnali and Gandaki do not fit this pattern. Karnali has the highest piped share in the country (86.1 %), yet inaccessibility is its main problem (53.3 against 29.2 %) rather than non-functionality. Gandaki, despite having the second-highest piped share (81.2 %), splits almost evenly between non-functionality (37.4 %) and inaccessibility (41.5 %), rather than showing the non-functionality lead that its high piped share would suggest. Source-type composition therefore cannot fully explain the provincial pattern. Karnali and Gandaki in particular remain unexplained by this data alone and would require further investigation into province-specific factors not captured here.

Figure 3.5 Percentage of population with dominant cause of water insufficiency/unavailability, byprovince, MICS 2024/25.

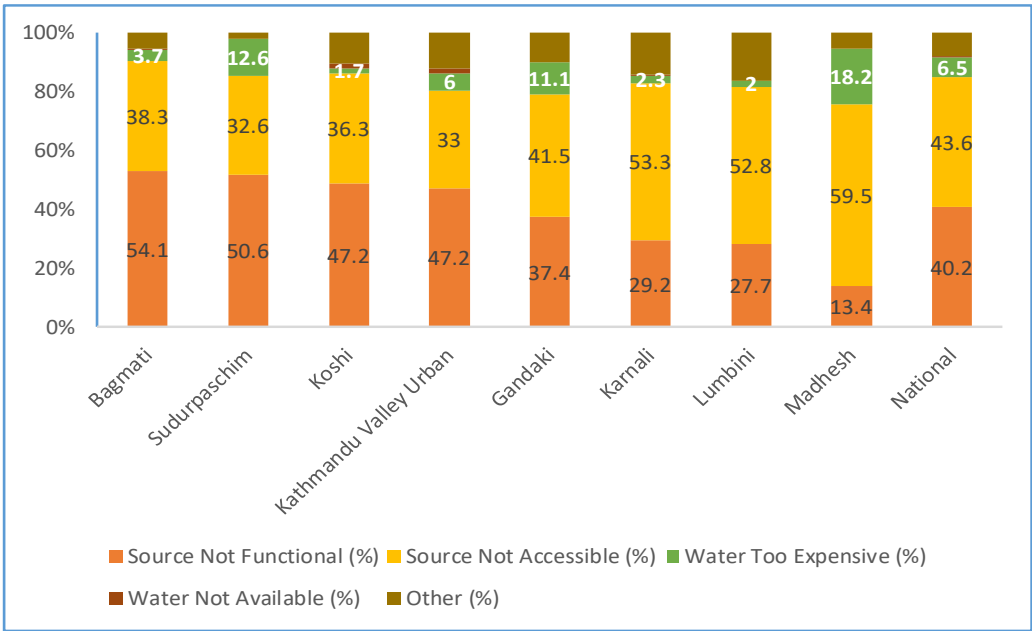


Table 3.10 Percentage of population with main source of improved water by province, MICS 2024/25.

Type of source	Koshi	Madhesh	Bagmati	Gandaki	Lumbini	Karnali	Sudur pashchim	Total
Piped water	55.1	17.5	71.0	81.2	48.7	86.1	63.8	54.7
Tube well/Borehole	38.4	80.5	3.5	1.5	44.4	0.6	30.7	34.3
Protected well or spring	3.5	0.4	2.1	2.5	2.5	5.7	3.3	2.4

3.3.2 Water Collection Burden for those Lacking on-Premises Access

Section 3.3 established that 90.0 percent of the population has on-premises access to an improved water source in 2024/25, meaning the remaining ten percent population must leave the household to collect water. So, it is important to track not only physical access but also information on who bears the responsibility for collection where on-premises access is absent. WHO/UNICEF JMP,

2018 has recognized globally that water collection for households lacking on-premises sources is a burden distributed unevenly across household members and the responsibility for this task typically falls disproportionately on women and girls, with implications for their time, safety, and opportunities outside the household. This section examines who collects water in Nepal, how much time this requires, and how this burden varies by geography and source type, using the MICS data.

Burden of Water Collection on Women and School-Age Children

Table 3.11 shows a stark imbalance in how the physical task of water collection is divided in Nepal. Where a household has no water source on premises, this task falls overwhelmingly to women and girls. Nationally in 2024/25, 71.1 percent of household members aged 10 and above who usually collect water are female, while just 17.5 percent are male.

Table 3.11 Percentage of population involved in water collection by gender and age group, MICS 2024/25

Gender	Under 10 Years	10–14 Years	15–19 Years	20–24 Years	25–49 Years	50+ Years	Total
Female	0.4	3.8	5.2	7.3	44.0	10.8	71.5
Male	0.0	1.8	1.7	1.1	7.3	5.6	17.5
DK/Missing/Members do not collect							11.2

The burden is heaviest for adult women aged 25–49, who alone account for 44.0 percent of all water collection, more than the entire male share across all age groups combined. Within this age band specifically, women account for six times the share of collection that men do (44.0 percent against 7.3 percent). The gap holds in every age group above 10, meaning the burden persists across the life course rather than one concentrating at a single age.

The gender gap in water collection is present even among school-age children and grows wider as they age. Among 10–14 year olds who collect water, 3.8 percent are girls compared with 1.8 percent who are boys, a ratio of roughly 2.1 girls for every boy. Among 15–19 year olds, the gap is larger still: 5.2 percent of collectors are girls compared with just 1.7 percent who are boys, a ratio of roughly 3.1 girls for every boy. This indicates the gender gap in this responsibility widens, rather than narrows, as children approach adulthood.

Time-use and Trip Duration

Table 3.12 shows that the gender imbalance in water collection widens, rather than narrows, as trips take longer. Of all household members collecting water on trips of up to 30 minutes, 49.8 percent are women aged 25–49, and of those on trips lasting over 1 to 3 hours, 67.4 percent are women in the same age group. By contrast, of collectors on these longer 1-to-3-hour trips, only 7.1 percent are men aged 25–49 and 5.6 percent are men aged 50 and above. This indicates that where water collection is most time-consuming, the burden falls even more heavily on adult women than the national average already shows. Collection is also frequent rather than occasional: of all household members who collect water themselves, 66.5 percent (NSO/UNICEF, 2026; Table WS.1.3), make nine or more trips per week. Among women aged 25–49, roughly 69 percent fall into this same high-frequency group. This means the group carrying the largest share of the collection burden overall is also the group most likely to be collecting water on a nearly daily basis.

Table 3.12 Percentage of population involved in water collection by gender and trip duration, MICS 2024/25

Trip time required	Sex	Under 10 Years	10–14 Years	15–19 Years	20–24 Years	25–49 Years	50+ Years	Total
Including and up to 30 minutes	Female	0.4	4.4	5.8	8.0	49.8	12.3	100.0
	Male	0	1.9	1.8	1.2	8.2	6.1	
31 minutes to 1 hour	Female	0	1.7	7.5	13.6	33.1	12.1	100.0
	Male	0	4.4	6.6	0.0	7.6	13.4	
Over 1 hour to 3 hours	Female	0	0.0	4.2	8.7	67.4	4.0	100.0
	Male	0	0.0	0.0	3.1	7.1	5.6	

Geographic and Provincial Disparities in Water Collection

Table 3.13 shows that provincial and geographic patterns reinforce findings from earlier in this section. Karnali shows the widest child gender gap of any province: girls aged 10–14 make up 11.1 percent of collectors, nearly three times the national rate, consistent with Karnali's weak access position. Mountain areas show the same pattern, with the highest without on-premises access among the ecological belts (Table AW.4) and an elevated gap for girls aged 10–14 (5.9 percent against 2.5 percent for boys). Kathmandu Valley Urban and Gandaki Urban stand out for a different reason: unusually high shares of household members who do not collect water at all (28.5 and 46.4 percent respectively). This most likely reflects delivered jar or dispenser water (Kathmandu valley urban: 42.8%, Gandaki Urban: 19.0%) rather than a genuine absence of collection burden (NSO/UNICEF, 2026; Table WS.1.3).

Table 3.13 Distribution of percentage of population involved in water collection at province, ecological belt and DEGURBA categories by gender and age group, MICS 2024/25

Area	Under 10 Years		10–14 Years		15–19 Years		20–24 Years		25–49 Years		50+ Years		DK/ Missing/ Members do not collect	Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male		
National	0.4	0	3.8	1.8	5.2	1.7	7.3	1.1	44.0	7.3	10.8	5.6	11.2	100.0
Area of residence														
Urban	0.0	0.0	3.2	1.5	3.8	1.2	6.3	0.8	44.8	8.1	9.6	4.8	16.0	100.0
Rural	0.8	0.0	4.5	2.2	7.1	2.5	8.6	1.4	42.9	6.2	12.4	6.7	4.7	100.0
Province														
Koshi	0	0	1.0	3.9	5.7	0	6.4	0	51.7	11.1	6.2	9.9	4.2	100.0
Madhesh	0	0	3.1	0.4	5.3	2.3	5.9	0.4	53.1	4.5	13.4	1.5	10.2	100.0
Bagmati	0.4	0	2.0	0.8	2.6	0.8	5.4	2.1	40.6	12.4	8.5	8.6	15.9	100.0
KTM Valley Urban	0	0	1.1	0	2.6	0	4.8	2.0	30.8	16.1	6.4	7.8	28.5	100.0
Gandaki	0	0	0.9	0.6	2.0	0.3	3.1	0.3	26.2	5.3	19.3	6.5	35.3	100.0
Gandaki Urban	0.0	0.0	0.0	0.9	2.5	0.5	3.0	0.0	20.8	2.7	17.7	5.6	46.4	100.0
Lumbini	0	0	3.3	3.3	11.3	5.2	6.1	0.7	50.1	4.2	7.8	4.7	3.3	100.0
Karnali	0.7	0	11.1	2.6	5.0	1.1	11.1	1.6	42.6	8.0	10.2	4.0	1.9	100.0
Sudurpashchim	1.1	0	5.5	2.1	6.0	2.2	12.7	0.7	43.6	1.6	13.6	2.6	8.3	100.0
Ecological belt														
Mountain	0.0	0.0	5.9	2.5	4.2	0.8	10.2	0.8	44.1	8.8	11.9	7.3	3.7	100.0
Hill	0.4	0.0	3.3	1.4	4.0	1.2	6.5	1.4	40.4	8.6	10.9	7.1	14.8	100.0
Tarai	0.4	0.0	3.6	2.3	7.8	3.1	7.3	0.6	50.0	4.4	10.2	2.4	8.0	100.0
DEGURBA categories														
Urban	0.0	0.0	1.3	2.0	2.8	1.5	4.8	1.0	36.8	10.5	8.0	5.6	25.6	100.0
Peri-urban	0.0	0.0	4.7	1.7	6.7	2.3	7.3	0.7	49.8	5.1	10.0	2.5	9.3	100.0
Rural	0.8	0.0	4.5	1.8	5.6	1.5	8.5	1.3	43.8	7.0	12.8	7.5	4.8	100.0

Socio-economic and Educational Inequality

Table 3.14 shows that as household head education and wealth rise, a growing share of household members do not collect water at all, likely because piped or delivered water removes the need for collection. This share climbs from 7.4 percent among households with no education to 28.1 percent among higher educated households, and from 4.4 percent among the Lowest quintile to 52.0 percent among the Highest. Among those who do collect, women aged 25–49 remain the largest group across almost every education and wealth level. The Highest and most educated households are a partial exception: men take on a somewhat larger share of collection in these groups than elsewhere, suggesting the gender gap narrows a little, though it does not close, as wealth and education rise.

Table 3.14 Distribution of percentage of population involved in water collection by gender, age group, level of education of household head and wealth quintile, MICS 2024/25

Area	Under 10 Years		10–14 Years		15–19 Years		20–24 Years		25–49 Years		50+ Years		DK/ Missing/ Members do not collect	Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male		
National	0.4	0	3.8	1.8	5.2	1.7	7.3	1.1	44	7.3	10.8	5.6	11.2	100.0
Household head education														
No education	0.6	0.0	4.5	1.4	6.0	1.3	7.6	0.7	42.3	6.0	16.3	5.8	7.4	100.0
Basic (Gr 1-8)	0.1	0.0	3.3	2.5	5.9	2.3	7.4	1.1	47.8	6.4	8.8	6.0	8.4	100.0
Secondary (Gr 9-12)	0.3	0.0	4.1	1.9	2.9	0.8	7.1	1.5	43.7	9.0	5.5	2.4	20.8	100.0
Higher education	0.0	0.0	0.0	0.0	4.0	3.6	0.4	2.5	26.4	21.1	1.3	12.6	28.1	100.0
Wealth quintile index														
Lowest	0.6	0.0	4.5	1.8	4.8	1.9	8.4	1.1	47.8	6.4	11.9	6.4	4.4	100.0
Lower	0.5	0.0	4.3	2.8	11.0	0.0	9.7	0.7	46.5	5.8	10.5	2.9	5.3	100.0
Middle	0.0	0.0	3.9	1.1	3.9	1.3	6.7	2.4	48.9	3.6	12.1	7.3	9.0	100.0
Higher	0.0	0.0	2.1	2.8	3.6	4.1	5.6	0.8	39.3	13.3	10.9	3.8	13.8	100.0
Highest	0.0	0.0	1.1	0.0	0.0	2.0	0.8	0.0	21.0	12.2	4.2	6.7	52.0	100.0

3.4 Water Quality: Faecal and Arsenic Contamination

Physical access and availability, examined in the preceding sections, address only two of the three criteria for safely managed status. Even a source that is on-premises and available when needed may still fail the third criterion: freedom from faecal and priority chemical contamination (WHO and UNICEF, JMP, 2017). This section examines the two contamination pathways tracked in MICS 2024/25: microbial contamination, measured through the presence of E. coli in drinking water, and arsenic, the priority chemical contaminant most relevant to Nepal's groundwater sources. The two pathways differ in origin. Microbial contamination typically results from inadequate sanitation, poor source protection, or contamination during collection and storage.

Arsenic, by contrast, is geogenic, meaning it occurs naturally in the groundwater of certain areas, independent of sanitation practices or household behaviour. Reporting both pathways together in this section reflects their shared role in determining safely managed status.

Faecal contamination

The quality dimension of safely managed status requires source water to be free from faecal contamination. MICS tests water at two points: the point of collection (source) and the point of use within the household. Percentage of population drawing E. coli contaminated water at source fell from 75.3 to 46.1 percent between rounds, a reduction of 29.2 percentage points (Table 3.15). This is genuine progress. However, nearly half (46.1%) the national population still drawing water from a faecally contaminated source in 2024/25 is a matter of concern. However, household water stays dirtier than source water almost everywhere, a national gap of 15.1 percentage points. Only Bagmati and Kathmandu Valley Urban reverse this pattern, where household water actually tests cleaner than source water.

Table 3.15 E. coli contamination at source water and at household water, by province, ecological belt and DEGURBA classification, MICS 2019 and 2024/25 (percent of population)

Area	E.coli at water source		E.coli at household water		Increase or decrease of E.coli at source water (percent pts.)	"HH water E.coli " minus "source water E.coli" (percent pts.) (2024/25)
	2019	2024/25	2019	2024/25		
	i	ii	iii	iv	(ii- i)	(iv - ii)
National	75.3	46.1	85.1	61.2	-29.2	15.1
Area of residence						
Urban	72.1	39.6	82.3	57.0	-32.5	17.4
Rural	81.8	58.9	90.9	69.4	-22.9	10.5
Province						
Koshi	60.7	58.2	81.8	62.1	-2.5	3.9
Madhesh	67.4	28.3	89.8	65.0	-39.1	36.7
Bagmati	76.7	42.9	60.3	47.4	-33.8	-19.7
KTM Valley Urban	72.3	24.0	60.3	23.2	-48.3	-0.8
Gandaki	85.1	68.3	82.9	75.8	-16.8	7.5
Lumbini	82.6	41.3	90.9	61.0	-41.3	19.7
Karnali	89.1	70	90.3	74.3	-19.1	4.3
Sudurpashchim	83.2	43.3	98.9	61.6	-39.9	18.3
Ecological belt						
Mountain	86.1	70.1	93.4	72.2	-16	2.1
Hill	84.5	58.9	80.5	62.1	-25.6	3.2
Tarai	65.9	31.6	88.4	59.0	-34.3	27.4
DEGURBA categories						
Urban	69.4	31.4	74.6	44.0	-38.0	12.6
Peri-urban	67.2	35.4	86.8	59.8	-31.8	24.4
Rural	89.0	71.0	92.3	76.9	-18.0	5.9

Area	E.coli at water source		E.coli at household water		Increase or decrease of E.coli at source water (percent pts.)	"HH water E.coli " minus "source water E.coli" (percent pts.) (2024/25)
	2019	2024/25	2019	2024/25		
	i	ii	iii	iv	(ii- i)	(iv - ii)
Wealth quintile index						
Lowest	89.7	67.4	95.8	79.5	-22.3	12.1
Lower	79.5	54.6	91.6	71.7	-24.9	17.1
Middle	72.3	43	87.9	63.2	-29.3	20.2
Higher	69.8	37.8	86.2	54.1	-32.0	16.3
Highest	64.5	28.3	64.5	38.8	-36.2	10.5
Note: Full description of all disaggregation available at Table AW.9 and Table AW.10						

Provincial figures spread widely. Karnali (70.0%) and Mountain (70.1%) remain the most contaminated at source in 2024/25, despite recording some of the largest declines since 2019. Madhesh shows the opposite problem: its source contamination fell furthest of any province (67.4% to 28.3%), yet household contamination barely moved (89.8% to 65.0%), leaving it with the widest household-to-source gap in the country (36.7 points). Tarai as a whole mirrors this pattern (27.4 points), while Mountain shows almost no gap at all (2.1 points), meaning Mountain's problem is dirty water at the source, while Madhesh and Tarai's problem is water getting dirtier after collection.

The wealth and DEGURBA breakdowns do not follow a simple pattern either. The gap is widest for the middle quintile (20.2 points), and rural areas show the smallest gap of any DEGURBA category (5.9 points) despite having the highest absolute contamination of any group. Peri-urban areas show the opposite: the largest gap (24.4 points) despite much lower contamination overall. Taken together, this suggests recontamination between source and household is a distinct problem from source-level contamination itself, and does not track wealth or rurality in any straightforward way.

Table 3.16 E. coli contamination at source and at household water, by type of water source, MICS 2024/25 (percent of population)

Type of water source	E.coli at source water	E.coli at household water	HH E.coli minus source E.coli 2024/25 (percentage points)
Improved sources	45.1	60.5	15.4
Piped water	60.4	64.8	4.4
Into dwelling	43.9	46.0	2.1
To yard/plot	63.7	68.2	4.5

Type of water source	E.coli at source water	E.coli at household water	HH E.coli minus source E.coli 2024/25 (percentage points)
To neighbour	64.9	84.9	20.0
Public tap/standpipe	61.5	66.6	5.1
Tube well/Borehole	26.6	59.0	32.4
Protected well or spring	67.4	71.4	4.0
Unimproved sources	88.9	86.9	-2.0

By source type (Table 3.16), the same pattern as seen in Table 3.15 holds with more precision: contamination rises from source to household across every type, but the size of the gap varies sharply. It is largest for tube wells and boreholes (26.6% to 59.0%, a 32.4 points increase), pointing to handling and storage rather than the source itself as the main risk for these users. Piped water performs best only when delivered directly into the dwelling (43.9% to 46.0%), and water collected from a neighbour's tap shows contamination levels approaching that of unimproved sources. Protected wells and springs (67.4% and 71.4%) also show comparatively poor performance among improved sources, though still meaningfully better than unimproved sources (88.9% and 86.9%). This raises a question about how much practical protection the "improved" classification confers for this specific source type in Nepal, relative to piped water.

Arsenic contamination

Table 3.17 shows that, at the national level, the percentage of population using arsenic contaminated source water rises at a modest rate between survey rounds, from 2.8 to 3.9 percent at the WHO standard and from 0.5 to 1.0 percent at the national standard, unlike the sharp declines seen in fecal contamination in Table 3.15. The trend at the WHO standard is uneven rather than uniform. Urban areas fell by roughly half (4.5% to 2.2%) while Peri-urban areas nearly doubled (3.8% to 7.4%), reversing their relative positions since 2019. At the provincial level, Madhesh and Sudurpashchim, the two most affected provinces, showed little to no improvement (9.8% to 9.5%, and 6.3% to 8.4% respectively), while several other provinces rose from a much lower base.

Table 3.17 Arsenic contamination of source drinking water, by geography, MICS 2024/25 (percent of population above threshold)

Area	WHO standard (>=10 ppb)		National standard (>=50 ppb)	
	2019	2024/25	2019	2024/25
National	2.8	3.9	0.5	1.0
Ecological belt				
Mountain	0	0.5	0.2	0
Hill	0.2	0.4	0.9	0.1
Tarai	5.4	7.4	0.5	2

Area	WHO standard (>=10 ppb)		National standard (>=50 ppb)	
	2019	2024/25	2019	2024/25
Province				
Koshi	0.2	3.2	0	0
Madhesh	9.8	9.5	2.1	3.8
Bagmati	0.3	0.6	0.3	0.2
Gandaki	0.3	0.1	0.3	0
Lumbini	1.1	2.3	0	0.4
Karnali	0	0.9	0	0
Sudurpashchim	6.3	8.4	0.4	1.5
DEGURBA categories				
Urban	4.5	2.2	0.8	1.2
Peri-urban	3.8	7.4	0.7	1.7
Rural	0.1	0.9	0	0.1
Wealth index quintile				
Lowest	0.7	2.7	0.4	0.4
Lower	2.8	4.5	0.2	1.4
Middle	4.6	7.0	1.1	1.9
Higher	3.1	3.5	0.2	0.4
Highest	2.7	1.7	0.6	1.0

Table 3.17 shows, in 2024/25, the geographic pattern is sharply concentrated in Tarai, which records the highest exposure of any ecological belt (7.4%, WHO standard), against 0.4%–0.5% in Hill and Mountain areas. Madhesh (9.5%) and Sudurpashchim (8.4%) are the most affected provinces. Madhesh sits almost entirely within the Tarai and has the highest tubewell reliance in the country (80.5%, Table 3.10), consistent with arsenic's known geogenic origin in Tarai groundwater. Sudurpashchim spans Mountain, Hill, and Tarai terrain, with roughly a third of its population relying on tubewells (30.7%, Table 3.10), and its elevated arsenic exposure likely reflects its own Tarai portion specifically, though this cannot be confirmed without a within-province, belt-level breakdown.

The wealth quintile pattern does not follow a simple rich-to-poor progression: exposure peaks in the middle quintile (7.0%, WHO standard) rather than at either extreme, and the Highest quintile shows a rare decline over the period (2.7% to 1.7%) The DEGURBA pattern is similarly uneven: Peri-urban exposure nearly doubled (3.8% to 7.4%) while urban exposure fell (4.5% to 2.2%), a pattern this data cannot explain and would benefit from further investigation

Table 3.18 Arsenic contamination of source drinking water, by source type, MICS 2024/25 (percent of population above threshold)

Type of source	WHO standard (>=10 ppb) 2024/25	National standard (>=50 ppb) 2024/25
Improved sources	3.8	1
Piped water		
Into dwelling	1.4	0
To yard/plot	0.7	0
To neighbor	2.8	2.1
Public tap/standpipe	0	0
Tube well/Borehole	9.4	2.8
Protected well or spring	0.5	0
Unimproved sources	5	0

By source type, tube wells and boreholes show by far the highest exposure (9.4%, WHO standard, 2.8% national standard), more than double the rate for improved sources overall (Table 3.18). Piped water performs unevenly by connection type: water piped into the dwelling shows minimal exposure (1.4%). Piped water collected from a neighbour's tap shows the highest arsenic exposure of any piped subcategory (2.8%), which is an unusual result as arsenic is a fixed property of source water and should not vary with how far it travels after collection, unlike fecal contamination.

3.5 Safely managed drinking water services

The safely managed indicator combines all three criteria, on-premises access, availability when needed, and freedom from contamination, for the same household simultaneously. A household satisfying two of the three criteria does not qualify.

Table 3.19 shows, despite 90.0 percent on-premises access, only 47.5 percent of the national population has safely managed water in 2024/25. In other words, for roughly half of all, the tap or borehole is there but the water it delivers is either unsafe or insufficient or both. Sections 3.3 and 3.4 establish which failure mode dominates where. The safely managed water service coverage rose from 19.1 to 47.5 percent between 2019 and 2024/25, more than doubling in five years. When adjusted for arsenic at the WHO threshold of 10 ppb, coverage falls to 47.3 percent.

Table 3.19 Use of at least basic and safely managed drinking water services, with and without arsenic adjustment, by province, ecological belt, DEGURBA, and wealth quintile, MICS 2019 and 2024/25 (percentage of population)

Area	At least basic water services* 2024/25	On-premises access* 2024/25	Safely managed (improved drinking water located on-premises, available when neeeded, and free of E.coli)		Change in safely managed (between 2024/5 and 2019) (percent pts.)	Difference between on-premises access and safely managed 2024/25 (percent pts.) Smaller the better	Safely managed + arsenic ≤10ppb (2024/25)
			2019	2024/25			
	i	ii	iii	iv	(iv – iii)	(ii – iv)	
National	98.0	90.0	19.1	47.5	28.4	42.5	47.3
Ecological belt							
Mountain	95.3	76.3	4.2	24.0	19.8	52.3	24.0
Hill	96.8	87.9	9.0	33.1	24.1	54.8	32.8
Tarai	98.9	93.2	29.7	62.0	32.3	31.2	57.6
Area of residence							
Urban	98.8	92.0	21.9	53.4	31.5	38.6	53.2
Rural	96.4	86.1	13.4	36.0	22.6	50.1	35.8
Province							
Koshi	97.9	93.3	34.7	39.0	4.3	54.3	39.0
Madhesh	99.0	93.2	24.5	66.1	41.6	27.1	66.0
Bagmati	98.5	88.7	14.9	48.0	33.1	40.7	47.8
KTM Valley Urban	99.6	90.1	16.1	58.5	42.4	31.6	58.1
Gandaki	98.6	92.6	10.5	28.2	17.7	64.4	28.2
Lumbini	98.3	91.5	14.8	54.0	39.2	37.5	53.6
Karnali	93.4	77.3	3.5	22.1	18.6	55.2	21.9
Sudurpashchim	97.2	83.2	14.7	43.8	29.1	39.4	43.6
Municipalities							
Metropolitan City	98.5	90.2	29.8	63.4	33.6	26.8	63.3
Sub-Metropolitan City	97.9	96.5	21.4	52.8	31.4	43.7	52.2
Urban Municipality	98.5	90.1	20.1	50.7	30.6	39.4	48.2
Rural Municipality	96.4	86.1	13.4	36.0	22.6	50.1	35.8

Area	At least basic water services* 2024/25	On-premises access* 2024/25	Safely managed (improved drinking water located on-premises, available when neeeded, and free of E.coli)		Change in safely managed (between 2024/5 and 2019) (percent pts.)	Difference between on-premises access and safely managed 2024/25 (percent pts.) Smaller the better	Safely managed + arsenic ≤10ppb (2024/25)
			2019	2024/25			
	i	ii	iii	iv	(iv – iii)	(ii – iv)	
DEGURBA Categories							
Urban	98.4	92.0	23.8	58.1	34.3	33.9	56.5
Peri-urban	98.7	92.5	28.0	58.5	30.5	34.0	54.3
Rural	96.0	84.5	5.4	26.1	20.7	58.4	23.4
Wealth Quintile							
Lowest	94.0	76.9	3.9	26.1	22.2	50.8	26.1
Lower	98.3	90.1	14.9	38.1	23.2	52.0	37.7
Middle	98.6	91.8	22.9	49.3	26.4	42.5	49.0
Higher	99.0	93.8	27.0	57.4	30.4	36.4	57.4
Highest	98.6	96.1	27.2	66.0	38.8	30.1	65.8
**For basic and on-premises figures source: Table WS.1.2 MICS 2024/25*							

Provincial safely managed coverage in 2024/25 ranges from 22.1 percent in Karnali to 66.1 percent in Madhesh, a spread of 44 percentage points (Figure 3.6). Gandaki shows the widest gap of any province between on-premises access and safely managed status, at 64.4 percentage points, despite ranking third nationally on access itself (92.6%, behind Koshi at 93.3% and Madhesh at 93.2%). Karnali's low safely managed share reflects weak performance across all three underlying criteria, access, availability, and water quality, rather than a single dominant cause.

Figure 3.6 Percentage of population with safely managed water services by province, MICS 2019 and 2024/25



The wealth gradient in safely managed coverage remains wide despite strong on-premises access gains for the Lowest quintile (Figure 3.7). The Highest quintile reaches 66.0 percent safely managed in 2024/25 against 26.1 percent for the Lowest, a gap of 39.9 percentage points. Absolute gains in safely managed coverage since 2019 were also larger for the Highest quintile (38.8 points) than for the Lowest (22.2 points), even though on-premises access itself expanded fastest for the Lowest quintile over the same period.

Figure 3.7 Percentage of population with on-premises access and safely managed water services by wealth quintile, MICS 2019 and 2024/25



3.6 Policy implications

Nepal's SDG target for safely managed water services by 2022, 2025 and 2030 are 50, 65 and 90 percent of population (NPC/GoN, 2017) and (NPC/GoN, 2024a). MICS 2024/25 finding of this indicator at 47.5 percent shows that the targets are very unlikely to be met by the deadline. The implications below concern what this chapter's findings mean for how that progress should be understood and monitored going forward, rather than prescribing specific interventions, which are addressed in this report's concluding recommendations chapter.

1. A residual population remains on unimproved sources even within Nepal's best performing urban categories, meaning "urban" cannot be treated as synonymous with adequate access. NPHC 2021 data shows unimproved source use persisting in 4.6 percent of metropolitan and 6 percent of sub-metropolitan households, even though these municipality types recorded 95.4 and 94.0 percent overall improved source access respectively in 2021 (Table 3.2 and

Table AW.1). This indicates that urban averages, like national averages, can obscure a smaller but real underserved population, and that targeting based on urban/rural classification alone may miss these households.

2. The national safely managed figure conceals a wide provincial spread that a single national target cannot capture. Provincial safely managed coverage ranges from 22.1 percent in Karnali to 66.1 percent in Madhesh, a 44-percentage-points spread (Table 3.19). Monitoring progress against the Sixteenth Plan target at the national level alone risks masking this scale of disparity.

3. On-premises access and safely managed status are distinct achievements. In several geographies, they have moved in opposite directions. Karnali and Mountain areas recorded the fastest access gains of any geography over the period, while simultaneously recording the steepest availability declines and the highest hazard exposure (Table 3.8). Gandaki shows the widest gap in the country between access and safely managed status, 64.4 percentage points, despite ranking third nationally on access itself (Table 3.19). Access figures alone are therefore not a reliable indicator of whether household water security has genuinely improved.

4. The dominant constraint on water insufficiency differs by province and by source type, rather than following one national pattern. Source non-functionality accounts for 40.2 percent of reported insufficiency nationally, rising to 64.1 percent in Bagmati. Water inaccessibility dominates in Karnali, Lumbini, and Madhesh, and affordability is a major factor in Madhesh and Sudurpashchim (Table 3.9). In most provinces, this pattern tracks source type directly: piped-majority provinces report operational failure as dominant, while tube well-majority provinces report inaccessibility as dominant. Karnali and Gandaki break this link between source type and reason. Karnali has the highest piped water share of any province (86.1 percent), which would predict operational failure as dominant, yet inaccessibility remains the larger problem there. Gandaki, with the second-highest piped share (81.2 percent), splits almost evenly between the two rather than showing the operational-failure dominance its source type implies. This indicates other, province-specific factors are also at work in these two provinces specifically.

5. Faecal and arsenic contamination are governed by different mechanisms and follow different trends. Faecal contamination fell sharply at the source between survey rounds but rises again between source and household, most severely for tube well users, an increase of 32.4 percentage points, and for piped water not delivered directly into the dwelling (Table 3.16). This indicates handling, storage, and connection type remain important even where source-level quality has improved. Arsenic contamination, by contrast, is concentrated in Tarai groundwater, driven by geology rather than infrastructure condition, and has shown little improvement over the same period (Table 3.17). Progress against one contamination pathway does not indicate progress against the other.

6. Gains in safely managed coverage have not been equitable across wealth groups, despite pro-poor gains in on-premises access. The Lowest quintile recorded the fastest access growth of any wealth group over the period but the smallest absolute gain in safely managed coverage, 22.2 percentage points against 38.8 for the Highest quintile, leaving a 39.9-percentage-point gap between the two in 2024/25 (Table 3.19). Access reaching households at lower wealth quintile has not translated into an equivalent improvement in the quality and reliability of the water they receive.

7. Water collection remains overwhelmingly the responsibility of women and girls, giving the remaining on-premises access gap a distinct gender dimension. Nationally, 71.5 percent of household members who collect water where no on-premises source exists are female, concentrated most heavily among women aged 25–49 (Table 3.11). This gap is present even among school-age children, widens with age and with trip duration, and is most pronounced in Karnali and Mountain areas (Table 3.13), the same geographies already identified as having the largest remaining access and reliability gaps. Closing the residual on-premises access gap in these specific areas would therefore carry a disproportionate benefit for women's and girls' time, a dimension a uniform national coverage target does not capture on its own.

3.7 Recommendations

1. **Identify and target households using unimproved source within urban areas.** NPHC 2021 data shows unimproved source use persisting even in metropolitan (4.6%) and sub-metropolitan (6%) municipalities. Local governments should identify these households directly, since their marginalization within other urban areas with better services may require a different response than the broader rural access gap.

2. **Fund existing scheme rehabilitation and O&M, as well as new connections.** Source non-functionality is the leading cause of insufficiency in Bagmati, Koshi, and Sudurpashchim (64.1 percent in Bagmati). Expansion without a parallel, resourced stream for rehabilitation, spare parts, and local O&M financing will not improve reliability where the constraint is existing infrastructure.

3. **Make water safety and hygiene promotion a standard, funded component of every water programme.** Contamination rises sharply between source and household, most severely for tube well users and households using pipe water from outside of premises. Source protection, safe storage guidance, and treatment promotion should be built in.

4. **Match new infrastructure standards to local risk before commissioning.** Groundwater connections in arsenic-affected Tarai areas should require water quality testing before use. Piped schemes built in landslide or flood prone Mountain and Hill areas should be designed to withstand those specific hazards, following appropriate technical guidance.

5. **Address affordability separately for piped and self-supply households.** Affordability is a major barrier to sufficient water in Madhesh, Sudurpashchim, and among tube well dependent communities (Table 3.9), but the underlying cost differs by source type. For households connecting to piped supply, tariff design and connection subsidies should be considered as part of expanding metered service. For households reliant on self-supply tubewells, the barrier is more likely the upfront cost of construction. This may warrant a different form of support, such as targeted construction subsidies or low-cost drilling programmes for households belonging to lower wealth quintile.

6. **Weigh gender equity explicitly when prioritizing remaining access gaps.** Water collection falls overwhelmingly on women and girls, most heavily on women aged 25–49, who alone account for 44 percent of all collection nationally. This burden is present even among school-age children and widens with age and girls aged less than 19 years make up nearly three times the share of collectors that boys do. The burden is also most concentrated in Karnali and Mountain areas which are the same geographies having the largest remaining access and reliability gaps. This should factor into how underserved areas are ranked for investment, since closing the access gap in these specific areas would disproportionately reduce the time burden on women and girls, including school-age girls whose collection responsibility may compete directly with time otherwise available for school.

Further investigation needed

1. **The link between water collection burden and women's and girls' outcomes.** This report shows women and girls carry the overwhelming share of water collection, but it cannot show what this costs them in practice. A dedicated time-use survey, and a study linking collection responsibility to school attendance records, would help establish whether this burden measurably affects women's economic participation or girls' schooling.

2. **Why Karnali and Gandaki don't follow the usual pattern.** In most provinces, a high share of piped water predicts that scheme breakdowns are the main cause of water insufficiency. Karnali and Gandaki break this pattern: despite having two of the highest piped water shares in the country, accessibility gaps remain the bigger problem in both. Settlement level data, or a review of how these specific schemes are designed and managed, would help explain why.

CHAPTER 4

SANITATION SERVICES

Nepal's constitution guarantees the right to sanitation under Article 35(4), the same constitutional provision establishing the right to clean drinking water addressed in chapter four. The country has also committed to safely managed sanitation and hygiene services for all by 2030 under SDG Target 6.2, monitored through indicator 6.2.1, which tracks the proportion of the population using safely managed sanitation services, including a handwashing facility with soap and water. As with drinking water, these commitments go beyond simple toilet ownership: a household counted as having "access" to sanitation infrastructure is not necessarily using a facility that is unshared with other households, that safely contains and disposes of excreta, or that is genuinely accessible and usable by every household member.

Nepal's sanitation progress over the past two decades has been rapid by any measure. The proportion of households without a toilet fell from 53.2 percent in 2001, to 38.2 percent in 2011, to 4.5 percent in 2021 (CBS, 2014; NSO, 2023). This transition was formally recognized in September 2019, when the Government of Nepal declared all 77 districts "Open Defecation Free" (ODF), following a national campaign built around the Community-Led Total Sanitation (CLTS) approach (MoWS, 2023).

Chapter 3 established that having a water source nearby does not guarantee safe water. A tap on the household plot does not tell us whether the water flowing from it is free from contamination and reliably available. The same logic applies to sanitation. Having an improved toilet does not mean that excreta is being safely managed. A sanitation facility that overflows into the surrounding soil, is shared with several neighbouring households, or discharges septic effluent into an open drain does not protect its users or their community from faecal contamination. The gap between facility access and safe excreta management is the central analytical problem of this chapter, just as the gap between on-premises access and safely managed water was the central problem of Chapter 3.

These two gaps, viz. on-premises water access without safely managed water in Chapter 3, and facility access without safe excreta management in this chapter, are not independent of each other. Uncontained excreta spreads through multiple pathways at once, commonly summarized in the sanitation sector as the "five Fs" (fluids, fields, flies, fingers, and food), a framework tracing back to Wagner and Lanoix's foundational 1958 transmission diagram (Wagner and Lanioix, 1958). Drinking water is only one of these routes. This means water contamination is frequently a downstream symptom of an upstream sanitation failure, rather than an isolated problem in its own

right. Cleaning up water quality alone, without addressing the sanitation failure feeding it, leaves the other exposure pathways open and often allows the water itself to become recontaminated again. This is why the JMP framework treats water and sanitation as interdependent components of the same safely managed standard, rather than as separate targets (WHO and UNICEF, JMP, 2017), and why the faecal contamination in household drinking water documented in Chapter 3 and the sanitation containment failures examined in this chapter should be read together. Section 4.1 in this chapter examines sanitation's distinct collective dimension in more detail. This chapter examines where Nepal stands on sanitation and hygiene today, moving beyond the ODF milestone to assess the safely managed dimension of the JMP sanitation ladder. It draws on the same data sources used in Chapter 3: the National Population and Housing Census (NPHC) 2011 and 2021, the Multiple Indicator Cluster Surveys (MICS) of 2019 and 2024/25. It covers sanitation facility types and coverage trends, the persistence of open defecation after the ODF declaration, safely managed sanitation and excreta containment, hygiene facilities and the combined WASH picture, and the policy implications that follow from the evidence. One methodological point shapes the interpretation of the safely managed sanitation figures presented in this chapter and is explained in Section 4.4, immediately before the relevant figures appear.

4.1 Concepts of sanitation classification and the JMP service ladder

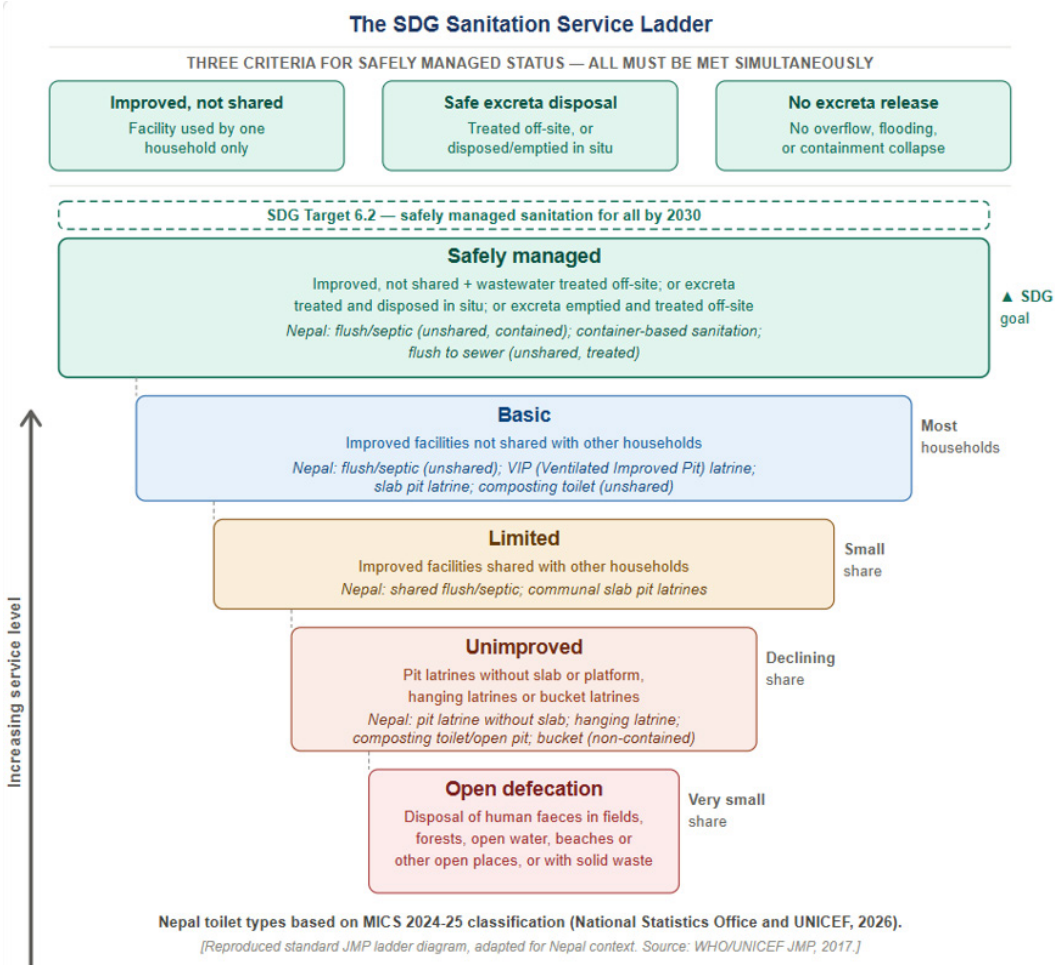
To track progress in sanitation, this report adopts the sanitation service ladder established by the WHO/UNICEF Joint Monitoring Programme, which parallels the water service ladder described in chapter 4. The classification principle for sanitation ladder (Figure 4.1) is parallel to the water ladder, though the criteria reflect sanitation's distinct characteristics. An improved sanitation facility is one that is designed to hygienically separate excreta from human contact as opposed to an unimproved facility, which do not ensure such separation (WHO and UNICEF JMP, 2015). The JMP sanitation service ladder classifies household sanitation across five tiers: open defecation, unimproved, limited, basic, and safely managed, in increasing service level. Open defecation means having no facility of any kind and the disposal of human faeces may be in fields, forests, open bodies of water, or other open places, or discarded with solid waste. Unimproved facilities include pit latrines without a slab, bucket latrines, and hanging latrines. A limited service uses an improved facility shared between households. A basic service uses an improved, unshared facility but makes no requirement on excreta disposal. A safely managed sanitation service requires three conditions to be met simultaneously for the same household: i) the facility is improved, ii) it is not shared with other households, and iii) excreta is safely disposed of, either in situ or removed from the site for off-site treatment.

In practice, "safely disposed of" covers three distinct technical pathways: treated on-site (in-situ containment), transported to a treatment facility via sewer (off-site wastewater treatment), or emptied and transported for treatment elsewhere. These are simply different technologies for the same underlying requirement, that is, excreta must not be released into the surrounding

environment. Under the JMP definition, a household whose wastewater is discharged untreated into a river does not qualify as safely managed regardless of how modern its toilet appears (WHO/UNICEF JMP, 2018).

In Nepal's context, improved facility types enumerated in MICS include: i) flush or pour-flush toilets connected to piped sewer systems, septic tanks or pit, ii) ventilated improved pit (VIP) latrines and slab pit latrines, and iii) container-based toilets. Flush or pour-flush toilets connected to a sewer or septic tank are the most common improved type nationally, and are concentrated in urban and Peri-urban areas, while slab pit latrines and VIP latrines are more common in rural hill and mountain areas (NSO/UNICEF, 2026).

Figure 4.1 SDG sanitation service ladder adapted for Nepal context

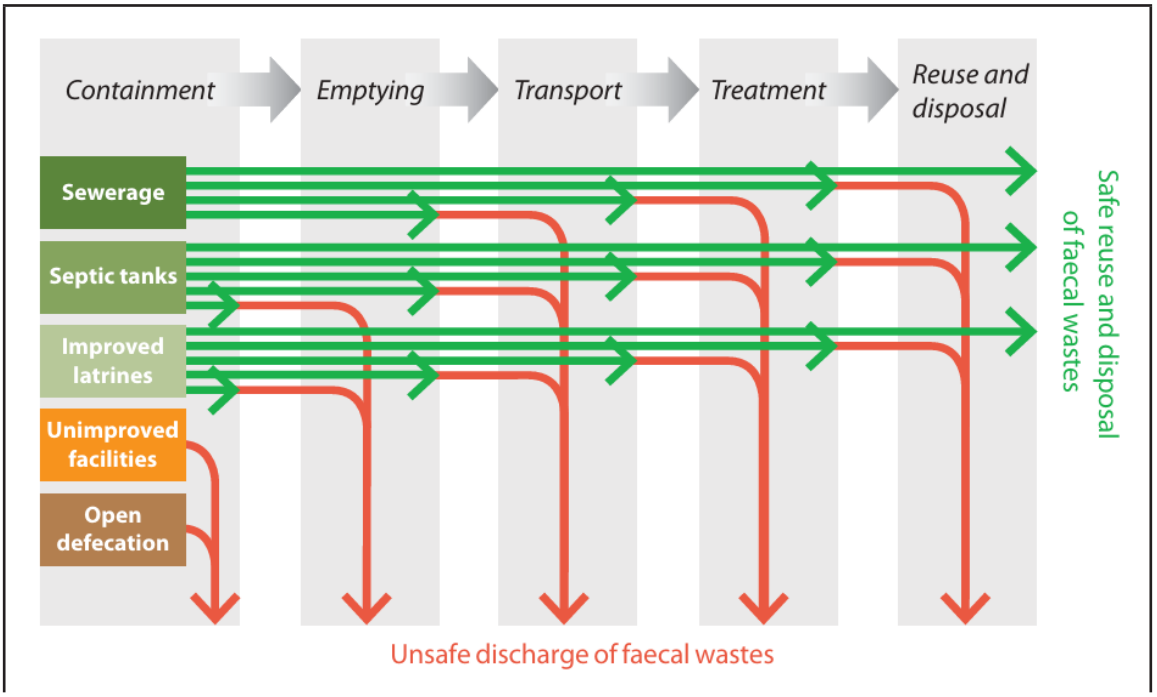


Nepal toilet types based on MICS 2024-25 classification (National Statistics Office and UNICEF, 2026).

[Reproduced standard JMP ladder diagram, adapted for Nepal context. Source: WHO/UNICEF JMP, 2017.]

Figure 4.1 illustrates this five-tier structure. What the ladder measures is genuine protection from faecal exposure rather than the mere presence of a facility on the household plot. As with water services, hardware and performance are not the same thing. For example, a modern flush toilet connected to a septic tank looks like safe infrastructure. But if the tank's outlet pipe discharges untreated effluent into a nearby open drain, pathogens enter the shared environment just as they would through open defecation. A concrete-slab pit latrine qualifies as an improved facility. But if the pit overflows into the surrounding soil, it provides no public health protection to anyone in the community. In both cases the hardware is present. In both cases the system is failing.

Figure 4.2 Excreta flow diagram, WHO and UNICEF JMP, 2018



Source: (WHO and UNICEF (JMP), 2018). Green arrows indicate pathways where faecal waste is safely managed through each stage of the chain. Red arrows show where waste escapes into the environment unsafely at each stage. Safe reuse and disposal requires waste to remain on a green pathway through all five stages.

The "excreta flow diagram" concept in Figure 4.2 illustrates why safely managed sanitation requires more than a functioning toilet. Excreta passes through five stages before it is safely reused or disposed of: containment within the facility, emptying, transport to a treatment site, treatment, and finally reuse or disposal. These stages are tracked separately for waste flushed into sewer networks and for waste stored in on-site facilities such as septic tanks and pit latrines

(WHO and UNICEF (JMP), 2018). A failure at any single stage sends waste onto a red pathway and into the environment. The failure does not need to occur at the first stage because a system can perform well at containment but can discharge waste unsafely later in the chain. The five facility types on the left are ordered to match the sanitation ladder, from open defecation at the bottom to sewerage at the top, reflecting each type's overall position in the hierarchy of hygiene safety rather than containment performance alone.

This diagram matters for the analysis that follows because Nepal's own sanitation data, examined later in this chapter, shows both kinds of failure occurring, and in different places. A household's own facility can be well constructed and still fail at containment, or can succeed at containment and still fail once the waste moves further along the chain. For example, Pit latrines filling beyond capacity can overflow into surrounding topsoil or septic tanks with cracked walls or inadequate construction can leak into shallow groundwater. Where this happens, excreta stays within the household's own surroundings, but it still spreads into the soil and water that the wider community relies on. Where sanitation systems rely on sewer connections or emptying and transport services, rather than on-site containment alone, failure tends to occur later in the chain, i.e., at the treatment stage rather than at containment, as the Kathmandu Valley case discussed later illustrates. The excreta flow diagram in figure 4.2 gives this chapter a shared framework for locating exactly where a given failure occurs which is essential for identifying the right kind of response to each type of failure.

The Kathmandu Valley offers a well-documented example to show how the failure occurs further along the chain. A study conducted by the High Powered Committee for Integrated Development of the Bagmati Civilization in 2011 found that around 70 percent of households in the Valley disposed excreta directly into sewer lines, while the remaining 30 percent used on-site systems such as septic tanks concentrated predominantly in Peri-urban settlements (HPCIDBC and UNHABITAT, 2011). The study identified: at the containment stage, sewer-connected households were performing reasonably well as excreta left the household efficiently and entered a structured network. But the network discharged more than 95 percent of sewerage directly into the Bagmati, Bishnumati, Manohara, and Hanumante rivers without treatment. That finding dates from 2011 and should not be read as today's position. Treatment capacity has since been added, notably at the Guheshwori plant and further plants at Dhobighat, Sallaghari, and Kodku are under construction (ADB, 2026). How much of the Valley's sewage is treated today has not been documented in the data available for this report. The on-site systems presented a parallel problem at the emptying and transport stages. The study estimated approximately 68,000 septic tanks in the Valley generating around 76,600 cubic metres of faecal sludge annually, yet due to the absence of a functioning treatment facility, almost all mechanically collected sludge was discharged directly into rivers. The Valley's only treatment plant (Teku Faecal Sludge Treatment Plant), then run by Kathmandu Metropolitan City had already been non-operational for years due to management and technical failures. This facility has since been decommissioned and demolished entirely, with no replacement septage treatment capacity established in its place (ENPHO/CWIS-FSM, 2024) .

While the Valley's population and infrastructure have expanded considerably since this assessment, treatment capacity for the two waste streams has since diverged. Sewered wastewater treatment has seen some recent investment, though the Asian Development Bank's own project monitoring notes operation and maintenance challenges persist (ADB, 2026). Septage treatment capacity, by contrast, has moved in the opposite direction with Teku's decommissioning, leaving households on on-site systems with no dedicated facility at all. The rivers of Kathmandu Valley continue to carry the visible consequence of this structural gap. Further study is required to establish how far this structural gap has affected the Valley's own water supply system and that of downstream communities. MICS 2024/25 question WS11D (NSO/UNICEF, 2026) was designed to detect these two failure modes (containment failure and treatment failure), and Section 4.5 examines its scale and geographic distribution in detail.

Beyond where in the chain a system fails, sanitation has one further property that distinguishes it from water: a collective dimension. Open defecation by even a minority of a community contaminates the shared environment for everyone, including those who use latrines, through the multiple exposure pathways already discussed. Evidence from a longitudinal study of 360 compounds in rural Bangladesh found that households surrounded by complete latrine coverage within 50 metres had measurably lower faecal contamination of stored water and hand rinses than those with even one neighbouring compound lacking a latrine, with stronger effects at higher population densities (Contreras et al., 2022). The public health benefit of sanitation coverage is therefore non-linear. Near-universal coverage provides disproportionately greater protection than partial coverage because the faecal contamination pathway is broken only when the large majority of a community uses a facility (Pickering et al., 2015). Therefore, Nepal's ODF declaration in 2019, confirming that all 753 local governments had achieved open defecation free status, carries much public health significance beyond the coverage statistics alone. This is because, where open defecation continues despite the ODF declaration, it leaves the whole community exposed and no household can eliminate this risk simply by having its own latrine. Section 4.3 examines where that risk is concentrated and which populations carry it disproportionately.

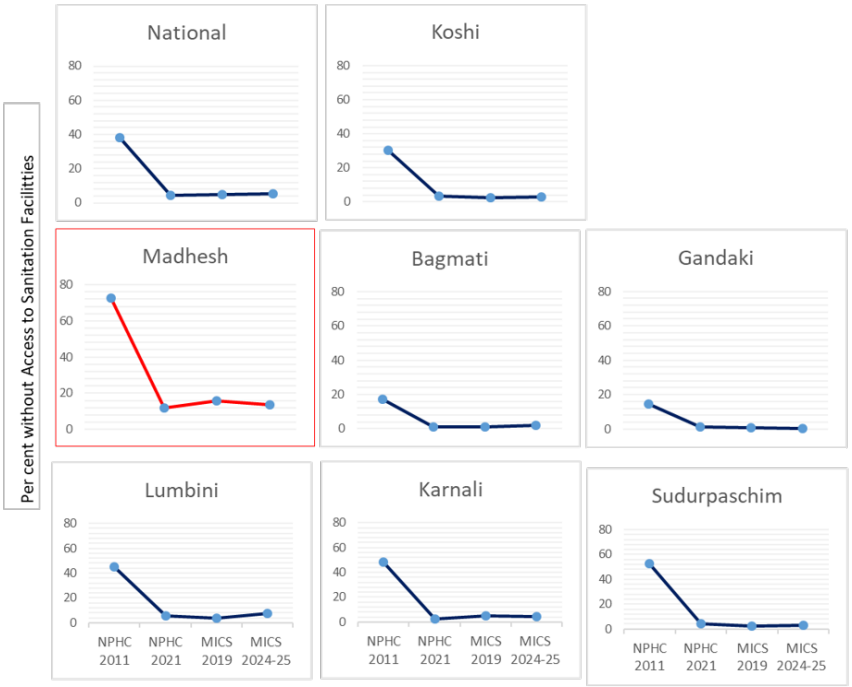
Is a toilet shared between households? This is the second criterion that matters independently of facility quality. A flush toilet shared between two households is classified as limited service regardless of how well it functions, how modern its construction, or how frequently it is cleaned. The facility itself may be in perfect condition. But because it serves more than one household, it does not meet the basic service threshold, let alone the safely managed threshold. This is mainly because the shared sanitation facilities may have greater chances of contamination of communicable diseases to users. In Nepal, rapid latrine construction during the ODF period may have produced communal facilities serving multiple households in some dense settlements. Where this occurred, a settlement could appear to have full toilet coverage while few or none of its household qualifies as having even basic service, since the sharing criterion alone is enough to exclude a household from falling into "safely managed" group regardless of how well the facility itself performs.

4.2 Trends in sanitation coverage – CENSUS and MICS

Nepal's sanitation transformation over the past decade and a half was driven primarily by the Community-Led Total Sanitation (CLTS) approach, which shifted government strategy from distributing hardware to fostering community-wide behaviour change. Rather than targeting individual households, CLTS mobilised entire communities to collectively stop open defecation, triggering the kind of community-level behaviour change that Section 5.1 identified as necessary to break the faecal contamination pathway. Sustained public investment through successive national plans, combined with school sanitation programmes, behaviour change communication, and the decentralisation of responsibility to local Water and Sanitation User Committees, produced the transformation the census data document below (MoWS, 2023).

Table 4.1 and Figure 4.3 present the available evidence from both census rounds and MICS 2019 and 2024/25. The census and MICS use different classification systems for sanitation facilities that cannot be reconciled into a single comparable series[14] .

Figure 4.1 SDG sanitation service ladder adapted for Nepal context Figure 4.3 Trend in percentage of households and population without access to Sanitation/Open Defecation, NPHC and MICS.



Note: 2011 and 2021 figures are percentage of households with no toilet (NPHC census). MICS 2019 and 2024-25 figures are percentage of population practising open defecation (MICS). Both measure the same underlying condition — absence of sanitation access — using the indicator available in each data source.*Y-axis fixed at 0–80% across all panels for comparability.*

[14] See annex E and F for categories of sanitation facilities used by the NPHC and MICS respectively.

NPHC captures sanitation coverage through a single question: “What type of toilet facility does your household use?” NPHC 2021 records five categories: (i) flush toilet connected to public sewerage, (ii) flush toilet connected to a septic tank, (iii) ordinary toilet, (iv) public toilet, and (v) no toilet. The "ordinary toilet" category is ambiguous, since it can encompass both improved types (a pit latrine with a slab) and unimproved types (a pit latrine without one), depending on construction, and the census provides no further detail to resolve this. The census also captures no information on whether a facility is shared between households. For these reasons, the census categories cannot support JMP’s limited, basic, or safely managed classifications.

The values in Table 4.1 are household-based for NPHC and population-based for MICS. They are comparable within each data source across its own two rounds, but not directly comparable across sources. “No toilet” from the census and “open defecation” from MICS are treated as broadly equivalent and thought to be measuring the same underlying case of absence of sanitation.

The NPHC data document the scale of Nepal’s sanitation transformation over the census period. No-toilet households fell from 38.4 percent in NPHC 2011 to 4.5 percent in NPHC 2021, a reduction of 33.9 percentage points nationally in one decade.

Table 4.1 Percentage of households using different types of toilets (NPHC) and percent of population using improved sanitation service (MICS)

Area	NPHC (percent of households)								MICS (percent of population)			
	Flush-connected to sewer		Flush-connected to septic tank		Ordinary toilet		No toilet		Using improved sanitation facilities		Open Defecation	
	2011	2021	2011	2021	2011	2021	2011	2021	2019	2024/25	2019	2024/25
National	8.3	9.8	33.5	55.1	19.5	30.1	38.4	4.5	93.8	92.8	5.0	5.5
Urban/Rural												
Urban	12.2	13.3	37.8	54.6	18.2	27.9	31.1	3.8	94.7	93.9	4.2	4.5
Rural	1.0	2.8	25.5	56.0	21.8	34.7	51.2	6.0	92.0	90.7	6.7	7.6
Ecological Belt												
Mountain	0.4	1.0	26.8	69.2	32.4	27.5	39.9	2.0	95.5	94.8	4.0	3.8
Hill	16.4	19.2	37.0	59.3	21.3	19.8	24.9	1.5	97.8	97.1	1.5	1.8
Tarai	1.3	2.6	30.9	49.5	15.8	39.7	51.2	7.6	91.3	88.8	8.3	9.1
Province												
Koshi	1.5	2.2	32.7	61	35.1	33.1	30.3	3.2	95.2	95.6	2.6	2.7
Madhesh	1.3	2.7	14.9	35.8	9.9	48.6	72.7	12.0	83.6	85.6	15.8	13.7
Bagmati	31.1	32.7	35.9	49.6	15.1	16.2	17.2	1.2	97.8	97.2	1.1	1.9
Gandaki	1.1	2.8	62.9	75.9	21.1	20.1	14.5	1.0	98.7	99.4	0.8	0.2
Lumbini	1.6	4.0	35	58.6	17.9	31.4	45.0	5.6	94.9	91	4.0	7.7

Area	NPHC (percent of households)								MICS (percent of population)			
	Flush-connected to sewer		Flush-connected to septic tank		Ordinary toilet		No toilet		Using improved sanitation facilities		Open Defecation	
	2011	2021	2011	2021	2011	2021	2011	2021	2019	2024/25	2019	2024/25
Province												
Karnali	0.8	2.2	27.3	60.2	23.1	34.6	48.2	2.6	94.0	93.4	4.9	4.1
Sudurpashchim	1.0	2.0	30.0	62.2	15.7	30.9	52.7	4.4	95.7	90.1	2.6	3.2
Municipalities												
Metropolitan City	44.7	39.3	41.9	47.4	8.5	11.8	4.2	1.1	96.4	99.2	3.2	0.5
Sub-metropolitan City	1.6	3.0	53.8	68.7	19.0	25.0	24.8	2.9	90.9	94.9	8.1	2.1
Urban Municipality	6.2	9.6	34.8	54.1	20.3	31.4	38.0	4.5	94.8	92.9	3.9	5.5
Rural Municipality	1.0	2.8	25.5	56.0	21.8	34.7	51.2	6.0	92.0	90.7	6.7	7.6
Source: Table AS.1												

In the two census years, flush toilet connected to a septic tank rose from 33.5 to 55.1 percent of households at the national level, becoming the dominant facility type. Ordinary toilet use rose from 19.5 to 30.1 percent reflecting construction of a minimum-standard toilet by households that previously had none. No-toilet rates fell over the census years across every province, but by widely varying amounts. Madhesh recorded the largest absolute drop (72.7 to 12.0 percent, a 60.7 point fall), followed by Sudurpashchim (52.7 to 4.4 percent), Karnali (48.2 to 2.6 per cent), and Lumbini (45.0 to 5.6 per cent). Yet Madhesh still ended with the highest no-toilet rate of any province in 2021, nearly three times the national average, since its starting point was so much higher than the rest of the country. Among caste and ethnicity groups, Madhesh/Tarai Dalit households recorded 24.6 percent households reporting no-toilet in 2021, the highest of any group nationally, compared to 0.9 percent for Hill Castes (Table AS. 2).

The MICS data in the second vertical panel of Table 4.1 show a different picture. Improved sanitation coverage stood at 93.8 percent in 2019 and 92.8 percent in 2024/25, a marginal decline that can be more accurately described as stagnation rather than deterioration. At 92.8 percent, improved sanitation coverage looks close to complete, but improved status only requires a hygienic

facility. The improved status only says nothing about sharing or safe excreta disposal which are prerequisites for safely managed status. While open defecation rose marginally at the national level over the same period from 5.0 percent to 5.5 percent, driven mainly by Lumbini, where it climbed sharply from 4.0 to 7.7 percent of the population.

MICS data also depicts the provincial picture where ODF sustainability has held and where it has broken down. Gandaki is the strongest performer at 0.2 percent open defecation in 2024/25, effectively sustaining ODF status. Bagmati, Koshi, and Karnali all record rates below 5 percent. Madhesh records 13.7 percent, down from 15.8 percent in 2019, but still slightly more than one in seven people practicing it in 2024/25. Lumbini shows the most concerning trajectory: its Peri-urban rose from 5.0 to 13.0 percent (Table AG.2), which is one of the sharpest sub-provincial increases in the dataset between 2019 and 2024/25.

By ecological belt, Tarai records 9.1 percent population practicing open defecation in 2024/25, up from 8.3 percent in 2019, considerably higher than Mountain (3.8%) or Hill (1.8%) belts (Table 4.1). The belt with the flattest terrain and easiest physical access for latrine construction records the highest open defecation rate. The likely explanation lies less in physical access and more in social and economic vulnerability. A fuller explanation would require disaggregating the belt by province, since the Tarai spans lowland districts in Koshi, Madhesh, Lumbini, and Sudurpashchim with different sanitation outcomes.

4.3 Open defecation slippage since the ODF declaration

Section 4.2 established that open defecation rose marginally at the national level between MICS rounds, from 5.0 to 5.5 percent. This section examines where that national figure is concentrated, and what it means that open defecation persists five years after Nepal's 2019 ODF declaration.

Table 4.2 Percentage of population practicing open defecation by province by DEGURBA categories, MICS 2019 and 2024/25

Categories	2019	2024/25
National	5.0	5.5
DEGURBA		
Urban	3.1	1.7
Peri-urban	7.9	9.5
Rural	3.4	3.7
DEGURBA by Province		
Koshi	**2.6**	**2.7**

Categories	2019	2024/25
Urban	0	0.6
Peri-urban	4.3	3.9
Rural	2.0	2.6
Madhesh	**15.8**	**13.7**
Urban	15.0	7.8
Peri-urban	16.6	15.0
Rural	11.5	19.4
Bagmati	**1.1**	**1.9**
Urban	0.1	0.4
Peri-urban	0.9	1.0
Rural	3.6	5.0
Gandaki	**0.8**	**0.2**
Urban	0.4	0
Peri-urban	0	0.2
Rural	1.3	0.3
Lumbini	**4.0**	**7.7**
Urban	0.9	0
Peri-urban	5.0	13.0
Rural	3.6	0.9
Karnali	**4.9**	**4.1**
Urban	4.4	1.0
Peri-urban	0	0
Rural	5.5	5.1
Sudurpashchim	**2.6**	**3.2**
Urban	2.9	1.9
Peri-urban	1.5	2.1
Rural	3.0	4.4

Table 4.2 shows the provincial DEGURBA breakdown in full, and the pattern is far from uniform. This reveals a pattern that challenges the expected urban advantage, especially by Peri-urban areas where open defecation rose from 7.9 to 9.5 percent between rounds. This is the largest

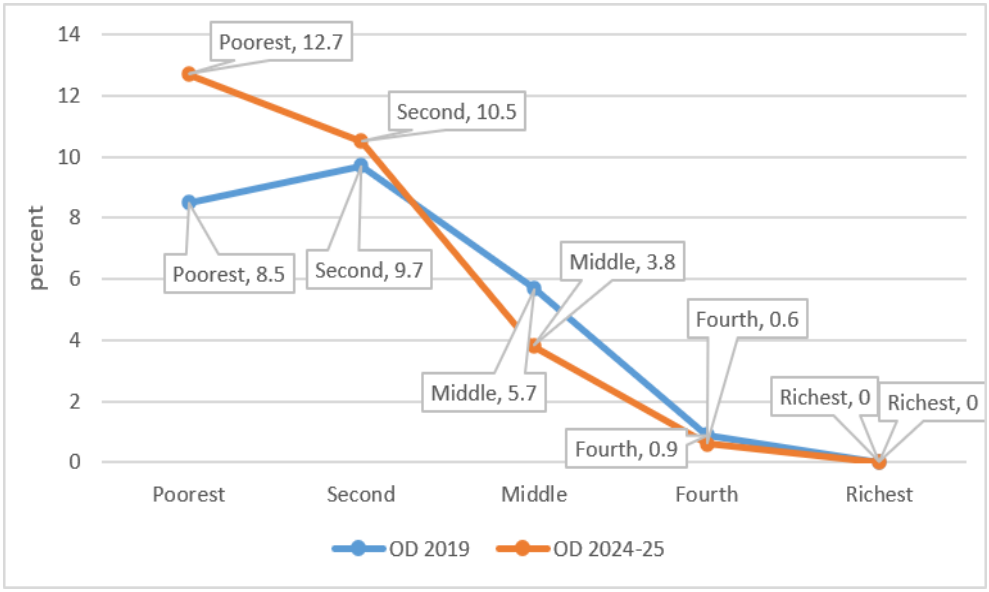
absolute increase of any DEGURBA category and it is particularly driven by Lumbini Peri-urban (5.0% to 13.0%). Urban open defecation fell from 3.1 to 1.7 percent. Rural open defecation rose marginally from 3.4 to 3.7 percent. Madhesh rural stands out sharply: open defecation nearly doubled, from 11.5 to 19.4 percent, the highest rate of any sub-provincial category in the country in 2024/25. This means Madhesh's overall provincial decline (15.8 to 13.7 percent) masks a worsening rural problem beneath it. Bagmati rural also deteriorated, rising from 3.6 to 5.0 per cent, despite Bagmati's urban and Peri-urban areas remaining low throughout. This reminds that even provinces with strong overall sanitation performance can have a rural pocket moving in the wrong direction. Sudurpashchim shows a similar pattern, with open defecation rising in every DEGURBA category, except in urban areas where it declined marginally by one percentage point. By contrast, Lumbini and Karnali's urban areas both improved to zero or near-zero even though Lumbini Peri-urban rose sharply by about 8 percentage points.

Figure 4.4 panel A and B show percentage of population practicing open defecation by household wealth quintile index and education of the household head. By wealth quintile, the Lowest recorded the sharpest deterioration of any group, rising from 8.5 to 12.7 percent between rounds. But the Lowest were not the worst-off group in 2019: the Lower quintile recorded a higher rate that year (9.7%) than the Lowest did (8.5%), before falling only slightly to 10.5 percent by 2024/25. The middle and Higher quintiles, by contrast, both improved over the same period (middle: 5.7 to 3.8% and fourth: 0.9 to 0.6%), and the Highest quintile recorded zero open defecation in both rounds. The result shows that deterioration is concentrated specifically at the bottom of the wealth distribution, rather than reflecting a uniform worsening across all except the Highest households. This also shows that the ODF declaration that was intended to represent universal coverage has not either reached proportionately to the most economically vulnerable households or the result achieved is not sustainable for those at the bottom and including those in the Lower quintile.

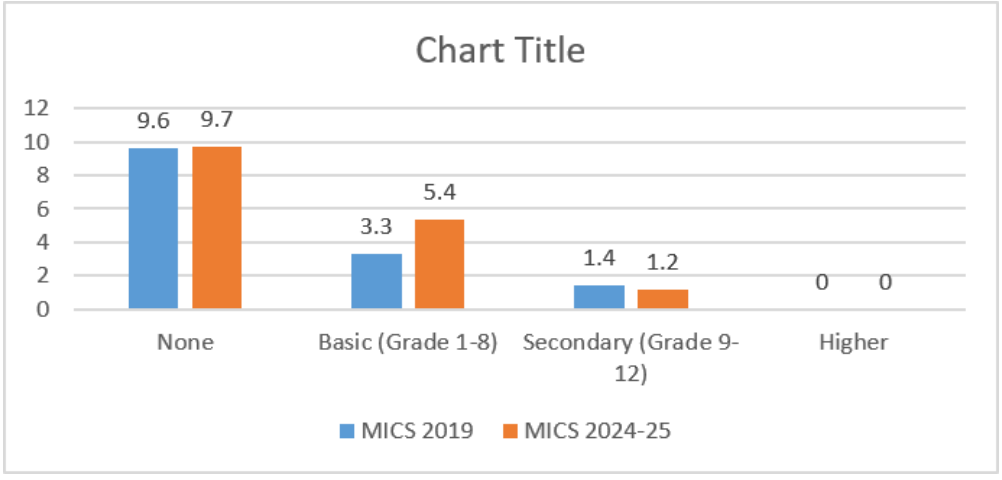
Education of household head shows (Figure 4.4 Panel B) the expected pattern in both rounds. Open defecation falls steadily as education rises in both the rounds of the survey. But one point worth flagging is the pace of change within the group, where the basic education category recorded the largest deterioration of any group between rounds, rising from 3.3 to 5.4 percent in the previously better-off group.

Figure 4.4 Percentage of population practicing open defecation (OD) by wealth quintile index and education of household head, MICS 2019 and 2024/25

Panel A: OD by Wealth Quintile Index (% of population)



Panel B: OD by education of household head (% of population)



Taken together, these patterns point to slippage (reverting to open defecation) concentrated in specific places and groups, rather than a single national trend. Several factors help explain why this slippage is occurring. For example, latrine construction during ODF verification may have prioritized count over durability. A report published in The Rising Nepal states that 30 percent of toilets built during the ODF campaign in Karnali were basic or temporary and require immediate improvement (TRN, 2025). Similarly, Tarai's high vulnerability to flood hazards presents a related distinct challenge in maintaining ODF. The seasonal inundation can damage or bury pit latrines, and households may revert to open defecation when no replacement is accessible (MoWS, 2023). This risk may be compounded by the Tarai's heavy reliance on shallow tube wells for water supply where many latrines in the belt are pour-flush designs that require water to operate. For example, a tubewell running dry or malfunction could leave an otherwise functioning latrine temporarily unusable, though this specific mechanism has not been directly confirmed by the data in this report. Whether a household reverts to open defecation after a latrine is damaged (for example flooding) or when water supply fails, often comes down to affordability. The cost of rebuilding or repairing a failed latrine may be unaffordable without a maintenance subsidy belonging to lower wealth quintile households.

The mechanisms how the toilets built once fail to provide services described above are specific, local examples of a broader national pattern which show that latrines that are built do not necessarily stay functional or in use. A sustainability study carried out by UNICEF and Department of Water Supply and Sewerage Management (DWSSM) in 2018 found that 90 percent of the ODF-declared communities had 10 percent slippage rate and about 75 percent of them were likely to retain their ODF status (UNICEF Nepal, 2019). UNICEF itself found that the sustainability of ODF status remained a challenge, particularly in the mountains and Tarai regions, where maintenance and use of toilets in some communities needed to be consistently reinforced, and advocated for an independent monitoring mechanism to track ODF retention and sustainability. Though the ODF program tremendously help reduce open defecation, ODF declaration and ODF sustainability are different problems, and consolidating the gains requires constant follow-up of ODF status, particularly of the population in the Lowest wealth quintile.

This slippage, however, is only the more visible part of Nepal's sanitation challenge. Ending open defecation does not, on its own, resolve this chapter's underlying concern. A latrine may have survived intact since the ODF campaign and been used by every member of the household, yet still fail to safely contain, treat, or keep its excreta out of the surrounding environment. The remaining sections of this chapter turn to that deeper, and considerably more fundamental, question directly.

4.4 Safely managed sanitation facilities

Sections 4.1 through 4.3 established that improved sanitation coverage in Nepal is high, but that improved status alone does not guarantee safe excreta management. This section quantifies that gap directly: how much of Nepal's improved sanitation coverage translates into safely managed status, and which of sharing, containment failure, or untreated discharge is driving the shortfall where it occurs.

Methodology and comparability

Safely managed[15] sanitation requires an improved facility that is unshared and where excreta is either safely contained in place (in situ) or treated, whether on-site or after removal to an off-site facility. A limitation applies to how this status is measured in both survey rounds. The full JMP definition sums three components: population using sewer connections with confirmed treatment, population using on-site facilities with confirmed off-site treatment, and population using on-site facilities with safe in-situ disposal. In both MICS 2019 and MICS 2024/25, the reported national safely managed figure is numerically identical to the safe in-situ disposal component alone (61.1 percent in 2019 and 39.9 percent in 2024/25), indicating that neither round confirms treatment outcomes for sewer-connected or off-site-treated populations, and both effectively count this population's contribution to safely managed status as zero by default. For Kathmandu Valley Urban, the missing confirmation reflects more than a data gap. A 2011 assessment found that most of the Valley's sewered waste was then discharged untreated (HPCIDBC and UNHABITAT, 2011). Treatment capacity has since been added, including the Guheshwori plant, but how much sewage is treated today has not been documented. For the remainder of the country's sewer-connected and off-site-treated population, whether treatment is genuinely occurring or simply unreported cannot be determined from this data, and both rounds' national safely managed figures should be read as conservative estimates of the in-situ component, rather than as fully JMP consistent measurements of safely managed sanitation overall.

Within this shared limitation, the two rounds also differ from each other. MICS 2019, in the absence of data on containment adequacy, classified on-site facilities that had never been emptied as safely managed, on the premise that an unemptied facility is still effectively containing waste (CBS/UNICEF, 2019). MICS 2024/25 introduced a specific question (WS11D) on whether excreta

[15] SDG Indicator 6.2.1 - The proportion of the population using safely managed sanitation services is defined as the proportion of the total population using an improved sanitation facility which is not shared with other households and where excreta are safely disposed of in situ or removed and treated off-site.

had been released into the surrounding environment through overflow, flooding, or structural collapse in the preceding 12 months, and explicitly excludes facilities with inadequate containment (NSO/UNICEF, 2026). As a result, the two rounds are not directly comparable[16] as a trend: the apparent decline from 61.1 percent in 2019 to 39.9 percent in 2024/25 reflects this stricter and more rigorous 2024/25 measurement rather than a genuine deterioration in service. The 2024/25 figure should be treated as a new baseline for the in-situ component specifically, rather than compared directly against 2019.

Table 4.3 Safely managed sanitation coverage and on-site excreta management, by province and wealth quintile, percentage of population, MICS 2024/25

Area	Improved 2024/25			Using improved on-site sanitation facilities (excluding shared and inadequately contained) 2024/25			Safely managed (SM) in situ		Flush to piped sewer 2024/25 (%)	Gap: 2024/25 (Percentage points)	
	Total Improved	Improved Not Shared	Improved Shared	With safe disposal of excreta in situ	With unsafe disposal of excreta	With excreta removed off-site for treatment	SM 2019*	SM 2024/25**		Gap of improved minus SM (containment-treatment -sharing)	Remaining gap after sharing (containment-treatment)
	i	ii	iii	iv	v	vi	vii	viii	ix	x = i - viii	x - iii
National	92.8	79.9	12.9	39.9	5.1	2.5	61.1	39.9	8.5	52.9	
Province											
Urban	93.9	79.2	14.6	37.1	5.7	2.9	54.9	37.1	12.2	56.8	42.2
Rural	90.7	81.1	9.6	45.6	3.9	1.5	73.9	45.6	1.0	45.1	35.5

[16] The 2019 round did not include direct questions on containment breach. It facility type and emptying history rather than the observed or reported containment failure events.

Area	Improved 2024/25			Using improved on-site sanitation facilities (excluding shared and inadequately contained) 2024/25			Safely managed (SM) in situ		Flush to piped sewer 2024/25 (%)	Gap: 2024/25 (Percentage points)	
	Total Improved	Improved Not Shared	Improved Shared	With safe disposal of excreta in situ	With unsafe disposal of excreta	With excreta removed off-site for treatment	SM 2019*	SM 2024/25**		Gap of improved minus SM (containment-treatment -sharing)	Remaining gap after sharing (containment-treatment)
	i	ii	iii	iv	v	vi	vii	viii	ix	x = i - viii	x - iii
Ecological belt											
Mountain	94.8	80.9	13.8	49.8	1.7	0.2	72.3	49.8	0.7	45	31.2
Hill	97.1	81.5	15.5	45.4	2.3	1.5	54.3	45.4	16.6	51.7	36.2
Tarai	88.8	78.4	10.5	33.8	8.1	3.6	65.8	33.8	2.3	55	44.5
DEGURBA											
Urban	96.7	75.1	21.5	31.0	5.6	3.8	38.4	31.0	26.3	65.7	44.2
Peri-urban	88.8	79.6	9.3	35.5	7.6	3.1	66.5	35.5	2.3	53.3	44
Rural	94.7	84.4	10.3	53.1	1.6	0.5	74.7	53.1	1.3	41.6	31.3
Province											
Koshi	95.6	81.9	13.7	48.7	2.8	3.3	69.4	48.7	0.5	46.9	33.2
Madhesh	85.6	78.3	7.3	28.2	13.7	3.1	66.1	28.2	2.1	57.4	50.1
Bagmati	97.2	78.2	18.9	38.7	2.5	2.7	36.7	38.7	33.8	58.5	39.6
KTM Valley Urban	99.4	73.2	25.9	14.3	1.7	1.8	17.0	14.3	66.1	85.1	59.2
Gandaki	99.4	88.1	11.3	63.3	2.5	0.8	66.5	63.3	0.2	36.1	24.8
Lumbini	91.0	80.2	10.7	40.4	4.0	2.8	69.1	40.4	4.1	50.6	39.9
Karnali	93.4	76.8	16.6	31.9	1.6	0.3	76.4	31.9	0.3	61.5	44.9
Sudurpash-chim	90.1	76.7	13.4	34.1	3.1	1.1	67.7	34.1	0.9	56.0	42.6

Area	Improved 2024/25			Using improved on-site sanitation facilities (excluding shared and inadequately contained) 2024/25			Safely managed (SM) in situ		Flush to piped sewer 2024/25 (%)	Gap: 2024/25 (Percentage points)	
	Total Improved	Improved Not Shared	Improved Shared	With safe disposal of excreta in situ	With unsafe disposal of excreta	With excreta removed off-site for treatment	SM 2019*	SM 2024/25**		Gap of improved minus SM (containment-treatment -sharing)	Remaining gap after sharing (containment-treatment)
	i	ii	iii	iv	v	vi	vii	viii	ix	x = i - viii	x - iii
Municipalities											
Metropolitan City	99.2	78.1	20.8	31.1	3.8	3.1	24.3	31.1	43.3	68.1	47.3
Sub-metro City	94.9	78.2	16.7	40.8	10.7	3.4	56.5	40.8	4.8	54.1	37.4
Urban Municipality	92.9	79.6	13.3	37.6	5.3	2.9	61.9	37.6	8.4	55.3	42
Rural Municipality	90.7	81.1	9.6	45.6	3.9	1.5	72.7	45.6	1.0	45.1	35.5
Wealth quintile											
Lowest	84.3	73.8	10.5	36.8	2.1	0.6	71.9	36.8	0.2	47.5	37
Lower	87.5	76.5	11.1	39.5	5.1	1.0	70.1	39.5	0.6	48.0	36.9
Middle	94.5	81.0	13.5	40.6	5.2	1.7	66.5	40.6	2.5	53.9	40.4
Higher	98.4	79.4	18.9	42.0	7.1	3.6	60.6	42.0	10.6	56.4	37.5
Highest	99.3	88.6	10.6	40.8	6.0	5.3	36.5	40.8	28.7	58.5	47.9

Source:(CBS/UNICEF, 2019) and (NSO/UNICEF, 2026) from Tables WS 3.4.1 and WS.3.8, and WS.3.1 (for column ix: flush to piped sewer 2024/25). Annex Table AS.3
**2019 used lenient containment criteria as information about adequacy of containment was not collected.*
***2024/25 safely managed excludes inadequately contained.*

Table 4.3 presents safely managed coverage along with excreta management data from on-site sanitation facilities in MICS 2024/25. All figures in the table describe shares of the same national population. The share of the population on piped sewers, shown in the column ix, constitutes 8.5 percent of the national population and 66.1 percent of Kathmandu Valley Urban residents.

Table 4.3 also shows that improved sanitation coverage in 2024/25 stands at 92.8 percent of the population, while safely managed sanitation covers only 39.9 percent. The total gap between improved and safely managed (52.9 percentage points, reflecting containment, treatment, and sharing combined) splits into two parts. Sharing accounts for 12.9 points of it (the difference between Total-Improved and Improved-Not-Shared). The remaining gap after sharing (containment/ treatment) accounts for 40.0 points, arising even among unshared, improved facilities. Nationally, roughly three-quarters (40.0 out of 52.9 points) of the total gap is explained by containment and treatment failure, and only about one-quarter by sharing.

This pattern holds everywhere, but the balance between sharing and containment/treatment failure shifts considerably by area.

Madhesh shows the most extreme version of the pattern. Its sharing gap (7.3 points) is the smallest of any province, meaning most Madhesh households already have their own facility. But its remaining gap after sharing (50.1 points) is the second-widest in the table, and its unsafe disposal rate (13.7 %) is the highest of any province. This points to a province where the sharing problem has largely been resolved, but where a large share of individually owned facilities are still failing to contain excreta safely.

Karnali records the widest total gap of any province, at 61.5 percentage points (93.4 % improved, 31.9 % safely managed), with a remaining gap after sharing of 44.9 points (the widest of any province) indicating that on-site containment and treatment failure, rather than sharing, is the dominant driver of Karnali's shortfall.

Bagmati presents a different profile. Its total gap (58.5 points) is nearly as wide as Karnali's, but its unsafe disposal rate is low (2.5 percent), while its flush-to-sewer share is unusually high (33.8 per cent). Its remaining gap after sharing (39.6 points) is narrower than Karnali's despite a similar total gap, signalling that Bagmati's shortfall is driven mainly by unconfirmed sewer treatment rather than on-site containment failure.

Kathmandu Valley Urban takes this pattern to its extreme. It records the widest total gap of any area in the table, at 85.1 percentage points, and the widest remaining gap after sharing too, at 59.2 points, despite having the highest improved coverage of any province (99.4 %). Its flush-to-sewer share (66.1 %) is by far the highest in the country, and this is the direct explanation for its exceptionally low safely managed figure (14.3 %): two-thirds of the Valley's population is on a sewer

network whose treatment status cannot be confirmed from the survey. Some treatment capacity exists, notably at Guheshwori, and more is under construction, but a 2011 assessment found most Valley sewage was then discharged untreated, and no current figure is available. Because sewer-connected households contribute nothing to the safely managed figure by construction, the 14.3 percent should therefore be simply treated as a floor rather than a precise estimate, because some sewered households may be connected to treatment that the survey could not confirm. The Valley also records the highest sharing gap of any area (25.9 %), consistent with dense urban and rental housing. Both mechanisms, high sharing and unconfirmed sewer treatment, are working against the Valley simultaneously, which is why its gap so far exceeds every other area in the table.

Gandaki, by contrast, is the strongest performer, with the narrowest total gap of any province (36.1 points) and the narrowest remaining gap after sharing too (24.8 points). Its sharing gap (11.3 points) and unsafe disposal rate (2.5 %) are both among the lowest in the table, and its flush-to-sewer share is negligible (0.2 %), meaning Gandaki's relatively strong performance is not exposed to the unconfirmed treatment problem affecting Bagmati and Kathmandu Valley Urban.

By wealth quintile, safely managed coverage converges sharply, ranging from 36.8 percent for the Lowest to 40.8 percent for the Highest, a spread of only 4.0 points, far narrower than the provincial spread. But the gap columns tell a different story: the Highest quintile's total gap (58.5 points) is wider than the Lowest's (47.5 points), and its remaining gap after sharing (47.9 points) is the widest of any quintile. The Highest quintile also records by far the highest flush-to-sewer share of any quintile (28.7 %, against just 0.2 % for the Lowest), suggesting its shortfall follows the same mechanism as Kathmandu Valley Urban: high sewer connection without confirmed treatment. Notably, the Highest quintile's unsafe disposal rate (6.0 %) is also the highest of any quintile, higher even than the Lowest's (2.1 %), an unintuitive finding this report's data source cannot fully explain, though it may reflect a small population of on-site users among the Highest quintile whose facilities are poorly maintained despite the household's overall wealth.

Ecological belt. The Mountain belt has the highest safely managed sanitation of any belt, at 49.8 percent. Even so, containment or treatment failure accounts for most of its gap (31.2 of 45.0 points), and sharing for the rest (13.8 points). The Tarai has the lowest improved coverage of any belt, at 88.8 percent, and the widest remaining gap after sharing.

DEGURBA. Urban areas have the highest improved coverage of any category, at 96.7 percent. Yet they have the lowest safely managed status, at 31.0 percent. Urban areas also have the highest sharing and the highest flush-to-sewer share of any category. Rural areas show the opposite pattern. They have the highest safely managed status, at 53.1 percent, and almost no sewer connection.

Municipalities. Safely managed status rises steadily from Rural Municipalities to Urban Municipalities and Sub-Metropolitan Cities. Metropolitan Cities break this pattern. They have the highest improved coverage of any type, at 99.2 percent, but the lowest safely managed status, at 31.1 percent. This mirrors Kathmandu Valley Urban, since Metropolitan Cities also have the highest flush-to-sewer share and the highest sharing of any type.

Figure 4.5 Percentage of population using improved sanitation facilities, safely managed, and gap between them by ecological belt and DEGURBA categories, MICS 2024/25

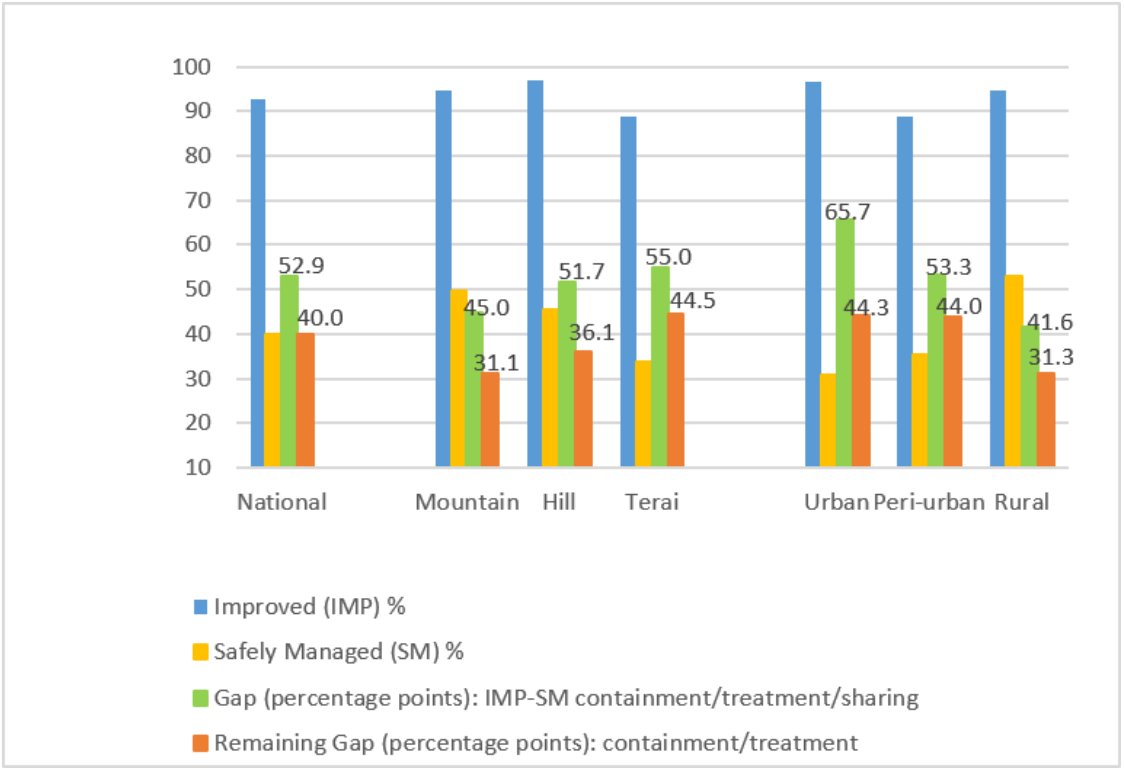
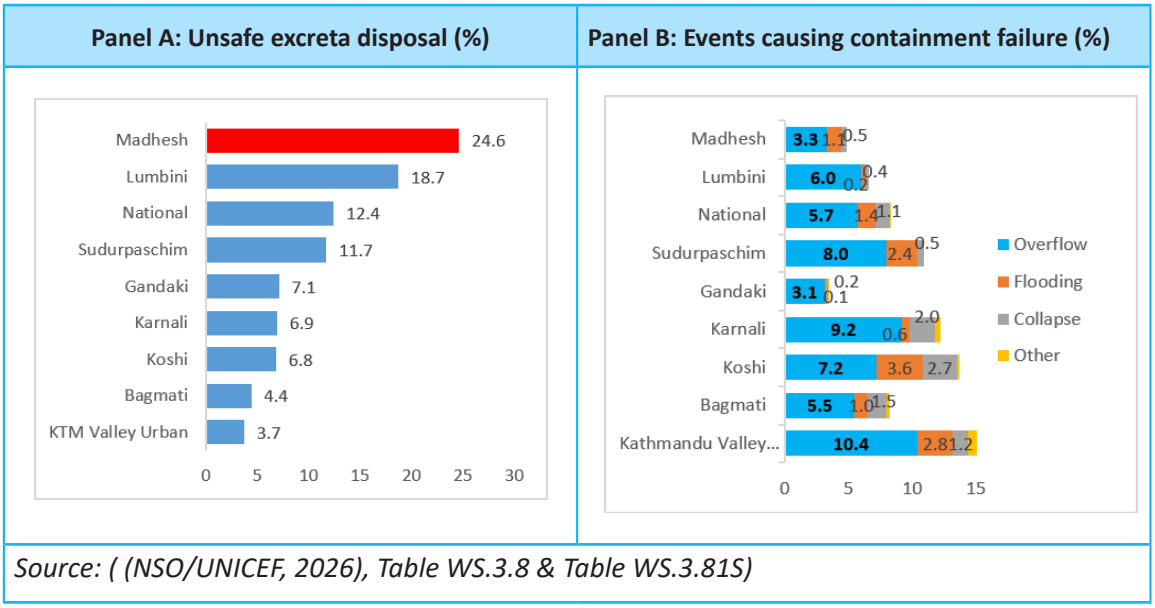


Figure 4.5 displays widest gaps at Tarai and urban areas, both driven mainly by containment/ treatment failure rather than sharing. Tarai has the lowest improved coverage of any belt (88.8 %) yet the widest gap (55.0 points). The urban areas have the highest improved coverage of any DEGURBA category (96.7 %) yet the lowest safely managed coverage (31.0 %) and widest gap (65.7 points), echoing the Kathmandu Valley Urban pattern. Mountain and rural areas perform best on both gap measures.

4.5 Excreta containment failure and triggering events

MICS 2024/25 introduced, for the first time, direct household-level enumeration of excreta release from sanitation facilities into the surrounding environment ((NSO/UNICEF, 2026),Table WS.3.81S). The excreta released from a failing facility enters the soil and water pathways described above by the "five Fs" framework, contributing to the faecal contamination. Such containment failure is one of several upstream sources of that contamination. The others include open defecation and contamination during water storage and handling after collection. However, the relative contribution of each pathway cannot be determined from the available data alone. The data below identifies where this release is occurring, through which mechanism: overflow, flooding, or structural collapse, and which facility types carry the greatest risk, providing a more specific diagnostic than the aggregate containment/treatment gap in Section 4.4 alone can offer.

Figure 4.6 Percentage of population using improved on-site sanitation facilities with unsafe disposal of excreta and events causing containment failure, MICS 2024/25

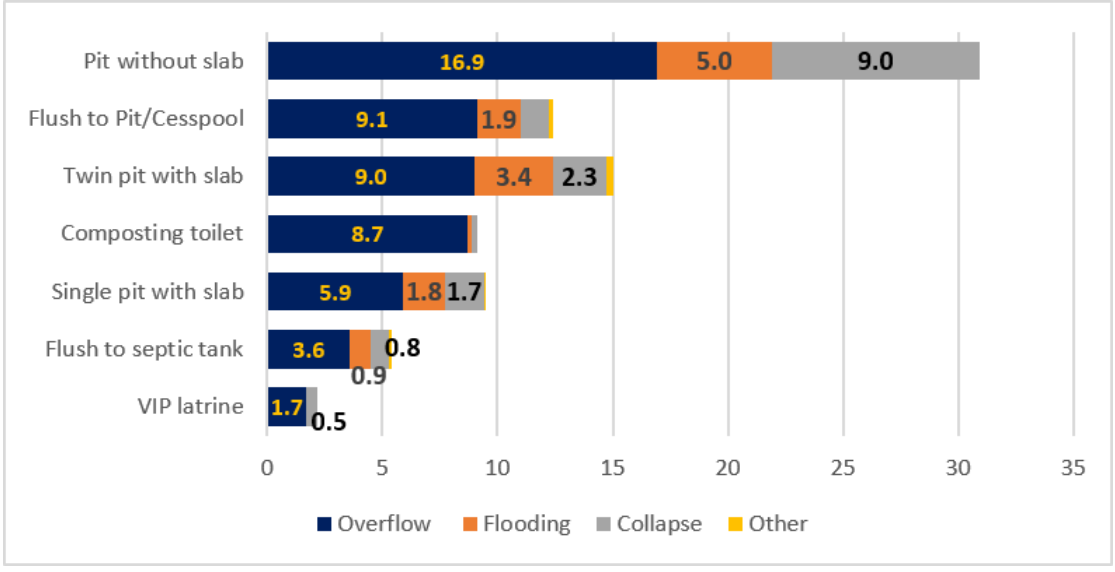


Source: ((NSO/UNICEF, 2026), Table WS.3.8 & Table WS.3.81S)

Figure 4.6 left Panel A shows unsafe excreta disposal ranging from 3.7 percent in Kathmandu Valley Urban to 24.6 percent in Madhesh, a nearly sevenfold difference. Only Madhesh and Lumbini exceed the national rate of 12.4 percent (at 24.6 and 18.7 percent respectively), and every other province falls below it, with Kathmandu Valley Urban and Bagmati recording the lowest rates in the country.

Right Panel B in figure 4.6 decomposes this range by events triggering the release. Karnali records the highest overflow rate of any province (9.2 %), driven by rural Karnali specifically at 11.8 per cent, the highest sub-provincial overflow figure in the dataset ((NSO/UNICEF, 2026), Table WS.3.81S). Sudurpashchim records the second highest overflow rate (8.0 %). Koshi stands out on the other two events, recording the highest flooding rate (3.6 %) and highest collapse rate (2.7 %) of any province, more than double most others on both measures. Gandaki records the lowest rates on all three events, consistent with its leading safely managed coverage position established in Section 4.4. Kathmandu Valley Urban's overflow rate (10.4 %) is the highest of any sub-provincial category in the entire dataset, a striking finding given that 66.1 percent of its population is sewer-connected and has no pit or tank to overflow at all, and this figure reflects an extremely high overflow rate concentrated among the remaining 33.9 percent of the Valley's population still on on-site systems. This may be consistent with the Valley's population with the on-site sanitation facilities operating in a dense urban sectors where tank emptying or replacement may be constrained by time or space. Madhesh presents a different pattern again: despite recording the highest unsafe disposal rate of any province (24.6 %), its overflow rate is comparatively low (3.3 %), suggesting different kind of containment failure, possibly gradual leaching through inadequate pit walls, rather than identifiable overflow events. However, this interpretation cannot be confirmed from the available data alone.

Figure 4.7 On-site sanitation facilities by events triggering the release of excreta, MICS 2024/25



Source:((NSO/UNICEF, 2026),Table WS.3.81S)

Figure 4.7 shifts the analysis from geography to facility design, and the clearest finding is the gap between unimproved and improved technology. Pit latrines without a slab, an unimproved facility type, record by far the highest combined release rate of any category in the chart, with overflow (16.9 %), flooding (5.0 %), and collapse (9.0 %) far exceeding every improved facility type. This shows that improved facilities release excreta less often than unimproved ones, although some improved types still perform poorly.

Among improved facilities, design matters considerably. Flush-connected cesspools record more than double the overflow and flooding rates of septic tanks (9.1 against 3.6 % overflow and 1.9 against a much smaller septic tank flooding rate), confirming that cesspool design carries materially higher release risk within the same improved category. VIP latrines perform best of any facility type shown, improved or unimproved, with only a 1.7 percent overflow rate and no recorded flooding and tiny collapse rate. Twin pit latrines with slab, however, record a higher overflow rate than single pit latrines (9.0 against 5.9 %) despite being designed specifically to prevent overflow through alternating use. This illogical result cannot be confirmed from this data alone and warrants further investigation, whether the cause is poor construction, misuse, or something else. Composting toilets record a high overflow rate (8.7 %) with minimal flooding or collapse, suggesting a capacity or management failure rather than a structural one.

Linking containment failure to water quality

The findings above show that containment failure in Nepal is not a single, uniform problem. It varies by various triggers like flooding, landslide or structural collapse, by geography, and, most clearly, by facility design, with the gap between unimproved and improved technology far larger than the differences among improved types themselves.

This has a direct bearing on the water quality findings in Chapter 3. Excreta released through any of these mechanisms enters the shallow soil and groundwater systems that many households rely on for drinking water, particularly tube wells and unprotected springs. Piped water systems are not immune either because a damaged or poorly maintained distribution network running through contaminated soil can allow the same excreta to infiltrate the pipe itself, particularly at joints, cracks, or low-pressure sections, a plausible contributor to the pattern already noted in Chapter 3.

However, containment failure is unlikely to be the only pathway behind this pattern, since post collection handling and storage also contribute, as Chapter 3 noted. The geographic and facility-type patterns identified in this section give that broader finding a more specific, testable shape: the areas and facility types with the highest excreta release rates identified here would be a logical starting point for investigating where sanitation-driven water contamination is most likely concentrated.

4.6 Handwashing and hygiene behaviour

Handwashing with water and soap is the hygiene indicator most strongly associated with reductions in diarrhoeal disease and child mortality (Curtis and Cairncross, 2003). This is particularly true for mothers of children under five, since handwashing at certain critical moments, after defecation or toilet use, before and after cleaning a child's faeces or handling nappies, before eating or preparing food, during breastfeeding or feeding a child, and after contact with a source of contamination, is central to preventing many communicable diseases (Dhital et al., 2024). MICS measures the presence of a designated handwashing facility with water and soap as a proxy for this behaviour, on the basis that facility presence is a necessary, though not sufficient, condition for consistent practice (WHO and UNICEF (JMP), 2018). The JMP classifies a household as having basic handwashing facilities if it has a facility with both soap and water available on premises. Where a facility is present but lacks water, soap, or both, it is classified as having limited handwashing facilities. This section examines what that proxy indicator shows for Nepal, and, since the indicator itself combines two distinct requirements, water and soap, decomposes it into its components to identify which is driving the remaining gap.

Table 4.4 Percentage of population with handwashing facility with water, soap, and, water and soap present at the handwashing station, MICS 2019 and 2024/25

Area	Hand washing facility with water (%)		Hand washing facility with soap (%)		Hand washing facility with water and soap (%)		Change in facility with water (between rounds) (PP)	Change in facility with Soap (between rounds) (PP)	Change in Facility with both water and Soap (between rounds) (PP)
	i	ii	iii	iv	v	vi	i - ii	iii - iv	v - vi
	2019	2024/25	2019	2024/25	2019	2024/25			
National	90.8	97.0	87.0	88.5	80.7	86.4	6.2	1.5	5.7
Province									
Koshi	94.8	97.8	87.1	83.9	84.6	82.0	3.0	-3.2	-2.6
Madhesh	92.5	96.3	86.4	84.5	79.3	83.1	3.8	-1.9	3.8
Bagmati	94.4	97.2	93.5	95.9	88.2	93.7	2.8	2.4	5.5
Kathmandu Valley Urban	98.3	96.8	98.3	98.2	96.1	95.4	-1.5	-0.1	-0.7
Gandaki	95.0	98.1	91.8	96.3	88.1	94.8	3.1	4.5	6.7
Lumbini	94.3	98.3	89.5	82.6	84.6	81.0	4.0	-6.9	-3.6
Karnali	70.3	94.2	68.3	86.9	55.2	81.8	23.9	18.6	26.6
Sudurpashchim	71.2	95.1	72.7	93.9	57.6	89.7	23.9	21.2	32.1
Ecological Belt									
Mountain	73.9	91.9	69.9	88.0	58.3	81.8	17.9	18.1	23.5
Hill	88.5	97.2	87.2	91.2	79.6	89.1	8.7	4.0	9.5
Tarai	95.0	97.6	88.9	86.2	84.6	84.5	2.6	-2.7	-0.1

Area	Hand washing facility with water (%)		Hand washing facility with soap (%)		Hand washing facility with water and soap (%)		Change in facility with water (between rounds) (PP)	Change in facility with Soap (between rounds) (PP)	Change in Facility with both water and Soap (between rounds) (PP)
	i	ii	iii	iv	v	vi	i - ii	iii - iv	v - vi
	2019	2024/25	2019	2024/25	2019	2024/25			
DEGURBA Categories									
Urban	96.2	97.5	95.5	94.4	91.8	92.5	1.3	-1.1	0.7
Peri-urban	95.2	97.6	88.5	86.4	84.3	84.7	2.4	-2.1	0.4
Rural	81.3	95.9	78.0	86.3	67.3	83.3	14.5	8.3	16.0
PP – Percentage Points									

Table 4.4 shows that access to both water and soap for handwashing improved nationally between 2019 and 2024/25. Water access grew faster (up 6.2 percentage points) than soap access (up 1.5 points), and the combined indicator (households with both) rose by 5.7 points. The Key Informants and the persons participated in the Focus Group Discussions held during field validation exercise organized in selected places after the preliminary findings of local-level WASH indices reported an increased awareness in handwashing after COVID-19.

Karnali, Sudurpashchim, and Mountain saw the largest gains, closing much of the historical gap with the rest of the country. This is broadly consistent with Chapter 3's finding that Karnali and Mountain areas recorded the largest gains in on-premises water access of any geography over the same period. A household gaining an on-premises source may also more likely be gaining water at its handwashing station. However, the survey data cannot trace the same households directly to confirm the two findings. Koshi and Lumbini saw slight decline in the combined indicator, mainly due to falling soap availability rather than water.

Kathmandu Valley Urban is the only area where water fell (−1.5 points) while soap barely moved (−0.1 points), making water, not soap, the binding ceiling here in this case, and explaining its

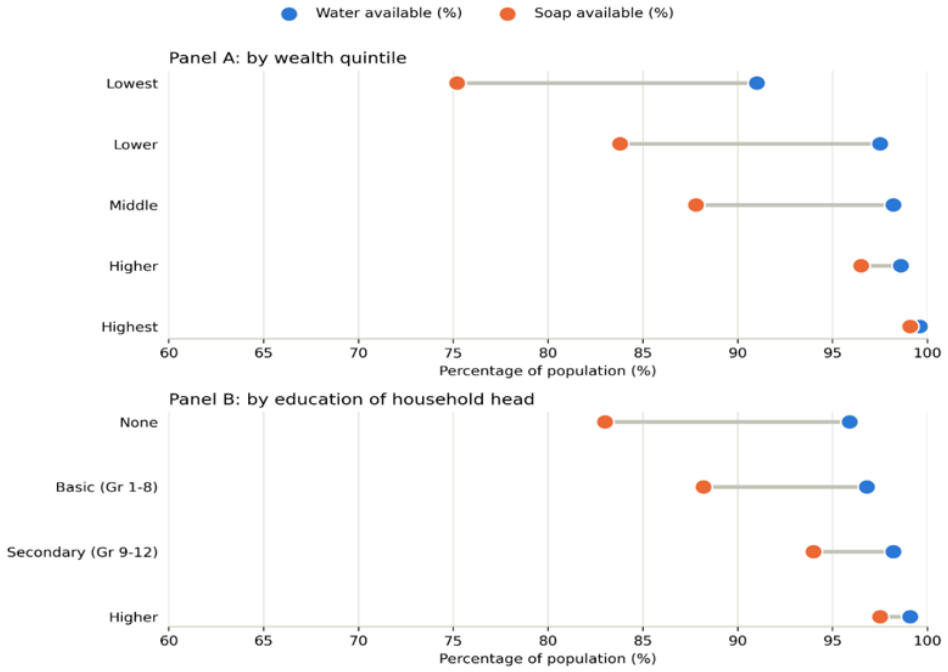
combined decline (−0.7 points). By urban-rural areas, rural areas improved the most, while more than nine out of ten people in urban areas had handwashing facilities with both of water and soap.

A household counts as having a handwashing facility with water and soap only if it has both. The combined figure therefore cannot be higher than the soap figure, which was the lower of the two in both survey rounds. In 2019, the combined figure (80.7 percent) was 6.3 points below the soap figure (87.0 percent). In 2024/25 the difference was only 2.1 points (86.4 against 88.5 percent). Households that have soap at their handwashing facility are now much more likely to have water there too. Among households with soap at their handwashing facility, about 93 percent (80.7 of 87.0) also had water in 2019. By 2024/25 this had risen to about 98 percent (86.4 of 88.5).

Wealth and education differentials in access to handwashing facility

MICS 2024/25 finds that the water-soap gap at handwashing facilities widen steadily (Figure 4.8) as wealth and education fall.

Figure 4.8 Percentage of population with water and soap available by wealth quintile and education of household head, MICS 2024/25



Panel A (wealth quintile) shows the gap between water and soap availability shrinking as wealth rises. It is widest for the Lowest quintile, where soap availability sits around 15 percentage points below water availability, and narrows through Lower and Middle before nearly closing for Higher and Highest, where the two dots sit almost on top of each other.

Panel B (education of household head) shows the same pattern. The gap is widest for households where the head has no education, narrows through Basic and Secondary levels, and is smallest for Highest education, where water and soap availability converge to nearly the same value.

In both panels, water availability (blue) stays consistently high, above roughly 95 percent across every group except the Lowest quintile, while soap availability (orange) is the component that varies most, and is what drives the size of the gap at lower wealth and education levels. This confirms that soap is the binding constraint for the most disadvantaged groups on this indicator rather than water.

4.7 Policy implications

1. The gap between improved and safely managed sanitation is the defining finding of this chapter, and a better indicator of where Nepal actually stands. Improved sanitation reached 92.8 percent of the population in 2024/25, but only 39.9 percent had safely managed sanitation, meeting all three JMP criteria at once (Table 4.3). As in Chapter 3, relying mainly on coverage figures to report progress risks giving a rosier picture than the reality on the ground.

2. Nepal's ODF achievement and its sustainability are two distinct problems, and the data shows the first has not guaranteed the second. Open defecation rose marginally at the national level between 2019 and 2024/25 despite the 2019 ODF declaration (Section 4.2, 4.3), with slippage concentrated in the Tarai, Madhesh, Lumbini, Peri-urban settlements, and the Lowest wealth quintile (Table 4.2). This indicates that declaring ODF status was a milestone in construction, rather than a guarantee of sustained use, and that maintaining gains requires continued monitoring distinct from the initial verification process.

3. The safely managed shortfall is driven overwhelmingly by containment and treatment failure instead of by facility sharig. Nationally, roughly three-quarters of the gap between improved and safely managed status is explained by inadequate containment or unconfirmed treatment, and only about one-quarter by sharing (Table 4.3). This means interventions focused solely on ending shared facility use would address only a minority of the shortfall. The larger problem is what happens to the excreta after collection, whether on-site or off-site.

4. Which failure mode dominates differs by geography, meaning a single national response is unlikely to fit every province. Madhesh's shortfall is driven almost entirely by on-site containment failure. Bagmati and Kathmandu Valley Urban's shortfalls are driven mainly by unconfirmed sewer treatment. Karnali's reflects both access and containment weaknesses simultaneously (Table 4.3, Section 4.4). Effective response requires identifying the dominant failure mode locally before allocating resources.

5. Kathmandu Valley Urban illustrates that piped sewer connection is not, on its own, evidence of safe sanitation. Kathmandu Valley Urban has improved sanitation coverage of 99.4 per cent, level with Gandaki and the highest of any area reported, yet its safely managed coverage is only 14.3 per cent, the lowest. Two-thirds of its population uses a sewer, and the survey cannot confirm that this sewage is treated, so these households add nothing to the safely managed figure. A 2011 assessment found that most of the Valley's sewage was then discharged untreated (HPCIDBC and UN-Habitat, 2011). This has a direct bearing on how future sewer expansion, in the Valley or elsewhere, should be evaluated.

6. Facility design and containment failure are plausibly linked to the drinking water contamination documented in Chapter 3, meaning sanitation and water quality require a joined-up response instead of two separate ones. The gap between unimproved and improved facility types is far larger than the differences among improved types themselves, though within the improved category, cesspools fail at roughly double the rate of septic tanks, and twin-pit latrines perform worse than single-pit latrines despite being designed to prevent overflow (Section 4.5). Excreta released through these failures enters the same shallow soil and groundwater systems that supply many households' drinking water sources. Addressing water quality without addressing sanitation containment, and facility design specifically, in the same areas is likely to be a partial solution.

7. Progress in handwashing behaviour has been broadly equitable, in clear contrast to the inequitable pattern found elsewhere in this chapter, but a soap-specific gap is emerging in a distinct set of areas. Handwashing facility availability rose considerably and fastest among the Lowest quintile and in Karnali and Sudurpashchim, the provinces that started furthest behind (Section 4.6). At the same time, soap availability specifically declined in Koshi, Madhesh, Lumbini, the Tarai belt, and urban and Peri-urban areas nationally, even as water availability rose in the same places. This indicates the remaining handwashing gap is now primarily a soap access or behavioural issue concentrated in a specific set of areas, rather than a water access issue, and the appropriate response differs accordingly.

4.8 Recommendations

1. Adopt safely managed sanitation instead of improved coverage, as the primary indicator for tracking national progress. With only 39.9 percent of the population safely managed against 92.8 percent improved, coverage-based reporting overstates the state of sanitation. Sixteenth Plan and SDG progress reporting should lead with the safely managed figure, using improved coverage as a secondary, contextual statistic only.

2. Establish a post-ODF sustainability monitoring system, distinct from the initial verification process. Open defecation has risen marginally since the 2019 declaration, concentrated in the Tarai, Madhesh, Lumbini, Peri-urban settlements, and the Lowest wealth quintile. Local governments should be required to periodically re-verify ODF status, with targeted follow up and repair support directed at the specific areas and wealth groups identified in this chapter showing slippage.

3. Fund excreta containment and treatment improvement as a distinct priority from new facility construction. Roughly three-quarters of the national safely managed shortfall is due to containment or treatment failure instead of sharing. Investment should shift toward pit and septic tank upgrading, safe emptying services, and functioning treatment infrastructure, rather than continuing to prioritize new toilet construction alone.

4. Tailor sanitation investment to each province's dominant failure mode rather than applying a single national model. Madhesh's shortfall is driven by on-site containment. Bagmati and Kathmandu Valley Urban's by unconfirmed sewer treatment. Karnali's by both access and containment weaknesses together. Provincial and local WASH plans should diagnose which failure mode dominates locally before allocating resources.

5. Require confirmed functional treatment as a condition for classifying any new or existing sewer connection as safely managed. Kathmandu Valley Urban shows that near universal sewer connection does not equal safe sanitation where treatment is absent or unconfirmed. Sewer expansion, in the Valley and elsewhere, should be paired with treatment plant investment and monitoring, and connection rates alone should not be reported as a safely managed proxy.

6. Set design and construction standards that account for differential facility performance, and investigate the twin-pit overflow anomaly before further promoting that design. Cesspools fail at roughly double the rate of septic tanks, and twin-pit latrines, despite their design intent, overflow more than single-pit latrines. Facility promotion programmes should not treat all improved designs as equally protective, and construction guidance should be revisited.

7. Integrate sanitation containment assessment into water safety planning in shared geographic areas, and vice versa. Containment failure may be a plausible contributor to the drinking water contamination documented in Chapter 3. Water safety planning and sanitation investment should be coordinated within the same geographic areas rather than planned as separate sector programmes.

8. Address the soap-specific gap in handwashing behaviour directly, separately from water infrastructure investment. Handwashing progress has been broadly equitable overall, but soap availability specifically declined in Koshi, Madhesh, Lumbini, the Tarai belt, and urban and Peri-urban areas, even as water availability rose in the same places. This requires a targeted behavior change and soap access response in these specific areas, rather than an assumption that continued water infrastructure investment will resolve the gap.

Further Investigation Needed

1. Why twin-pit latrines with slab show a higher overflow rate than single-pit latrines, despite being designed specifically to prevent overflow through alternating use. Whether this reflects poor construction, misuse, or a design flaw cannot be determined from this report's data.

2. Test whether and how much sanitation containment failure actually contaminates drinking water. This report can only show that the two are plausibly linked instead of confirming or measuring the connection directly. Using the geographic and facility-type patterns identified in Section 3.5 as a starting point, targeted water testing in those specific areas would establish whether containment failure is genuinely contributing to the contamination documented in Chapter 4, and by how much.

CHAPTER 5

LOCAL-LEVEL ESTIMATION METHODOLOGY AND VALIDATION FOR WATER AND SANITATION SERVICES

5.1 Introduction

This chapter presents the methodology used to estimate the WHO/UNICEF Joint Monitoring Programme (JMP) drinking water and sanitation service ladders at the local level (municipality) in Nepal. Furthermore, it details the construction of a sub-national Water Supply and Sanitation Equity Index to guide decentralized planning. This is achieved through the integration of data from the NPHC 2021 and the MICS 2024/25, drawing on the conceptual approach described by the two resources namely (Brunckhorst, B. and et.al., 2026) and (Brunckhorst, B. and et.al., 2026).

The main difficulty addressed in this analysis is the lack of direct, granular data at lower administrative levels. While the Nepal MICS 2024/25 provides reliable national and provincial data, it is not representative for all 753 individual municipalities in Nepal. Consequently, local levels lack the evidence required for targeted budgeting and equity-focused resource allocation.

To address this constraint, a two-stage framework was developed:

- Stage 1 (Probability Estimation): Transfers MICS water and sanitation service level probabilities into the full Census population to generate local-level JMP service distributions.
- Stage 2 (Equity Indexing): Aggregates these municipal estimates into standardized Drinking Water, Sanitation, and WASH Equity Indices[17] .

Ultimately, this combined approach transforms raw infrastructure counts into localized, actionable equity metrics for sub-national tracking.

[17] Note: While labeled as WASH to align with SDG 6, this index is operationally restricted to Water and Sanitation components due to hygiene data limitations. See the Methodology section for the full technical justification.

5.1.1 Why this methodology matters for Nepal

While this chapter focuses on statistical formulas, the real-world value of the methodology is straightforward. By bridging the gap between national survey trends and the complete population census, this approach provides a reliable dataset built for decentralized governance. This integration supports Nepal's local administration in several key areas:

- Universal local coverage: It successfully generates reliable water, and sanitation estimates for all 753 individual local levels across Nepal, filling a massive data gap.
- Evidence-based municipal planning: It empowers local municipalities with granular, actionable data to design custom local water and sanitation plans, especially where direct survey samples are missing or statistically insufficient.
- Targeted and equitable investment: Federal, provincial, and local authorities can use these precise metrics to accurately target infrastructure grants and resources directly to the communities experiencing the worst deprivations.
- Sub-national SDG 6 monitoring: It translates international benchmarks into manageable indicators, strengthening Nepal's capacity to track and report progress toward Sustainable Development Goal 6 (Clean Water and Sanitation) at a highly localized level.
- Exposing hidden inequalities: Broad national and provincial averages often smooth over severe localized disparities. This approach uncovers unique local pockets of vulnerability and structural challenges that would otherwise remain invisible to central planners.

5.2 Conceptual framework

The conceptual basis of this methodology rests on a two-phase structural transition:

1. Information borrowing (The estimation phase): Households with similar drinking water and sanitation facilities found in both the Census and the Survey are assumed to have similar service-level outcomes to those observed in the MICS. This allows the framework to transfer high-tier service probabilities from the survey sample into the full census population.
2. Equity indexing (The policy phase): Once the granular municipal-level service distributions are estimated, they are structurally aggregated into multi-dimensional equity indices. These indices convert complex distributions into a single, standardized score for localized comparison.

The methodology consists of five key steps:

1. Harmonization of Census and MICS drinking water and sanitation categories.
2. Estimation of JMP service level transition probabilities.
3. Application of transition probabilities to Census population.
4. Validation of estimates.
5. Computation of sub-national equity indices.

5.3 Data sources

5.3.1 Population census

The Population Census provides complete enumeration of households in Nepal and contains information on basic drinking water and sanitation facility type.

Advantages

- Full geographic coverage across the country.
- Local-level representation for all municipalities.
- Complete population counts without sampling errors.

Limitations

- Missing JMP dimensions for drinking water, such as water quality (E. coli) testing, accessibility on premises, and availability when needed.
- Missing JMP dimensions for sanitation, such as safe containment, emptying practices, and the transport, treatment, and safe disposal of excreta.

5.3.2 MICS

MICS provides detailed, household-level drinking water and sanitation information that aligns fully with the JMP service ladder classification.

It includes

- Drinking water indicators: source type, availability when needed, accessibility on premises, and the information on E. coli contamination.
- Sanitation indicators: facility type, sharing status, containment types, emptying history, and subsequent waste disposal or treatment.

MICS provides observed drinking water and sanitation JMP service ladder estimates at three geographical/administrative tiers:

- National level
- Province level
- Province x urban/rural strata, with a separate Kathmandu Valley Urban stratum

A total of 15 analytical domains were utilized for this estimation process.

5.3.3 JMP service ladder global standards

The construction of household-level drinking water and sanitation service classifications in this study follows the WHO/UNICEF JMP framework for monitoring SDG Targets 6.1 and 6.2. The JMP framework provides internationally standardized service ladders that classify households according to progressively higher levels of access to drinking water and sanitation services.

Under the JMP methodology, drinking water and sanitation services are organized into hierarchical and mutually exclusive categories. Although multiple service-related indicators may overlap at the household level, each household is ultimately assigned to only one final service category representing the highest level of service achieved.

To operationalize these classifications, the analysis utilized a set of intermediate indicators. For drinking water, these include source type, accessibility on premises, collection time, service availability, and water quality. For sanitation, these include facility type, sharing status, containment system, and excreta disposal or treatment. These intermediate indicators were used only as building blocks to derive the final JMP service ladder classifications.

The final drinking water and sanitation ladder definitions applied in this analysis are presented in the following tables.

Table 5.1 Drinking water JMP ladder logic

JMP level	Operational technical definition
Safely managed	Household uses an improved drinking water source* that is located on-premises, available when needed, and completely free from microbiological (E. coli) and chemical contamination.
Basic	Household uses an improved drinking water source where the total round-trip collection time (including queuing) is 30 minutes or less.
Limited	Household uses an improved drinking water source where the total round-trip collection time exceeds 30 minutes.
Unimproved	Household relies on an unprotected dug well or unprotected spring.
Surface water	Household collects drinking water directly from rivers, streams, lakes, ponds, or irrigation canals.
*Improved drinking water source: piped water, tube well/borehole, protected well, protected spring, jar/bottled water, rainwater, tanker-truck water.	

Table 5.2 Sanitation JMP ladder logic

JMP level	Operational technical definition
Safely managed	Household uses an improved sanitation facility* that is not shared with other households, and where excreta are safely disposed of in situ (contained and buried) or transported and treated off-site via sewers or fecal sludge management systems.
Basic	Household uses an improved sanitation facility that is privately used by a single household.
Limited	Household uses an improved sanitation facility that is shared between two or more households.
Unimproved	Household relies on a pit latrine without a slab or platform, an open pit or a bucket latrine.
Open defecation	Household members practice defecation in fields, forests, bushes, open bodies of water, or other open spaces.
*Improved sanitation facility: flush/pour-flush toilets, ventilated improved pit latrines, or pit latrines with a slab. *Methodological Note: Off-site sewer connections and fecal sludge management systems are excluded from this 'safely managed' classification due to data constraints in verifying downstream treatment, noting that most piped wastewater in the local context is currently discharged into surface waters without treatment.*	

The adoption of this conceptual framework ensured methodological consistency with international JMP standards while also providing a statistically robust basis for subsequent equity analysis, index construction, and multidimensional assessment of WASH equity. The framework further ensured that household classifications were internally consistent, non-overlapping, and analytically suitable for the development of composite indicators such as the Drinking Water Equity Index (DWEI) and Sanitation Equity Index (SEI).

5.4 Harmonization of drinking water and sanitation categories

5.4.1 Methodological rationale for cross-survey alignment

A systematic harmonization of asset categories was required because the Census 2021 and the MICS 2024/25 utilizes different classification structures and coding nomenclatures for infrastructure. To apply a robust transition probability approach, the detailed service-chain categories recorded in the MICS microdata were aggregated and reclassified into harmonized target groups that directly match the structural groupings of the Census.

This synchronization ensures complete conceptual and empirical comparability between the two independent datasets. The mapping rules enforce structural alignment between census and survey, making it possible to transfer localized service probabilities directly onto the absolute population counts of the Census.

5.4.2 Drinking water infrastructure harmonization

The harmonization protocol for drinking water sources maps the multi-digit MICS classification codes and their global JMP designations into the nine fundamental target categories established by the NPHC 2021 Census.

Table 5.3 Harmonization matrix for drinking water classifications

MICS Code	MICS 2024/25 Facility Category	JMP Baseline Designation	Census Code	NPHC 2021 Census Target Category
11	Piped into dwelling	Improved	1	Tap/Pipe (inside house compound)
12	Piped into court-yard/compound	Improved	1	Tap/Pipe (inside house compound)
13	Piped to neighbor	Improved	2	Tap/Pipe (outside house compound)

MICS Code	MICS 2024/25 Facility Category	JMP Baseline Designation	Census Code	NPHC 2021 Census Target Category
14	Public tap/stand-pipe	Improved	2	Tap/Pipe (outside house compound)
21	Tube well / bore-hole	Improved	3	Tube-well / Hand-Pump
31	Protected well	Improved	4	Covered well / Kuwa
32	Unprotected well	Unimproved	5	Uncovered well / Kuwa
41	Protected spring	Improved	6	Spout water
42	Unprotected spring	Unimproved	6	Spout water
81	Surface water	Surface water	7	River/Stream
91	Bottled water	Improved	8	Jar/Bottle
93	Jar / dispenser refill	Improved	8	Jar/Bottle
51	Rainwater	Improved	9	Other
61	Tanker-truck	Improved	9	Other
71	Cart with small tank	Improved	9	Other
96	Other	Unimproved	9	Other

5.4.3 Sanitation infrastructure harmonization

The sanitation mapping matrix resolves differences between detailed MICS facility types and household sharing statuses, mapping them cleanly to the corresponding five structural codes utilized in the Census questionnaire.

Table 5.4 Harmonization matrix for sanitation and toilet classifications

MICS code	MICS 2024/25 facility category (Sharing Status)	JMP baseline designation	Census code	NPHC 2021 census target category
11	Flush to piped sewer (Not shared)	Improved	1	Flush connected to public sewerage
12	Flush to septic tank (Not shared)	Improved	2	Flush connected to septic tank
13	Flush to pit/cess-pool (Not shared)	Improved	3	Pit latrine
14	Flush to open drain (Not shared)	Unimproved	3	Pit latrine
18	Flush don't know where (Not shared)	Improved	3	Pit latrine
21	VIP latrine slab (Not shared)	Improved	3	Pit latrine
22	Single pit slab (Not shared)	Improved	3	Pit latrine
23	Open pit no slab (Not shared)	Unimproved	3	Pit latrine
24	Twin pit slab (Not shared)	Improved	3	Pit latrine
31	Composting toilet (Not shared)	Improved	3	Pit latrine
32	Container-based sanitation (Not shared)	Improved	3	Pit latrine
96	Other (Not shared)	Unimproved	3	Pit latrine
Any	Any improved/un-improved facility (Shared)	Shared	4	Public toilet
95	No facility/bush/ field (Not applica-ble)	Open Defeca-tion	5	No toilet

5.5 Application of transition probability

5.5.1 Estimation of transition probabilities

The methodology is based on a transition probability framework rooted in conditional probability theory, statistical matching, and small area estimation principles. For each of the 15 analytical domains, transition probabilities were estimated directly from the MICS data.

This application estimate

$$Prob(Y_j|X_i) = \frac{N(X_i \cap Y_j)}{N(X_i)}$$

Where

X_i = Harmonized Census drinking water or sanitation category i.
Y_j = JMP drinking water or sanitation service ladder category j.
$N(X_i \cap Y_j)$ = Household population that simultaneously belong to both Census drinking water or sanitation category X_i, and JMP drinking water or sanitation service level Y_j.
$N(X_i)$ = Total household population belonging to a given harmonized Census drinking water or sanitation category X_i.

This term represents the conditional probability that a household classified under Census category X_i belongs to the JMP service ladder outcome Y_j.

The fundamental probability condition is specified as:

$$\sum_j Prob(Y_j|X_i) = 1, for\ all\ i$$

This condition dictates that all possible JMP service ladder outcomes j for any given Census category i must sum exactly to 1. This mathematical rule applies independently to both drinking water and sanitation estimations.

5.5.2 Local-level estimation

The estimated transition probabilities derived from the survey data were mapped directly to the full Census counts at the lowest administrative tiers. Specifically, the transition probabilities for the harmonized categories associated with the JMP service levels were first estimated across all 15 analytical domains in the MICS. These domain-level probabilities were then applied to the corresponding harmonized categories of the Census for all local levels nested within each domain.

Finally, the five JMP service levels were aggregated at the local level. For each individual local level (l), the estimated total number of households falling into a specific JMP service ladder category is calculated as follows:

$$\hat{Y}_{lj} = \sum_{i} \left(N_{li} \times P(Y_j | X_i) \right)$$

Where

$\hat{Y}_{lj}$ = Estimated number of household population in JMP service ladder category j at local level l.

N_{li} = Total count of Census household population classified under drinking water or sanitation facility category i at local level l.

$P(Y_j | X_i)$ = The domain-specific transition probability of belonging to JMP category j given Census category i.

This mathematical operation converts raw, observable Census facility counts into estimated JMP service ladder. To derive relative metrics for local planning, percentage distributions were calculated using the following equation:

$$\hat{P}_{lj} = (\hat{Y}_{lj} / \sum_{j} \hat{Y}_{lj}) \times 100$$

Where

$\hat{P}_{lj}$ = Estimated percentage of household population having JMP drinking water or sanitation service level j at local level l.

This calculation provides the complete JMP drinking water and sanitation service ladder distributions for each administrative unit. This entire estimation process was executed systematically across all 753 local levels in Nepal.

5.5.3 Core transition probability assumptions

The application of Transition Probability is based on four core assumptions:

1. Conditional similarity assumption: Households sharing similar drinking water and sanitation facility types in both the Census and the MICS are assumed to have similar JMP service-level outcomes.
2. Domain-level stationarity assumption: The transition probabilities estimated from the MICS for harmonized drinking water and sanitation categories are assumed stationary across all municipalities within the same analytical domain.

3. Cross-survey harmonization validity assumption: The harmonized mapping between the Census and MICS facility categories is assumed to preserve conceptual consistency across both datasets.
4. Mutually exclusive service classification assumption: Each household is assumed to belong to one and only one final JMP service ladder category.

5.6 Validation framework and empirical results

5.6.1 Validation scope

Outputs were validated strictly for geographic domains where both observed survey data and estimates existed. Direct validation of the estimated service ladders was possible at three specific geographic tiers:

1. National level
2. Province level
3. Province x urban/rural strata, with a separate Kathmandu Valley Urban stratum

Direct validation below these administrative tiers (such as at the district or individual municipality level) was not possible. This is because the MICS design does not provide statistically representative or reliable direct survey estimates at those granular levels.

This validation restriction follows standard Small Area Estimation (SAE) practice. It ensures that the predictive performance of both the drinking water and the sanitation estimation is rigorously checked against trustworthy, data-rich benchmarks before the localized results are finalized.

5.6.2 Validation statistics

To rigorously assess the validity and reliability of estimated statistics against observed statistics (survey findings), relying on a single metric is statistically insufficient. A robust validation framework hence must evaluate three distinct dimensions of accuracy: linear association, systematic bias, and absolute error magnitude. This report utilizes these three diagnostics: Pearson's Correlation Coefficient (r), Root Mean Square Error (RMSE), and Mean Absolute Error (MAE) to provide a comprehensive multi-dimensional evaluation of estimation performance.

Integrating these three statistics transforms them from isolated metrics into a holistic diagnostic system. Because the blind spot of one metric is complemented by the strength of another, synthesizing them enables us to isolate the exact mathematical root of estimation success or failure.

5.6.2.1 Pearson correlation coefficient (r)

The Pearson correlation coefficient measures the linear strength and direction of the agreement between the observed survey values and the estimated values.

The mathematical formula is specified as:

$$r = \frac{\sum(O_i - \bar{O})(E_i - \bar{E})}{\sqrt{\sum(O_i - \bar{O})^2 \times \sum(E_i - \bar{E})^2}}$$

Where

O_i = Observed JMP drinking water or sanitation service ladder values from the MICS data within domain *i*.

E_i = Estimated JMP drinking water or sanitation service ladder values within domain i.

$\bar{O}$ = Mean of the observed survey values across all valid domains.

$\bar{E}$ = Mean of the estimated values across all valid domains.

Interpretation thresholds

0.90 <_|r|< 1.00: Excellent. Near flawless trend tracking.

0.70<_|r|< 0.90: Strong. High reliable linear relationship.

0.50 <_|r|< 0.70: Moderate. Trends match generally but contain noticeable noise.

0.30<_|r|<0.50: Weak. Very limited predictive alignment.

0.00 <_|r|< 0.30: Negligible. No meaningful association.

Higher correlation values indicate that the estimates closely mirrors the true distribution of drinking water and sanitation services across the representative survey domains.

5.6.2.2 Root mean square error (RMSE)

The Root Mean Square Error (RMSE) measures the average magnitude of the prediction error. It quantifies the typical deviation between the estimates and the observed survey values.

The mathematical formula is specified as:

$$RMSE = \sqrt{\frac{1}{n}\sum_{i=1}^{n}(O_i - E_i)^2}$$

Where

O_i = Observed JMP drinking water or sanitation service ladder values from the MICS data within domain *i*.

E_i= Estimated JMP drinking water or sanitation service ladder values within domain *i*.

n = Total number of comparative observation domains.

Interpretation thresholds

<_5: Excellent. Exceptionally tight precision.

5–10: Reliable. Minor deviations from reality.

10–20: Moderate. Noticeable spread, and acceptable for sub-national analysis.

20–30: Weak. High magnitude of error.

>30: Unacceptable. Errors are unacceptably high relative to data scale.

Lower RMSE values signify a tighter fit and higher accuracy for both drinking water and sanitation estimations.

5.6.2.3 Mean absolute error (MAE)

Mean Absolute Error (MAE) measures the average magnitude of errors between the estimated values and actual observations. Calculated by taking the absolute difference between each predicted data point and its corresponding observed benchmark, and then averaging those values across the entire dataset, MAE provides a straightforward representation of estimation accuracy in the exact same units as the underlying data (expressed here in percentage points).

The mathematical formula is specified as:

$$Mean\ Absolute\ Error = \frac{1}{n} \times \sum_{i=1}^{n} |E_i - O_i|$$

Interpretation thresholds (Percentage points)

<_5: Excellent. Indicates highly robust and reliable estimates.

>5 to 10: Good. Highly acceptable for complex sub-national estimates.

>10 to 15: Moderate. Suggests acceptable alignment but requires caution.

>15: Poor. Reflects unacceptably high estimation errors.

5.6.3 Validation results

To evaluate the predictive accuracy and structural integrity of the estimate, a multi-tiered validation exercise was executed across three distinct configurations: National, Provincial, and the MICS 15 Analytical Domains. By pairing the probability-based JMP estimates against observed survey benchmarks using MAE percent, RMSE percent, and Pearson correlation coefficients (r), the framework establishes a verifiable data baseline before sub-national application.

Table 5.5 Validation of probability-based JMP estimates against observed benchmarks

Validation level	Drinking water	Sanitation
National		
Mean Absolute Error (MAE, %)	1.57	3.61
Root Mean Square Error (RMSE,%)	2.12	4.85
Pearson Correlation Coefficient (r)	0.996	0.977
Province		
Mean Absolute Error (MAE, %)	1.99	5.96
Root Mean Square Error (RMSE,%)	3.16	8.73
Pearson Correlation Coefficient (r)	0.992	0.925
MICS 15 analytical domain		
Mean Absolute Error (MAE, %)	2.22	6.05
Root Mean Square Error (RMSE,%)	3.69	8.94
Pearson Correlation Coefficient (r)	0.99	0.932

5.6.3.1 Validation of drinking water estimations

The predictive methodology for the drinking water sector exhibits close alignment with empirical benchmarks across all validation layers, recording a national-level Mean Absolute Error (MAE) of 1.57 percent. This indicates that, on average, the predicted estimates deviate from the observed values by fewer than 1.6 percentage points. This average error remains low even at finer geographic resolutions, reaching 1.99 percent at the provincial level and 2.22 percent within the 15 MICS analytical domains. These numbers sit comfortably below the strict 5.0 percent threshold for optimal precision.

The RMSE increases consistently from 2.12 (national) to 3.16 (provincial) and 3.69 (analytical domains). The minimal divergence between the linear MAE and the variance-sensitive RMSE indicates an absence of severe, localized predictive outliers in the drinking water estimates. The Pearson correlation coefficients are near-perfect, holding firmly at 0.996 (national), 0.992 (provincial), and 0.990 (analytical domain).

5.6.3.2 Validation of sanitation estimations

Due to the multi-layered and behavioral complexities inherent to fecal sludge management and infrastructure adoption, sanitation estimates universally yields slightly higher volatility than drinking water estimates. The national sanitation MAE is precise at 3.61 percent. When disaggregated to the sub-national levels, the error widens slightly to 5.96 percent (provincial) and 6.05 percent (MICS 15 domains). Sitting right around the 6.0 percent threshold, this signifies that the estimates maintain a reliable 'average distance from reality,' making them highly dependable for localized municipal planning.

The sanitation RMSE marks 4.85 nationally, stretching to 8.73 provincially and 8.94 in the analytical domains. The slight divergence between the MAE and RMSE at the sub-national levels indicates that the estimate is actively absorbing variance and historical localized clusters of sanitation gaps (such as the lowland deficits in Kapilbastu or structural problems in parts of the Tarai).

Despite the increased infrastructural variance, the tracking strength remains excellent. The Pearson correlation coefficients remain highly secure at 0.977 (national), 0.925 (provincial), and 0.932 (analytical domains), mathematically establishing that the estimation process replicates the true distribution of sanitation ladders without structural distortion.

5.6.3.3 Methodological outcome

From a macro-modeling perspective, as data is forced into increasingly granular sub-national spatial strata (moving from 1 national pool to 7 provinces and finally into localized domains), statistical errors naturally tend to compound. In this framework, however, the error growth is heavily restricted. The drinking water MAE only shifts by 0.65 percentage points across the entire spectrum, while the sanitation MAE expands by a mere 2.44 percentage points.

This remarkable stability confirms that the transition probability configurations successfully prevent estimation degradation. The empirical evidence proves that the resulting outputs are statistically sound, structurally unbiased, and fully optimized to simulate the unknown WASH equity baselines for all 753 individual municipalities in Nepal.

5.6.3.4 Field validation

To ensure quality assurance and assess whether the model-based figures aligned with ground realities, the National Statistics Office conducted field verification missions across selected local levels. Led by a joint validation team including senior statistical officials and UN-Habitat

representatives, the exercise evaluated the draft JMP ladder estimates and equity indices against local knowledge and administrative records. This field validation served as a vital qualitative and contextual mechanism to observe the availability, functionality, and current condition of WASH facilities, while identifying local infrastructure changes and investments that have occurred since the data reference period.

The field verification followed a qualitative and observational methodology, covering 33 local levels across 22 districts in six provinces, including rural municipalities, municipalities, and sub-metropolitan cities. To ensure a systematic assessment, the validation teams utilized structured checklists, direct field observations of water supply lines and sanitation facilities, and extensive consultations with local government representatives, technical staff, and community members. Ultimately, the field exercises successfully triangulated the data and broadly validated the estimates for drinking water and sanitation facilities across the studied areas. The field validation demonstrated that the local level estimates are widely acceptable. The detailed process of field validation is presented in Annex A.

5.7 Uncertainty assessment

This probability-based estimation framework contains three primary sources of uncertainty. Identifying and analyzing these sources is essential for properly interpreting the local-level JMP service ladder outputs. Without acknowledging these limitations, the final data may be misunderstood as absolute facts rather than statistical estimates.

5.7.1 Sampling uncertainty

The baseline data used to calculate water and sanitation transition probabilities originates from the MICS 2024/25. Because the MICS collects data from a representative sample of households rather than conducting a full population census, the resulting statistics possess inherent sampling errors. This mathematical variance directly impacts the precision and reliability of both the drinking water and sanitation local-level estimates.

The relationship between the survey data and the final estimates is governed by the following structural principles:

- The precision of any statistical estimate is tied directly to the size of the underlying sample data. Larger household samples yield more stable and precise estimates.
- When the survey data is broken down into smaller, local analytical domains, the number of surveyed households drops significantly. When local service probabilities derived from such small survey samples are transferred and applied to the larger Census population, the initial baseline errors are amplified. Consequently, geographical areas with the smallest survey footprints inherently produce estimates with the lowest statistical confidence.

5.7.2 Classification uncertainty

Mapping Census facility categories into JMP service ladder categories relies on cross-survey assumptions. Because the two data sources do not use identical survey questions, perfect alignment is difficult to achieve, creating classification uncertainty. This uncertainty and data misalignment particularly influence the estimations across two primary domains:

Drinking water source discrepancies

- The Census groups distinct water sources into broad target codes, masking JMP safety distinctions. For example, "Spout water" maps blindly to both Protected spring (JMP Improved) and Unprotected spring (JMP Unimproved).
- Census "Other" clusters highly distinct water delivery methods including Rainwater, Tanker-truck, and Cart with small tank into a single container, preventing the separate tracking of these unique climate-resilient or commercial supply lines.

Sanitation and toilet facility discrepancies

- Census "Pit latrine" acts as a massive catchall category, forcing ten distinct MICS classifications into a single destination. This blends safely managed options like VIP latrine slabs, Twin pit slabs, and Composting toilets with highly hazardous facilities like Flush to open drain and Open pit no slab (which JMP flags as Unimproved).

5.7.3 Transferability uncertainty

The analysis relies on a domain-level stationarity assumption concerning the relationship between household-reported sources of drinking water (or sanitation facilities) and the corresponding final JMP service outcomes. Specifically, for a given analytical domain, it is assumed that households reporting the same source or facility category in the Census and in the Survey have the same underlying relationship with the relevant JMP service level.

The mathematical formulation of this core assumption is expressed as:

$$P(Y|X)_{domain} \approx P(Y|X)_{local}$$

For example, when households report "Covered well" as a drinking water source in both Census and Survey datasets within a specific domain, the framework applies survey-observed relationships between this category and JMP service outcomes directly to corresponding Census households

within that domain. Thus, Survey data provides a basis for estimating service-level distributions for that source category, which then transforms to the corresponding Census-reported category into estimated JMP service levels.

Importantly, this assumption does not mean that the overall JMP service outcomes estimated from the Survey are assumed to be constant between the Survey and the Census. Rather, the stationarity assumption applies to the source/facility-specific relationship within an analytical domain. Consequently, differences in the distribution of household-reported sources or facilities between the Census and Survey result in different overall JMP service-level estimates for the two data sources.

Transferability uncertainty arises because localized environmental, socioeconomic, technical, or institutional factors may cause the relationship between a particular reported source/facility and its JMP service level to differ between Survey and Census, even within the same analytical domain. For example, municipal-level management may affect water-supply reliability, contamination risks (including E. coli), or fecal sludge emptying services, potentially causing the actual service-level distribution associated with a given source or facility category to differ from that observed in the Survey.

5.8 WASH equity indices

5.8.1 Methodological rationale and scoring logic

The construction of the equity indices follows established composite-indicator principles: a clearly defined conceptual framework, transparent indicator selection, normalization to a common scale, explicit weighting and aggregation rules, and careful interpretation of the resulting composite measure (OECD, European Union, and Joint Research Centre - European Commission, 2008).

To translate municipal-level JMP service ladder population into an actionable policy tool, a localized WASH Equity Index framework was developed. The index converts multidimensional drinking water and sanitation service distributions into a standardized score ranging from 0 (absolute deprivation) to 1 (universal safely managed access). Its construction follows established composite-indicator principles concerning normalization, weighting, aggregation, and interpretation (OECD/European Union/EC-JRC, 2008).

Methodological note on index nomenclature: While the index is labeled as the WASH Equity Index to align with institutional frameworks and SDG 6 terminology, its current operationalization for Nepal is restricted to the Water and Sanitation components due to data unavailability for hygiene indicators in the Census. This approach remains robust because water and sanitation constitute the infrastructural foundation of the WASH framework, and tracking their equity dynamics provides a critical proxy for overall environmental health disparities.

The framework adopts a nonlinear, rights-based scoring system across the five JMP service levels. Instead of treating water supply and sanitation access as a binary condition, this approach recognizes progressive improvements in service quality and assigns increasing weights accordingly.

A larger increment is intentionally assigned between Basic (0.5) and Safely Managed (1.0), reflecting the disproportionately higher public health, environmental protection, and service reliability benefits associated with safely managed services. This weighting structure preserves the conceptual hierarchy of the JMP service ladder while recognizing the non-uniform welfare gains across service transitions.

Table 5.6 Rights-based scoring matrix for JMP service ladders

JMP rinking water ladder	JMP sanitation ladder	Rights-based assigned score	Strategic policy interpretation
Surface water	Open defecation	0	Critical hazard / Absolute deprivation
Unimproved	Unimproved	0	High public health risk
Limited	Limited	1/3	Basic infrastructure with systemic bottlenecks
Basic	Basic	1/2	Minimum human rights compliance baseline
Safely managed	Safely managed in Situ	1	Full structural compliance / Ideal standard

5.8.2 Drinking water equity index

The Drinking Water Equity Index for a specific local level l is calculated using a population-weighted average of the rights-based scores across all five water ladder levels. For any municipality, the estimated household population residing within a specific JMP category is multiplied by its corresponding score, summed, and then standardized by the municipality's total population.

The formula is expressed as:

$$DWEI_l = \frac{1}{N_l} \times \sum_{j=1}^{5} (P_{l,j} \times S_j)$$

Where

$DWEI_l$ = Drinking water equity index for local level *l*.

$PI_{,j}$ = Estimated population in local level l belonging to JMP drinking water service level *j*.

S_j= Rights based score assigned to JMP service level *j*.

N_l= Total population of local level l $(\sum_{j}^{5}{}_{=1} P_{l,j})$.

5.8.3 Sanitation equity index

Mirroring the drinking water framework, the Sanitation Equity Index evaluates the local-level performance of private and hygienic human waste containment. It applies the identical population-weighted scoring logic to the five sanitation levels:

$$SEI_l = \frac{1}{N_l} \times \sum_{j=1}^{5} (P_{l,j} \times S_j)$$

Where

SEI_l = Sanitation equity index for local level *l*.

$PI_{,j}$ = Estimated population in local level l belonging to JMP sanitation service level *j*.

S_j= Right-based score assigned to JMP service level *j*.

N_l= Total population of local level l $(\sum_{j}^{5}{}_{=1} P_{l,j})$.

5.8.4 Composite WASH equity index

The WASH Equity Index combines the Drinking Water Equity Index (DWEI) and Sanitation Equity Index (SEI) into a single integrated metric for each municipality.

The geometric mean is used to limit full compensability between the two dimensions: a relatively high score in one sector cannot completely offset a low score in the other. This makes the aggregation rule explicit and consistent with the principle that the choice of aggregation method affects the interpretation of a composite indicator (OECD/European Union/EC-JRC, 2008).

The index is calculated as the geometric mean of the two sub-sector indices:

$$WASH\ EI_l = \sqrt{DWEI_l \times SEI_l}$$

This composite measure provides an overall representation of local WASH equity and facilitates comparative analysis across municipalities, provinces, and national planning frameworks.

5.8.5 Policy and planning application

By condensing complex population probability distributions into these clean, standardized indices, the framework achieves three critical policy objectives:

- Equity-based budgeting: Federal and provincial governments can directly target infrastructure grants to municipalities with the lowest WASH EI scores.
- Granular target-setting: Local governments can monitor whether their municipal water and sanitation plans are effectively driving their score closer to the ideal target of 1.
- Bottleneck identification: Comparing the gap between a municipality's DWEI and SEI allows planners to quickly identify if a local level is lagging specifically in water supply or in sanitation coverage.

5.9 Strengths and limitations

5.9.1 Strengths

- **Maximizes existing data-fusions:** The framework successfully bridges the absolute population coverage of the NPHC 2021 Census with the deep, service-chain insights of the Nepal MICS 2024/25.
- **Unlocks localized insights:** It generates highly granular, municipal-level JMP estimations and standardized equity scores for areas where direct, representative survey data previously did not exist.
- **Operationalizes rights-based monitoring:** By transforming complex service ladder data into distinct Drinking Water, Sanitation, and WASH Equity Indices, it converts raw statistical probabilities into an intuitive, actionable tool for local governance.
- **Rigorous and reproducible:** The estimation and indexing workflow is entirely transparent, standardized, and fully reproducible.

- **Enforces structural compliance:** The estimation process maintains strict mathematical alignment with both the official international JMP service ladder definitions and the validated MICS macro-level domain totals.

5.9.2 Limitations

- Reliance on survey alignment: The precision of the final index outputs depends heavily on the initial processing assumptions made when aligning and mapping Census facility responses into MICS groupings.
- Assumed spatial uniformity: The estimation process assumes that broader sub-national service behaviors remain uniform across all embedded local municipalities within a specific domain, which may mask unique local pockets of vulnerability.
- Compounding local variances: Because baseline survey data is mathematically projected across smaller administrative tiers, statistical uncertainty naturally increases at the lowest municipal levels.
- Sensitivity of advanced service tiers: Estimates for "safely managed" service ladders carry higher baseline variability. Complex criteria, such as microbiological water quality (E. coli contamination) and off-site excreta treatment, depend on localized environmental and service-chain factors. Consequently, these variations can impact the precision of the highest tier within the equity index scoring matrix.

5.10 Conclusion

This chapter has established a mathematically robust framework for generating local-level estimations of water and sanitation services across Nepal. By integrating the absolute geographic coverage of the Census with the deep service-chain indicators of the MICS, this methodology successfully fills critical sub-national data gaps. The joint framework, combining a Transition Probability Approach and localized census weights delivers reliable coverage estimates for all 753 local levels.

The empirical validation results confirm that the outputs are statistically dependable and structurally sound for localized assessment. Furthermore, by moving beyond basic binary indicators, the construction of the distinct Drinking Water, Sanitation, and WASH Equity Indices ensures that service delivery can be scrutinized through a progressive, human-rights-based lens. Ultimately, this transparent and reproducible data integration approach is highly suitable for evidence-based municipal planning, targeted resource allocation, and decentralized water and sanitation monitoring within Nepal's federalized structure.

With the predictive capabilities of the process successfully validated against national benchmarks, the analytical focus shifts from methodological formulation to empirical application. To understand how these systematic inequalities manifest geographically, the subsequent chapter presents the localized data outputs generated by this framework. Chapter 6 provides a detailed examination of sub-national service distributions, mapping out municipal-level hotspots, identifying structural service constrains, and translating these spatial disparities into actionable planning insights for decentralized target setting and budget allocation.

CHAPTER 6

LOCAL-LEVEL WASH PERFORMANCE, EQUITY AND STRATEGIC PRIORITIZATION

6.1 Introduction

This chapter translates the local-level estimates of drinking water and sanitation service performance into a strategic decision-support framework for Nepal. The analysis uses the estimated Drinking Water Equity Index (DWEI), Sanitation Equity Index (SEI), and composite WASH Equity Index (WASH EI) for all 753 local levels. The accompanying service indicators describe the distribution of drinking water and sanitation service levels across the JMP service ladder, from the lowest to the highest levels of service.

The analysis demonstrates that Nepal's local levels are at very different stages in the transition from basic access towards safely managed WASH services. While substantial progress has been made in expanding access, high aggregate coverage does not necessarily translate into high-quality, reliable, safe and sustainably managed services. The strategic challenge is therefore increasingly shifting from infrastructure expansion alone towards service performance, quality, reliability, sustainability and equity.

The local-level estimates presented in this chapter were generated using the methodology described in Chapter 6. Estimated service-level distributions were derived by applying transition probabilities to Census 2021 data, using relationships observed from the Nepal MICS 2024/25, and subsequently benchmarking the estimates against available MICS-based national and subnational benchmarks. These estimates provide the basis for calculating the DWEI, SEI and WASH EI and for developing the strategic classification and prioritization framework presented in this chapter.

6.2 Data reference and interpretation of local-level estimates

The district and local-level WASH estimates presented in this chapter and corresponding annex tables reference the 2021 and 2024/25 period. These figures use population data from the 2021 National Population and Housing Census 2021 combined with Nepal MICS 2024/25 data, which was used to derive transition probabilities and benchmark estimates. Because these estimates integrate Census 2021 and MICS 2024/25 data, they comprise both Census-derived and model-based components.

At the local level, surface water and unimproved sources for drinking water, and open defecation for sanitation, are directly derived from Census 2021 source/facility information. In particular, the Census 2021 “No toilet” category is retained as the local-level proxy for open defecation. The remaining JMP service-level categories are estimated by applying transition probabilities derived from the Nepal MICS 2024/25 to the relevant Census 2021 distributions, as detailed in Chapter 5.

Accordingly, unless otherwise stated, all tables and figures presented in this chapter refer to the 2024/25 estimation period, while the underlying local-level source/facility distributions for the Census-derived components originate from Census 2021. The estimates for the model-based components should therefore be interpreted as model-based local-level estimates for 2024/25, rather than direct local-level observations from MICS 2024/25.

6.3 From local-level measurement to strategic decision support

6.3.1 Interpreting the three indices

The DWEI and SEI are composite measures constructed from the estimated local-level distributions of drinking water and sanitation service levels. Higher values indicate better overall service outcomes. The WASH EI is the composite measure obtained by combining the two sectoral indices. These indices should be interpreted as performance and equity scores, rather than as percentages of households receiving safely managed services.

For decision-making, the value of the indices lies less in the rank of an individual local level than in the pattern they reveal. A local level with relatively low DWEI but higher SEI faces a different policy problem from one with the opposite pattern. Similarly, a local level with low performance in both sectors requires a different response from one that is already performing relatively well.

6.3.2 A four-category strategic framework

To move beyond municipal rankings toward strategic planning, the 753 local levels are grouped into four operational categories. These categories represent three broad priority tiers, with the middle tier subdivided based on drinking water and sanitation challenges.

Table 6.1 Four-category strategic framework and classification of Nepal's 753 local levels by WASH priorities and implications

Strategic category	Basis for classification	Strategic implication	Number of local levels
Priority 1: Critical integrated WASH gap & severe deprivation status	WASH EI >_0.376 and < 0.600	• Immediate and coordinated support • Both sectors require attention	57 (7.6%)
Priority 2A: Drinking water at risk/inadequate (Lower than sanitation)	WASH EI >_0.600 and <_0.700; DWEI < SEI	Accelerate drinking-water access, reliability, quality and safety improvements	277 (36.8%)
Priority 2B: Sanitation at risk/inadequate (Lower than drinking water)	WASH EI >_ 0.600 and <_ 0.700; SEI < DWEI	Accelerate containment, treatment, safe disposal and sanitation-chain improvements	147 (19.5%)
Priority 3: Progress/ sustain & learn (Moderate progress/ High achievement)	WASH EI >_0.700	Consolidate gains, improve service quality and share effective practices	272 (36.1%)
Source: Extracted from Annex Table 6c.			

The framework is intended to support differentiated decision-making rather than to establish permanent rankings among local levels. The classification identifies the broad intensity and principal sectoral nature of the WASH challenge. Within the At Risk/Inadequate group, the relative DWEI and SEI values are used to determine whether drinking water or sanitation represents the primary challenge. The resulting categories should therefore be understood as dynamic planning and prioritization groups that can change as service conditions improve.

The 424 local levels classified as At Risk/Inadequate are not treated as a single homogeneous group: 277 face drinking water as their principal challenge, while 147 are constrained primarily by sanitation. By distinguishing between these needs, the framework directly links the overall severity of WASH deprivation to the specific type of intervention most likely to be required.

6.3.3 Why the framework is preferable to simple ranking

- A rank tells decision-makers who is above or below another local level, and a strategic category explains the nature and urgency of the problem.
- It supports differentiated planning rather than a uniform intervention package for all municipalities.
- It allows federal, provincial and local levels to align investment intensity with the severity and type of WASH gap.
- It is easier to monitor over time because local levels can move from one performance category to another as service outcomes improve.

6.4 Local-level JMP service-level profile

The localized JMP estimates provide an additional perspective on WASH performance across all 753 local governments. Whereas the DWEI, SEI and WASH EI synthesize service-level performance into equity-oriented indices, the JMP service-level distributions show more directly where local levels stand in the transition from basic access to safely managed services. This distinction is important for planning: the indices identify the relative pattern and principal constraint, while the service-level indicators help identify the service outcome that needs to be improved.

The estimates indicate substantial variation in safely managed service coverage across local governments. The local-level distribution shows that these national averages conceal considerable variation in the extent to which safely managed services have been achieved, ranging from 3.9 percent to 76.4 percent for drinking water and 4.8 percent to 90.5 percent for sanitation (Table 6.2).

6.4.1 Drinking-water service levels across the 753 local levels

For drinking water, safely managed coverage is below 50 percent in 518 of the 753 local levels (68.8 %). Of these, 348 local levels have an estimated coverage below 25 percent, while 170 fall between 25 percent and 49 percent. A further 234 local levels have safely managed coverage between 50 percent and 74 percent, and only one reach 75 percent or more. These bands are used only to describe the distribution of local-level estimates. They are not JMP service-level thresholds or additional performance classifications.

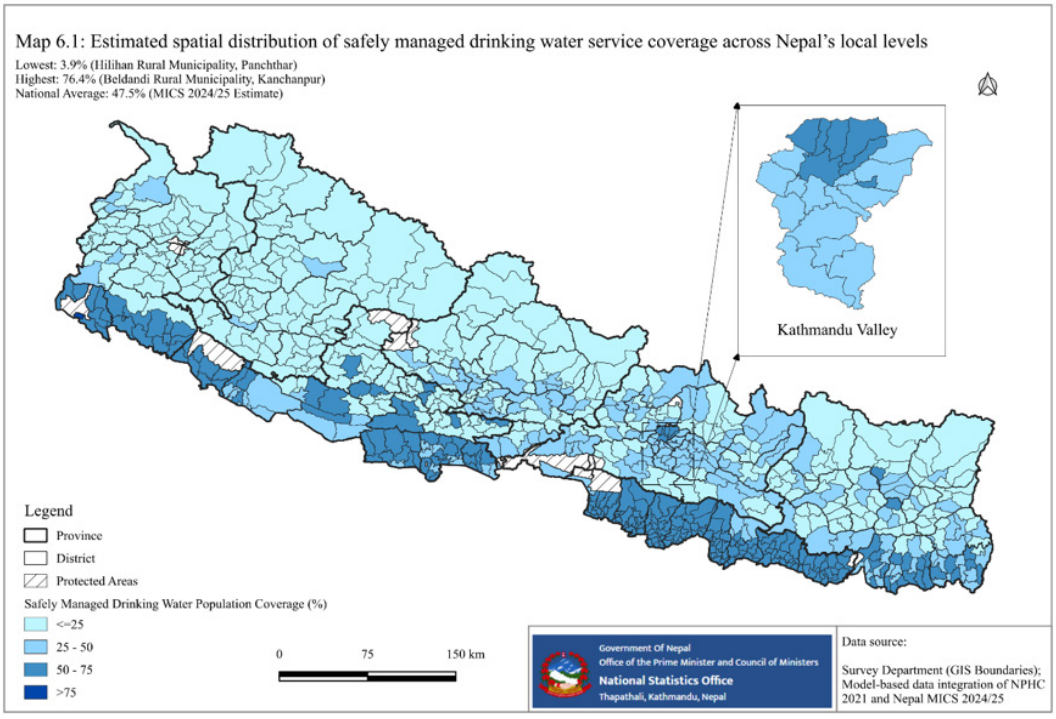
Table 6.2 Distribution of local levels by the percentage of population with safely managed drinking water and sanitation services

Safely managed service coverage population	Drinking water			Sanitation		
	No. of local levels	Percentage of local levels	Exact Min/Max	No. of local levels	Percentage of local levels	Exact Min/Max
< 25%	348	46.2	Min: 3.9%	97	12.9	Min: 4.8%
25–49%	170	22.6		170	22.6	
50–74%	234	31.1		333	44.2	
≥ 75%	1	0.1	Max: 76.4%	153	20.3	Max: 90.5%
Total	753	100	National: (47.5%)	753	100	National: 39.9%

Source: Extracted from Annex Table 6a & 6b.

Note: The coverage percentage refers to the proportion of the population within each local level that has access to safely managed drinking water or sanitation services. The numbers and percentages in the table show the distribution of the 753 local levels across different coverage ranges.

Map 6.1: Estimated spatial distribution of safely managed drinking water service coverage across Nepal's local levels

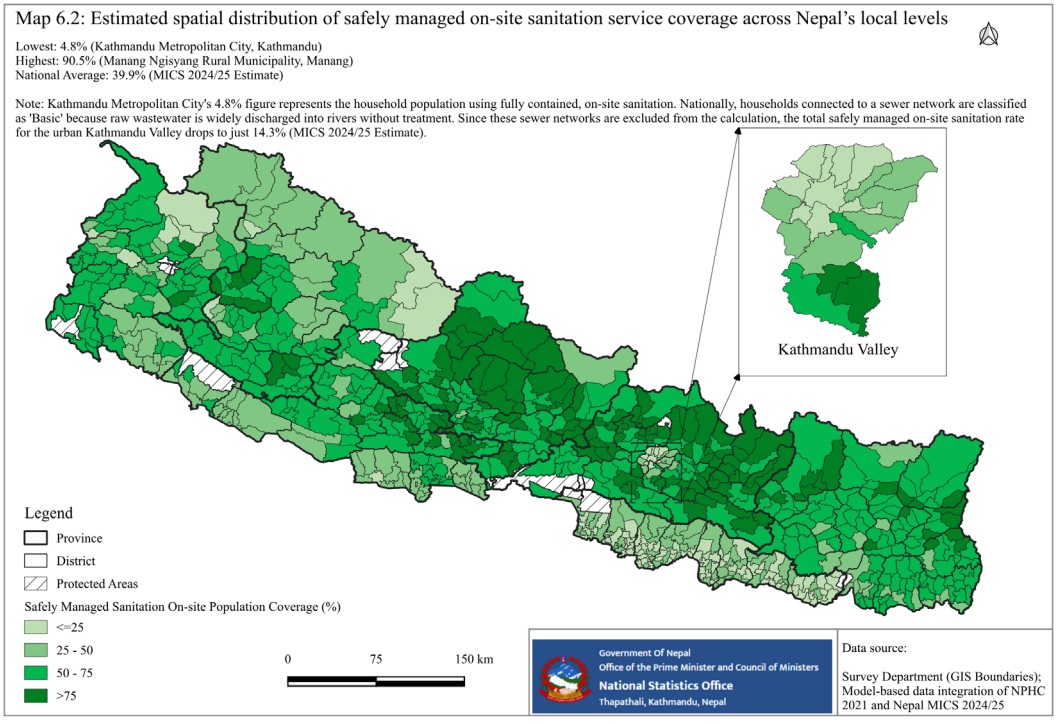


This pattern reinforces an important distinction in the national WASH agenda. Basic drinking-water access is widespread, but the transition from basic to safely managed service remains incomplete in many local levels. The policy question is therefore increasingly concerned with service quality, reliability, continuity, source protection and safety, rather than access alone. The specific intervention required in each local level should be diagnosed using the component JMP indicators together with the DWEI and the preceding service-level evidence.

6.4.2 Sanitation service levels across the 753 local governments

The sanitation profile is similarly heterogeneous. 267 of the 753 local governments (35.5 %) have safely managed sanitation coverage below 50 percent (Table 6.2). Within this group, 97 local levels are below 25 percent and 170 are between 25 percent and 49 percent. Another 333 local levels are in the 50 percent to 74 percent range, and 153 have safely managed sanitation coverage of 75 percent or more.

Map 6.2: Estimated spatial distribution of safely managed sanitation service coverage across Nepal's local levels



The sanitation findings also show why measuring toilet access alone is no longer sufficient for strategic planning. In almost all local levels, the largest sanitation service category is either safely managed sanitation in situ or basic sanitation (Annex Table 6b), and "open defecation" is not the dominant category in the localized estimates. The remaining challenge is therefore increasingly the conversion of basic sanitation into safely managed sanitation through appropriate containment, emptying, transport, treatment and safe disposal or reuse, together with effective operation and maintenance and environmental protection. This service-chain perspective is particularly important for urban and rapidly urbanizing local levels.

6.4.3 Linking service levels to strategic prioritization

The local-level analysis is therefore best interpreted as a hierarchy of evidence:

- JMP service-level indicators describe what level of service is being achieved,
- DWEI and SEI summarize drinking water and sanitation performance,
- WASH EI provides a combined performance measure, and
- The strategic categories translate the evidence into differentiated planning priorities.

Detailed JMP service-level data for all 753 local levels are provided in the Annex Tables 6a and 6b, while this chapter focuses on national patterns, interpretations, and implications for action.

6.5 National WASH performance and strategic priorities

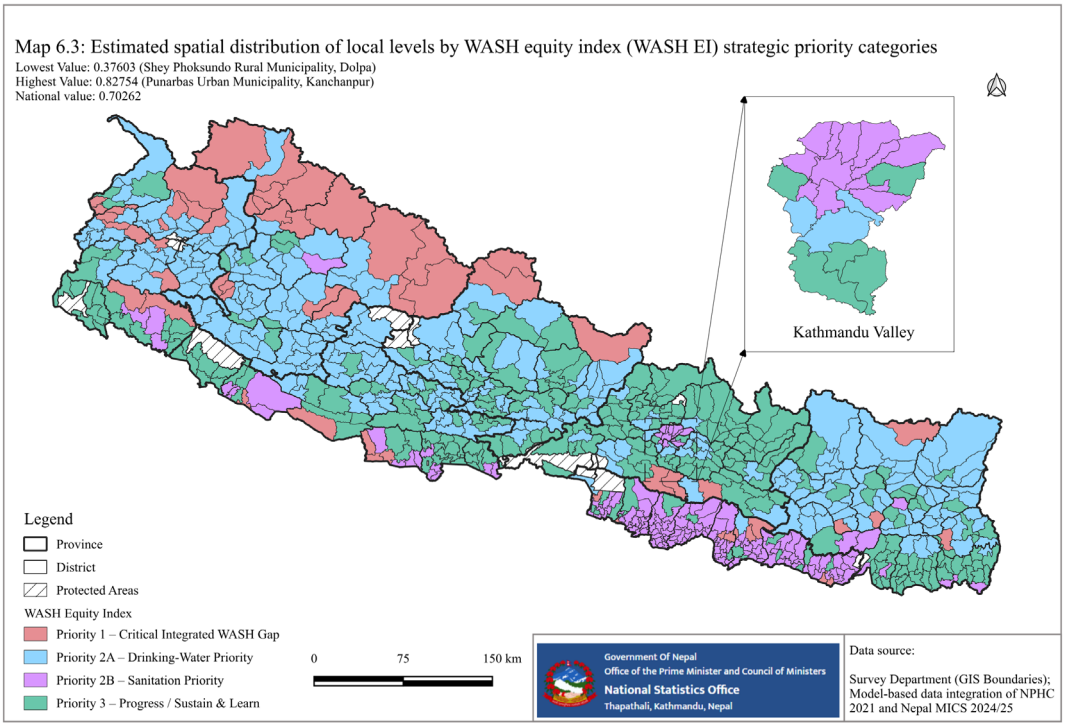
6.5.1 The national strategic picture

The 424 At Risk/Inadequate (Priority 2A and 2B) local levels represent the largest national opportunity for accelerated WASH progress, but they should not be treated as a homogeneous group. The evidence indicates that 277 require greater emphasis on drinking-water services, while 147 require greater emphasis on sanitation. The implication is therefore not simply to invest more, but to invest differently according to the nature of the local service gap.

A further 57 local levels (7.6 %) are in Severe Deprivation (Priority 1). These local levels require a different level of attention because weak performance is not confined to one sector. Their needs are more appropriately addressed through integrated WASH support, stronger local implementation capacity and coordinated investment.

At the other end of the distribution, 272 local levels (36.1 %) are in Moderate Progress or High Achievement (Priority 3). These local levels should not simply be regarded as having completed the WASH agenda. Rather, they represent an opportunity to consolidate gains, improve service quality and reliability, protect safely managed services and document practices that may be transferable to other local levels.

Map 6.3: Estimated spatial distribution of local levels by WASH equity index (WASH EI) strategic priority categories



6.5.2 Illustrative local-level extremes: understanding the range of performance

The extremes are presented here only to illustrate the breadth of local variation. The purpose is not to label local levels as permanently 'good' or 'bad', since WASH performance can change with investment, environmental conditions, population change, and service-management improvements.

Table 6.3 Top ten local levels with the highest WASH EI

Rank	Local level	District	Province	DWEI	SEI	WASH EI	Status
1	Punarbas UM	Kanchanpur	Sudurpashchim	0.819	0.836	0.828	High achievement
2	Beldandi RM	Kanchanpur	Sudurpashchim	0.881	0.773	0.826	High achievement
3	Belouri UM	Kanchanpur	Sudurpashchim	0.801	0.830	0.815	High achievement
4	Shuklaphanta UM	Kanchanpur	Sudurpashchim	0.800	0.818	0.809	High achievement
5	Siddharthanagar UM	Rupandehi	Lumbini	0.817	0.789	0.803	High achievement
6	Bhimdatta UM	Kanchanpur	Sudurpashchim	0.765	0.836	0.800	High achievement
7	Bhumikasthan UM	Arghakhanchi	Lumbini	0.780	0.811	0.795	High achievement
8	Tilottama UM	Rupandehi	Lumbini	0.810	0.780	0.795	High achievement
9	Resunga UM	Gulmi	Lumbini	0.782	0.807	0.794	High achievement
10	Thakurbaba UM	Bardiya	Lumbini	0.833	0.756	0.794	High achievement

Source: Extracted from Annex Table 6c.

Table 6.4 Bottom ten local levels with the lowest WASH EI

Rank	Local level	District	Province	DWEI	SEI	WASH EI	Status
1	Shey Phoksundo RM	Dolpa	Karnali	0.328	0.430	0.376	Severe deprivation
2	Chharka Tangsong RM	Dolpa	Karnali	0.460	0.407	0.433	Severe deprivation
3	Mugum Karmarong RM	Mugu	Karnali	0.441	0.518	0.478	Severe deprivation
4	Dolpo Buddha RM	Dolpa	Karnali	0.533	0.438	0.483	Severe deprivation
5	Adanchuli RM	Humla	Karnali	0.539	0.512	0.525	Severe deprivation

Rank	Local level	District	Province	DWEI	SEI	WASH EI	Status
6	Surma RM	Bajhang	Sudurpashchim	0.562	0.502	0.531	Severe deprivation
7	Sigas RM	Baitadi	Sudurpashchim	0.527	0.537	0.532	Severe deprivation
8	Aathbis UM	Dailekh	Karnali	0.531	0.541	0.536	Severe deprivation
9	Sayal RM	Doti	Sudurpashchim	0.497	0.584	0.539	Severe deprivation
10	Ganeshman Charnath UM	Dhanusa	Madhesh	0.571	0.512	0.541	Severe deprivation
Source: Extracted from Annex Table 6c.							

The ten highest WASH EI values are entirely concentrated within just two provinces: Sudurpashchim and Lumbini, with five local levels each. Notably, the Kanchanpur district in Sudurpashchim claims the top four spots nationwide (Punarbas UM, Beldandi RM, Belouri UM, and Shuklaphanta UM) and a fifth spot at Rupandehi (Siddharthanagar UM).

The ten lowest WASH EI values are primarily concentrated in Karnali Province (six local levels), followed by Sudurpashchim Province (three local levels), and a single entry from Madhesh Province (Ganeshman Charnath UM). Within Karnali, the Dolpa district experiences the most intense vulnerabilities, housing three of the four lowest-performing local levels in the country (Shey Phoksundo RM, Chharka Tangsong RM, and Dolpo Buddha RM).

This pattern is consistent with the broader geographic disparities described below, highlighting that while Sudurpashchim contains some of the nation's highest-performing local levels, it also displays internal inequality by housing three of the lowest-performing areas.

6.6 Provincial and Localized Inequality Analysis

6.6.1 Comparative provincial profile

Table 6.5 shows that the provincial picture is highly differentiated. The strategic value of the local-level analysis is precisely that it reveals these differences within and across provinces, which would be obscured by national averages alone.

Table 6.5 Provincial distribution of local levels across strategic categories and mean performance indicators

Province	Local levels	P1	P2A	P2B	P3	Mean DWEI	Mean SEI	Mean WASH EI
Koshi	137	4	71	7	55	0.619	0.787	0.693
Madhesh	136	9	2	109	16	0.807	0.541	0.659
Bagmati	119	3	20	13	83	0.625	0.819	0.712
Gandaki	85	3	45	0	37	0.428	0.851	0.695
Lumbini	109	5	39	14	51	0.675	0.741	0.699
Karnali	79	18	53	1	7	0.551	0.738	0.635
Sudur-pashchim	88	15	47	3	23	0.614	0.737	0.668

Source: Extracted from Annex Table 6c.
P1: Priority 1 – Critical integrated WASH gap, P2A: Priority 2A – Drinking-water priority, P2B: Priority 2B – Sanitation priority, P3: Priority 3 – Progress/sustain and learn

6.6.2 Koshi Province: strategic local-government profile

Koshi has 137 local levels. Fifty-five are in Progress/Sustain and Learn, while 4 are in the Critical Integrated WASH Gap. The largest group, 71 local levels, is classified as Drinking-Water Priority, compared with 7 Sanitation Priority local levels. The provincial mean DWEI (0.619) is below the mean SEI (0.787), indicating that drinking water is the more prominent aggregate challenge (Table 6.5). The strategic implication is to accelerate drinking-water service improvements while maintaining the gains already made in sanitation.

Table 6.6 WASH profiles and key performance indicators for illustrative lower-performing local levels in Koshi province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Mangsebung RM	Ilam	0.494	0.696	0.587	Severe deprivation
Baraha Pokhari RM	Khotang	0.519	0.663	0.587	Severe deprivation
Hatuwagadhi RM	Bhojpur	0.522	0.667	0.590	Severe deprivation

Source: Extracted from Annex Table 6c.

These examples illustrate within-province dispersion, and they should not be interpreted as a permanent ranking

6.6.3 Madhesh Province: strategic local-government profile

Madhesh has 136 local levels and presents the clearest sanitation-oriented provincial pattern. Only 9 local levels are in the Critical Integrated WASH Gap, but 109 are classified as Sanitation Priority, compared with only two Drinking-Water Priority local levels. The provincial mean DWEI (0.807) is substantially higher than the mean SEI (0.541). This indicates that future progress in Madhesh depends especially on strengthening sanitation service outcomes and the sanitation service chain (Table 6.5).

Table 6.7 WASH profiles and key performance indicators for illustrative lower-performing local levels in Madhesh province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Ganeshman Charnath UM	Dhanusa	0.571	0.512	0.541	Severe deprivation
Bhangaha UM	Mahottari	0.763	0.415	0.563	Severe deprivation
Bateshwor RM	Dhanusa	0.572	0.557	0.565	Severe deprivation
Source: Extracted from Annex Table 6c.					

6.6.4 Bagmati Province: strategic local-government profile

Bagmati has 119 local levels and the largest number in the Progress/Sustain and Learn category (83). It also has 20 Drinking-Water Priority and 13 Sanitation Priority local levels, while 3 are in Critical Integrated WASH Gap. The mean SEI (0.819) exceeds the mean DWEI (0.625), suggesting that drinking water remains the relatively weaker dimension at the provincial level (Table 6.5). The policy focus should therefore combine consolidation of stronger sanitation performance with targeted improvement of drinking-water services.

Table 6.8 WASH profiles and key performance indicators for illustrative lower-performing local levels in Bagmati province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Bakaiya RM	Makwanpur	0.500	0.679	0.583	Severe deprivation
Bagmati RM	Makwanpur	0.471	0.722	0.584	Severe deprivation
Marin RM	Sindhuli	0.424	0.833	0.595	Severe deprivation
Source: Extracted from Annex Table 6c.					

6.6.5 Gandaki Province: strategic local-government profile

Gandaki has 85 local levels. Forty-five are classified as Drinking-Water Priority, whereas none is Sanitation Priority. Three are in Critical Integrated WASH Gap and 37 are in Progress/Sustain and Learn. The provincial mean SEI (0.851) is substantially higher than the mean DWEI (0.428), making drinking water the dominant provincial challenge (Table 6.5). The result points to a need for targeted attention to drinking-water access, reliability and service quality, particularly in local levels outside the stronger sanitation-performing group.

Table 6.9 WASH profiles and key performance indicators for illustrative lower-performing local levels in Gandaki province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Lomanthang RM	Mustang	0.428	0.719	0.555	Severe deprivation
Lo Ghekar Damodarkunda RM	Mustang	0.536	0.617	0.575	Severe deprivation
Chumanubri RM	Gorkha	0.529	0.670	0.595	Severe deprivation
Source: Extracted from Annex Table 6c.					

6.6.6 Lumbini Province: strategic local-government profile

Lumbini has 109 local levels with 39 Drinking-Water Priority and 14 Sanitation Priority. It shows 5 Critical Integrated WASH Gap and 51 Progress/Sustain and Learn. Its mean SEI (0.741) is higher than its mean DWEI (0.675), indicating a somewhat greater drinking water challenge overall (Table 6.5). At the same time, the province contains several of the highest-performing local levels, showing that strong performance and significant local gaps can coexist within the same province.

Table 6.10 WASH profiles and key performance indicators for illustrative lower-performing local levels in Lumbini province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Bijayanagar RM	Kapilbastu	0.790	0.405	0.565	Severe deprivation
Maharajganj UM	Kapilbastu	0.813	0.399	0.570	Severe deprivation
Duduwa RM	Banke	0.707	0.463	0.572	Severe deprivation
Source: Extracted from Annex Table 6c.					

6.6.7 Karnali Province: strategic local-government profile

Karnali is one of the most urgent geographic concentrations of WASH deprivation. Of its 79 local levels, 18 are in Critical Integrated WASH Gap, 53 are Drinking-Water Priority and only one is Sanitation Priority, and 7 are in Progress/Sustain and Learn. Its mean WASH EI is 0.635, the lowest among the seven provinces in this dataset (Table 6.5). The strategic response therefore needs to combine integrated support for the most deprived local levels with sustained investment in drinking-water services and local service-delivery capacity.

Table 6.11 WASH profiles and key performance indicators for illustrative lower-performing local levels in Karnali province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Shey Phoksundo RM	Dolpa	0.328	0.430	0.376	Severe deprivation
Chharka Tangsong RM	Dolpa	0.460	0.407	0.433	Severe deprivation
Mugum Karmarong RM	Mugu	0.441	0.518	0.478	Severe deprivation
Source: Extracted from Annex Table 6c.					

6.6.8 Sudurpashchim Province: strategic local-government profile

Among 88 local levels in Sudurpashchim, 15 are in Critical Integrated WASH Gap, 47 are Drinking-Water Priority, 3 are Sanitation Priority and 23 are in Progress/Sustain and Learn. Its mean WASH EI is 0.668 (Table 6.5). The province therefore requires differentiated support, with immediate attention to the severe-deprivation group and accelerated drinking-water improvements among the wider at-risk population.

Table 6.12 WASH profiles and key performance indicators for illustrative lower-performing local levels in Sudurpashchim province

Illustrative lower-performing local levels	District	DWEI	SEI	WASH EI	Status
Surma RM	Bajhang	0.562	0.502	0.531	Severe deprivation
Sigas RM	Baitadi	0.527	0.537	0.532	Severe deprivation
Sayal RM	Doti	0.497	0.584	0.539	Severe deprivation
Source: Extracted from Annex Table 6c.					

6.7 Principal drivers of WASH performance and deprivation

The local-level indices identify where performance is weak, but the reasons for weak performance are not identical everywhere. The evidence in this report points to a combination of service-chain, environmental, geographic and institutional factors. The following drivers should therefore be considered together when translating the local-level classifications into investment decisions.

The transition from basic access to safely managed services: A substantial part of Nepal's WASH challenge has shifted from whether a facility exists to whether the service is safe, available, accessible, reliable and adequately managed. Local levels that already have high basic coverage may still have a substantial safely managed gap.

Drinking-water reliability and functionality: Access to an improved source does not guarantee that water is available when needed. Source functionality, seasonal constraints, distance/accessibility and other service interruptions can reduce effective service performance.

Water quality and safety: The report's water-quality evidence demonstrates that an improved source can still be exposed to contamination. Progress towards safely managed water therefore requires attention to quality at source and at household level instead of infrastructure type alone.

Sanitation service-chain weaknesses: Sanitation performance depends not only on the availability of a toilet or an improved sanitation facility, but also on whether excreta are safely contained, emptied where necessary, transported, treated and safely disposed of or reused. The gap between improved or basic sanitation and safely managed sanitation therefore represents an important unfinished component of Nepal's WASH agenda.

The next generation of sanitation investment should increasingly address the entire sanitation service chain, including safe containment, fecal sludge management, non-sewered sanitation, wastewater treatment, safe disposal or end use, environmental protection and the operation and

maintenance of sanitation infrastructure. Particular attention is also required in rapidly growing urban areas and in sustaining post-ODF achievements. This shift is important because high sanitation coverage does not necessarily mean that sanitation services are safely managed or that public health and environmental risks have been adequately controlled.

Geographic and environmental constraints: Remote, mountainous and hazard-prone local levels may face higher costs, difficult terrain, dispersed settlements and greater exposure to service disruption. These constraints help explain why severe deprivation is concentrated in particular geographic areas.

Institutional and implementation capacity: Local levels differ in planning, financing, technical capacity, operation and maintenance arrangements, data use and coordination with provincial and federal institutions. Similar infrastructure investments can therefore produce different service outcomes.

Unequal burdens across population groups: The wider report shows that WASH responsibilities and service disadvantages are not distributed equally across gender and socio-economic groups. Local strategies should therefore combine geographic targeting with equity and inclusion.

6.8 National WASH messages and decision-support implications

6.8.1 National WASH messages

Message 1 – Nepal's WASH challenge is changing

Nepal has made substantial progress in expanding basic drinking water and sanitation services. The next stage of the national WASH agenda is the transition from basic access to safely managed, reliable, sustainable and equitable services.

Message 2 – Coverage alone is no longer sufficient

Service quality, reliability, safety, functionality and sustainability require increasing policy attention. The existence of WASH infrastructure does not by itself guarantee that people receive a safe and dependable service.

Message 3 – Safe sanitation is a critical unfinished agenda

Nepal has made major progress in sanitation access and reducing open defecation, but safely managed sanitation remains substantially less widespread. Future investment should therefore increasingly focus on the complete sanitation service chain.

Message 4 – Local conditions require differentiated responses

The 753 local levels are at different stages of WASH development and face different combinations of drinking water and sanitation constraints. A uniform national intervention package is therefore unlikely to be equally effective everywhere.

Message 5 – The largest opportunity is in the At Risk/Inadequate group

The 424 At Risk/Inadequate local levels constitute the largest opportunity for accelerating national WASH progress. Within this group, the evidence identifies distinct drinking water and sanitation priorities.

Message 6 – Better-performing local levels also require continued attention

Higher-performing local levels should focus on sustaining safely managed services, strengthening reliability and quality, and documenting practices that can be adapted by other local levels

6.8.2 National WASH investment and action prioritization framework

The local-level classification provides a basis for differentiated WASH investment and institutional action across Nepal's 753 local levels. The category identifies the broad intensity and principal direction of action, and detailed interventions should be determined from the component service indicators, local conditions and institutional assessments. The framework is intended to support planning, budgeting, investment targeting and intergovernmental coordination rather than to establish permanent rankings.

Table 6.13 National WASH investment and action prioritization framework

Strategic category	No. of local levels (Municipalities)	Priority response	Primary responsibility
Priority 1 – Critical integrated WASH gap	57	• Focused integrated WASH support accelerated investment • Institutional and technical capacity development • Coordinated action across drinking water and sanitation	Federal + Provincial + Local
Priority 2A – Drinking-water priority	277	• Improve drinking-water access, reliability, quality, functionality and safety • Rehabilitate and sustain existing systems	Provincial + Local, with federal technical/policy support

Strategic category	No. of local levels (Municipalities)	Priority response	Primary responsibility
Priority 2B – Sanitation priority	147	• Strengthen safe containment, fecal sludge management, emptying, transport, treatment and safe disposal/end use • Strengthen wastewater management and environmental monitoring	Federal + Provincial + Local
Priority 3 – Progress/ sustain and learn	272	• Protect gains • Improve service quality, reliability and sustainability • Document and share good practices	Local + Provincial
Note: The priority categories are planning groups derived from WASH Status. They do not imply that a local level requires only one intervention, nor are they permanent labels. As service outcomes change, a local level may move between categories.			

6.8.3 Using the framework for planning and investment

Federal level: The federal government should use the strategic classification to guide national policy, standards, financing priorities, technical support and targeted programmes. Particular attention should be given to the Critical Integrated WASH Gap group and to nationally significant service-chain constraints.

Provincial level: Provincial governments are encouraged to use the classification to coordinate technical and implementation support across local levels, address crosscutting or geographically concentrated challenges, and facilitate differentiated drinking water and sanitation interventions.

Local level: Local levels use their DWEI, SEI, WASH EI and component service indicators to diagnose their principal service constraints and integrate appropriate responses into periodic, medium-term and annual plans and budgets.

Development partners: Development partners can increasingly align technical assistance and financing with the differentiated strategic categories rather than applying identical support packages across local levels.

Monitoring: The classification can be repeated periodically so that movement between categories can become a practical indicator of WASH progress and help determine whether investment strategies need to be maintained, intensified or adjusted.

6.8.4 Towards a national WASH performance index

The present analysis provides an important foundation for consideration of a broader National WASH Performance Index (WPI), but does not constitute a completed WPI. A future WPI could combine safely managed drinking water, safely managed sanitation, basic hygiene, service reliability and functionality, water quality, and equity and inclusion, subject to data availability and methodological validation. Such an index could eventually provide a single national monitoring framework for benchmarking all 753 local levels, tracking movement over time, supporting performance-based planning and budgeting, and linking WASH evidence more directly with SDG 6 and national sector targets. The present WASH EI can therefore be viewed as a valuable step towards a broader service-performance monitoring architecture rather than as the final form of such an index.

6.8.5 From evidence to action: the strategic decision pathway

To operationalize the findings of this report, local levels require a structured approach to move from data diagnostics to targeted implementation. Table 6.14 outlines a five-step strategic decision pathway designed to guide policymakers through this transition. By systematically assessing the overall severity of the local WASH gap and diagnosing whether drinking water (DWEI) or sanitation (SEI) presents the primary constraint, stakeholders can pinpoint specific challenges within the service chain. This diagnostic framework ultimately ensures that interventions are precisely targeted, institutional roles and financing are correctly aligned across federal, provincial, and local levels, and progress is continuously monitored for dynamic reclassification.

The purpose of the pathway is to ensure that the local-level evidence is translated into the right response, in the right place, at the right institutional level, with an appropriate level and type of financing.

Table 6.14 The strategic decision pathway for translating WASH evidence into action

Step	Decision question	Evidence to use	Expected action
1. Identify severity	How serious is the local WASH gap?	WASH Status/WASH EI	Determine priority intensity
2. Identify challenge	Is water or sanitation the principal constraint?	DWEI and SEI	Select sector emphasis
3. Identify service-chain problem	What is driving the low score?	Component JMP indicators and preceding chapter evidence	Design the appropriate intervention
4. Match institutional level	Who needs to act?	Local, provincial and federal responsibilities	Assign roles and financing
5. Monitor movement	Is performance improving?	Repeated DWEI, SEI, WASH EI and service indicators	Track progress and reclassify

6.9 Chapter summary

This chapter translates the local-level WASH analysis for all 753 local levels into a strategic framework for planning, investment and institutional action. The analysis identifies four operational groups: 57 local levels in the Critical Integrated WASH Gap category, 277 in Drinking-Water Priority, 147 in Sanitation Priority, and 272 in Progress/Sustain and Learn. Together, these categories demonstrate both the scale and differentiated nature of Nepal's remaining WASH challenge.

The main finding is that Nepal's WASH agenda has entered a new stage. Expanding basic access remains important, but future progress increasingly depends on achieving safely managed, reliable, safe, sustainable and equitable services. This requires greater attention to drinking water reliability and quality, sanitation service-chain management, operation and maintenance, environmental protection and institutional capacity.

The analysis also demonstrates that national or provincial averages alone are insufficient for effective WASH targeting. The substantial variation across local governments calls for differentiated responses: i) severe deprivation requires integrated support, ii) at-risk local levels require accelerated action focused on their principal drinking water or sanitation bottleneck, and iii) better performing local levels require continued efforts to sustain and improve service quality and share effective practices.

The strategic framework therefore provides a bridge between statistical evidence and policy action. It can support more differentiated planning, budgeting, investment targeting and intergovernmental coordination, moving Nepal progressively from coverage based WASH investment towards evidence based, performance oriented and equity sensitive service delivery.

Finally, the WASH EI developed in this report provides a useful foundation for a future national WASH performance monitoring architecture. Future development can progressively incorporate service quality, reliability, functionality, hygiene, equity and inclusion into a broader National WASH Performance Index, subject to data availability and methodological validation. This would strengthen Nepal's ability to benchmark all 753 local levels, monitor change over time and link WASH evidence more directly with national development priorities and SDG 6.

6.10 Policy implications

The findings of this chapter have several important implications for Nepal's WASH policy and planning.

First, the remaining WASH challenge is increasingly one of service quality and safe management rather than basic access alone. The localized JMP estimates show substantial variation in safely managed drinking-water and sanitation services across the 753 local levels, indicating that national averages can conceal important local disparities.

Second, WASH policy and investment need to become more differentiated and evidence-based. The strategic classification developed in this chapter identifies local levels with critical integrated gaps, drinking-water constraints, sanitation constraints, and those that have progressed sufficiently to focus on sustaining and improving their achievements. This suggests that a uniform investment approach is unlikely to address the different types of WASH constraints effectively.

Third, sanitation policy needs to move beyond toilet access towards the complete sanitation service chain, including containment, emptying, transport, treatment, safe disposal or reuse, operation and maintenance, and environmental protection.

Fourth, the findings support a stronger connection between WASH evidence, institutional responsibilities and financing. Local-level evidence can help align the intensity and type of intervention with the severity and nature of the problem and clarify the respective roles of federal, provincial and local levels.

Finally, the analysis highlights the need for a more integrated national WASH performance information system that brings together Census, MICS, administrative and WASH management information and progressively moves monitoring from coverage towards safely managed, reliable, sustainable and equitable services.

6.11 Recommendations

1. Adopt differentiated WASH planning and investment. Use the four strategic groups developed in this chapter as a decision-support framework, while avoiding permanent labelling of local levels. Investment intensity and intervention type should reflect the severity and nature of local WASH constraints.

2. Prioritize the transition from basic to safely managed services. Future WASH programmes should increasingly focus on service quality, reliability, functionality, water safety and sustainability, rather than measuring progress primarily through infrastructure and basic access.

3. Strengthen the sanitation service chain. Planning should address the complete chain from containment through emptying, transport, treatment and safe disposal or reuse, with particular attention to urban sanitation, wastewater management, environmental protection and post-ODF sustainability.

4. Strengthen operation, maintenance and rehabilitation. WASH financing should provide adequate attention to recurrent operation and maintenance, rehabilitation, system functionality and source protection, as well as new infrastructure development.

5. Align responsibilities and financing across government levels. Federal, provincial and local levels should use the localized evidence to clarify responsibilities, coordinate investments and direct technical and financial support to the appropriate institutional level.

6. Establish an integrated WASH performance monitoring framework. Nepal should progressively integrate Census, MICS, NWASH-MIS and relevant administrative data into a coherent WASH information architecture and regularly update local-level service-performance indicators.

7. Develop the proposed National WASH Performance Index progressively. Building on the WASH EI developed in this report, Nepal could develop a broader National WASH Performance Index incorporating safely managed services, reliability, functionality, water quality, hygiene and equity, subject to further methodological development and validation.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.1 Nepal's WASH outlook — The road to safely managed services

Over the past decade and a half, Nepal has expanded water and sanitation infrastructure at real scale. On-premises water access reached 90 percent of the population by 2024/25, improved sanitation coverage reached 92.8 percent, and Nepal declared itself Open Defecation Free in 2019. Handwashing has also progressed, with the share of the population with a handwashing facility with water and soap rising from 80.7 to 86.4 percent between 2019 and 2024/25. Measured by infrastructure alone, Nepal's WASH sector is a genuine success story.

This report's evidence, however, points to a different and more demanding task ahead. Basic access to water and sanitation has become fairly uniform across the country. At least basic drinking water access in 2024/25 ranges narrowly from 93.4 to 99.0 percent of population across provinces, and improved sanitation ranges from 85.6 to 99.4 percent. Safely managed status has not followed the same path. It ranges from 22.1 to 66.1 percent across provinces for water, and from 28.2 to 63.3 percent for sanitation, falling as low as 14.3 percent in Kathmandu Valley Urban.

Gandaki's position illustrates how differently the two sectors can perform in the same place. It has the highest safely managed sanitation coverage of any province, 63.3 percent, well above the second-highest, Koshi, at 48.7 percent. On water, however, Gandaki's safely managed coverage is just 28.2 percent, only 6.1 points above Karnali, which has the lowest safely managed water coverage of any province in the country at 22.1 percent. This indicates that having best performance on one WASH dimension can also have close to worst on the other, confirming that water and sanitation must be diagnosed and invested in separately, and this may be the case even within the same province.

At the national level, only 47.5 percent of the population receives safely managed water and only 39.9 percent receives safely managed sanitation in 2024/25, meaning that for roughly half of Nepal's population, the infrastructure exists but does not yet deliver a reliable, safe, and adequately managed service. This does not mean the sector has failed. Physical access was the first challenge, and Nepal has largely closed that gap. Making that access safe and reliable is the next challenge and provincial disparities remain wide and largely unaddressed.

The MICS national figures are independently validated by the report's local-level estimation technique (detailed in Chapters 5 and 6), which aggregates modeled data across all 753 local governments. Despite using an entirely different approach, the resulting water and sanitation estimates closely match the MICS data. This alignment between two independent methods strongly reinforces the accuracy of the overall national picture.

This transition cannot be pursued as a single national programme. The evidence in this report shows that safely managed status, and the specific reason it remains out of reach, varies sharply by geography and by socio-economic group, even where national averages look strong. In both water and sanitation, this means pursuing two tracks at once. Continued expansion is needed where access is still lacking, and a shift toward service quality is needed where access already exists but reliability and safety have not followed. The specific places and evidence differ by sector, and the two sectors remain closely linked, as the sections below show.

Water: Where access is still genuinely lacking, such as among the Lowest wealth quintile and in remaining unimproved-source pockets, continued expansion is needed. Where access already exists but reliability and safety have not followed, the priority shifts instead. Karnali illustrates this second case directly. It recorded the fastest access gains of any province, yet now has the lowest safely managed water coverage in the country, 22.1 percent, against 66.1 percent in Madhesh, showing that rapid access expansion does not by itself deliver a safely managed service.

This reliability gap has two separate national drivers. Source non-functionality, largely an operations and maintenance failure rather than a lack of infrastructure, accounts for 40.2 percent nationally and reaches 54.1 percent in Bagmati, where it is the leading reason. Natural hazard disruption compounds this risk further, with piped water systems recording a hazard-related disruption rate more than six times that of tube wells, concentrated in the same landslide and flood prone Mountain and Hill areas where access has expanded fastest.

This gap also carries an uneven human cost. Water collection continues to fall overwhelmingly on women and girls, most heavily on women aged 25 to 49, and the burden is concentrated in exactly the same geographies, Karnali and the Mountain belt, already identified as having the largest access and reliability gaps. The gap is present even among school-age girls, who collect water at nearly three times the rate of boys the same age. Closing the remaining access and reliability gap in these areas would therefore reduce this burden disproportionately, not only improve a coverage statistic.

Sanitation: Nepal’s sanitation investment faces the same two-track choice, but the specific evidence differs. Open defecation has risen since the 2019 ODF declaration in specific places, particularly Madhesh, Lumbini, and the Lowest wealth quintile, meaning some communities

still need renewed support to complete and sustain the transition away from open defecation. Elsewhere, the challenge is no longer defecation but safe containment and treatment. Kathmandu Valley Urban illustrates one version of this. It has the country's highest sanitation coverage and its lowest safely managed rate, driven by a sewer network whose treatment cannot be confirmed. This is not unique to the Valley. Nationally, Metropolitan Cities have the highest improved sanitation coverage of any municipality type, yet the lowest safely managed status, the same pattern seen in Kathmandu Valley Urban specifically. Nationally, this broader category, containment or treatment failure combined, accounts for roughly three-quarters of the total gap between improved and safely managed sanitation, making it the dominant national pattern rather than an isolated case. Containment failure of this kind may also affect drinking water quality in the same areas.

Water and sanitation together: These two sectors require distinct diagnosis, but they are not fully separable, and the specific connection differs by place. Karnali illustrates a source-level link. Its source water is the most contaminated of any province, 70.0 percent of the population, while the increase between source and household is comparatively small, consistent with its containment failure, driven mainly by acute pit overflow in rural areas, contaminating groundwater close to the source itself.

Madhesh illustrates a different pathway. Only 28.3 percent of its population had E. coli in their source water, the lowest of any province, yet contamination rises by 36.7 percentage points between source and household, the largest increase of any province. Madhesh also has the highest tube well dependency, the highest open defecation rate, and the highest rate of unsafe excreta disposal of any province. This combination points less toward groundwater contamination at the source and more toward open defecation and weak containment contaminating the wider household environment, soil, hands, and storage containers, introducing contamination during collection and storage rather than at the source itself. Lumbini shows a related, though less extreme, version of this same pattern, with a comparatively moderate source contamination rate but the second-largest source-to-household gap nationally. Besides these challenges, Madhesh is also one of the provinces where soap availability for handwashing has declined even as water access improved, leaving households there with less capacity to guard against contamination introduced during handling specifically.

A community's water and sanitation problems can share the same root cause, even when they show up differently. In Karnali, contamination reaches the water at the source. In Madhesh and Lumbini, it happens after collection, in the household environment. Either way, one sector's failure can drive the other's outcome. Water and sanitation should be diagnosed separately, since the specific failure differs by place, but planned and funded together in the same areas.

Delivering this at the local level: The local-level estimation for all 753 local governments, detailed in Chapters 5 and 6, moves beyond simple ranking to classify every local government into one of four strategic categories. Of the 753, 57 (7.6 %) face Severe deprivation, requiring immediate, coordinated support across both sectors at once. A further 424 (56.3 %) are classified as At Risk, the largest single group nationally, split between 277 (36.8 %) where drinking water is the principal constraint and 147 (19.5 %) where sanitation is the principal constraint. The remaining 272 (36.1 %) are in Progress or already performing well, and represent an opportunity to consolidate gains and share effective practice rather than a completed task.

This classification is only as credible as the model behind it. Chapter 5's validation exercise found the underlying drinking water model's national mean absolute error to be 1.57 percentage points, well within internationally accepted thresholds for model precision, giving this classification a credible basis for actual investment decisions.

In Bagmati, for example, a strong provincial average conceals both Kathmandu's high-performing municipalities and a cluster of municipalities in Sindhuli district scoring far below it. A small number of municipalities, concentrated in Dolpa and Mugu districts, face compounding water and sanitation deprivation simultaneously, making them the ten most acute combined WASH gaps in the country. The WASH Equity Indexes introduced in this report (the Drinking Water Equity Index - DWEI, the Sanitation Equity Index – SEI, and the combined WASH Equity Index - WASH EI), read at the municipal level and by sector rather than as a single blended score, are intended to provide the practical tool for identifying where deprivation is most severe, tracking whether it is narrowing over time, and targeting investment accordingly.

Addressing this requires a differentiated response, and that response is a task for local governments as much as for the federal government. Nepal’s National WASH Management Information System reports, however, that not a single one of the country's 753 local governments has adequate human resource capacity for WASH functions, and only 244 have even a formally constituted WASH unit, suggesting most are not yet institutionally equipped to act on the kind of differentiated, evidence-based response this report calls for. Achieving SDG 6 in Nepal will depend on whether local governments have the evidence and institutional capacity to act on findings like these.

The evidence in this report, read as a whole, shows that Nepal’s WASH sector has changed. The infrastructure question that has defined the sector for the past two decades has substantially been answered. The question that will define the next decade is whether Nepal can convert that infrastructure into a safely managed, reliable, and equitably distributed service for all of its people, and this report, together with the WASH Equity Indexes it introduces, is intended to provide the evidence base for exactly that task. These indexes should themselves continue to evolve. As water quality, service reliability, and hygiene and inclusion data mature, Nepal has the opportunity to develop them into a single National WASH Performance Index, giving the country one consistent instrument to benchmark every local government, track its progress over time, and link WASH

evidence directly to SDG 6 and national sector targets, rather than treating each new dimension of service quality as a separate monitoring exercise.

7.2 Five strategic shifts for Nepal's next generation of WASH

The evidence in this report points to a fundamental transition in Nepal's WASH agenda. The next phase is not simply about expanding coverage, rather it is about turning existing infrastructure into safe, reliable, sustainable and equitable services. The following five strategic shifts provide a high-level national reform framework for the detailed recommendations that follow.

1. Change what Nepal measures

Move from predominantly coverage-based WASH reporting toward safely managed service performance, including service quality, reliability, affordability and overall system performance. The central measure of progress should increasingly be whether people receive a safe and dependable service more than simply whether infrastructure exists.

2. Change how Nepal finances WASH

Move from coverage-driven and infrastructure-oriented financing toward evidence-based financing of safe and sustainable service outcomes. Resources should b e differentiated according to the severity and nature of local-level service gaps and should support rehabilitation, operation and maintenance, water safety, source and infrastructure protection, and the complete sanitation service chain.

3. Change how the WASH system is governed

Move from dispersed responsibilities toward clear institutional leadership and accountability for WASH service outcomes across federal, provincial and local levels, supported by clear mandates, minimum service standards, adequate technical capacity, regulation, compliance and coordinated planning and financing.

4. Change how Nepal manages and uses WASH information

Move from fragmented datasets and periodic reporting toward a coherent national WASH performance information architecture integrating Census, MICS, NWASH-MIS and relevant administrative data. The WASH Equity Index developed in this report should progressively evolve into a validated National WASH Performance Index, subject to data availability and methodological validation.

5. Change how Nepal targets action

Move from uniform WASH responses and reliance on national or provincial averages toward differentiated action based on local-level evidence. The report's analysis of all 753 local governments provides a basis for identifying the severity of the gap, determining whether water

or sanitation is the principal constraint, diagnosing the service-chain bottleneck, matching the response to the appropriate level of government, and tracking improvement over time.

The objective is to move from one uniform national WASH programme toward differentiated pathways to safely managed services: the right response, in the right place, at the right level, with the right financing.

7.3 Recommendations

This report recommends the following strategic reform areas:

A. Strengthening evidence-based WASH planning

How can evidence be linked to planning and budgeting? This report's most consistent finding, repeated across water, sanitation, and the local-level equity analysis, is that the specific cause of underperformance differs by geography, and that investment planned without that diagnosis is likely to misfire. Budget submissions and periodic plan targets for WASH should be required to cite the specific safely managed, containment, or equity-index diagnostic relevant to the proposed investment, rather than referencing coverage figures alone. This diagnosis should follow a consistent sequence: identify the overall severity of the local WASH gap, determine whether water or sanitation is the principal constraint, identify the specific service-chain problem behind that constraint, match the finding to the correct level of government, and monitor whether local governments move between severity categories over time. Chapter 6 sets out this five-step pathway in full as the practical mechanism for applying the recommendations in this section. Following specific reforms are also suggested to strengthen evidence-based WASH planning:

A.1 Adopt safely managed status rather than improved coverage, as the primary indicator in Sixteenth Plan and SDG progress reporting, with coverage retained only as contextual information.

A.2 Diagnose each province's dominant failure mode, whether access, functionality, affordability, or containment, before allocating water and sanitation investment. A uniform national model will misallocate resources where the underlying constraint differs.

A.3 Report water and sanitation performance separately at the municipal level along with a blended composite score, so that a strong result in one sector cannot mask a severe deficit in the other.

A.4 Plan water safety and sanitation containment investment jointly within the same geographic areas, because treating them as separate sector programmes risks each undermining the other.

B. Targeting investments to the most deprived municipalities and populations

How should Nepal prioritize future WASH investments? Investment should be prioritized using municipal-level deprivation evidence rather than provincial or national averages, which this report repeatedly shows can conceal the areas most in need.

B.1 Use municipality-level DWEI, SEI, and WASH EI scores directly as the basis for fiscal transfers and sector investment, rather than distributing resources using provincial or national benchmarks.

B.2 Prioritize the ten national hotspot municipalities identified in this report, particularly those in Dolpa and Mugu districts, for immediate, dedicated investment, given their compounding barriers of extreme terrain, isolation, and construction cost.

B.3 Target urban sanitation specifically in the high-density Tarai municipalities, within districts like Kapilbastu, Saptari, and Siraha, where water access is already strong but sanitation lags severely, rather than applying a generic WASH investment package.

B.4 Identify and target unimproved-source households within otherwise well-served urban and metropolitan areas, since this report finds these households are easily masked by strong aggregate urban performance.

B.5 Address the soap-specific handwashing gap directly in the provinces where it has emerged, Koshi, Madhesh, and Lumbini, and in urban and Peri-urban areas generally, since continued water infrastructure investment alone will not close it.

C. Accelerating the transition to safely managed services

How can existing infrastructure be converted into safely managed service? The largest share of Nepal's remaining WASH gap is not physical access but service quality. Investment should shift decisively toward the interventions that convert existing infrastructure into safely managed service.

C.1 Fund scheme rehabilitation and operation and maintenance along with new connections, since source non-functionality instead of lack of infrastructure, is the leading cause of unreliable supply in Bagmati, Koshi, and Sudurpashchim.

C.2 Make water safety promotion, source protection, and safe storage guidance a standard, funded component of every water programme.

C.3 Fund excreta containment and treatment improvement as a distinct budget priority from new toilet construction, since roughly three-quarters of the national safely managed sanitation shortfall is containment or treatment failure instead of sharing.

C.4 Require confirmed, functioning treatment before classifying any sewer connection as safely managed. Connection rates alone should not be reported as a proxy for safe sanitation.

C.5 Revisit construction guidance for facility types shown in this report to have elevated overflow rates, particularly cesspools, which overflow at roughly double the rate of septic tanks, and twin-pit latrines, which overflow more than single-pit latrines despite being designed to prevent it. This report's data cannot confirm whether these differences reflect the facility design itself, construction quality, or how the facilities are used, and this should be established before revising construction guidance.

D. Institutionalizing integrated WASH monitoring

How should national WASH monitoring evolve? Monitoring should move from a periodic, campaign-driven exercise to a continuous, institutionalized function.

D.1 Establish a post-ODF sustainability monitoring system, distinct from the initial verification process, with periodic re-verification and targeted follow-up in the specific areas and wealth groups this report identifies as showing slippage.

D.2 Institutionalize natural hazard and climate-disruption monitoring for both water and sanitation infrastructure.

D.3 Institutionalize the WASH Equity Index as a recurring national monitoring tool, recalculated with each future MICS and census round, so that progress in narrowing municipal-level gaps can be tracked over time rather than assessed only once.

D.4 Develop the WASH Equity Index introduced in this report into a broader National WASH Performance Index. The current index covers only drinking water and sanitation. The new index would add water quality, service reliability and functionality, hygiene, and measures of inclusion, subject to further data availability and methodological validation. This would give Nepal a single, progressively more complete monitoring instrument, rather than requiring the index's scope to be revisited each time a new dimension of service quality becomes measurable.

E. Reducing inequalities through equity-focused financing

How can financing be designed to narrow, rather than widen, existing inequalities?

E.1 Design differentiated affordability support by source type. For piped households, tariff structures and connection subsidies should be considered, since piped systems carry connection fees and ongoing charges that tubewell self-supply does not. For self-

supply tubewell households, construction cost is the more direct barrier, and low cost drilling support or construction subsidies may be more appropriate, consistent with this report's finding that affordability is a substantial reported barrier in Madhesh, Sudurpashchim, and tube well-dependent communities generally.

E.2 Weigh gender equity explicitly in how underserved areas are ranked for investment. Water collection falls overwhelmingly on women and girls, and this burden is concentrated in exactly the geographies, Karnali and the Mountain belt, already identified as having the largest access and reliability gaps.

E.3 Extend equity-focused financing criteria to caste, ethnicity, and disability dimensions as data availability improves, since this report's wealth quintile and geographic findings likely understate the full extent of who is being left behind.

F. Clarifying institutional roles across Federal, Provincial, and Local Government

How should federal, provincial and local governments use these findings? This report's findings imply a different task for each tier of government, and the evidence suggests local government capacity to carry out its task is not yet in place. Nepal's own National WASH Management Information System reports that not a single one of the country's 753 local governments currently has adequate human resource capacity for WASH functions, and only 244 have even a formally constituted WASH unit.

F.1 Federal government could use this report's findings to set minimum service standards, design equalization financing that channels additional resources to the most deprived municipalities identified in Chapter 6, and lead the data integration and monitoring reforms described above.

F.2 Provincial governments should use municipal-level findings to actively coordinate investment across municipalities within their province, rather than distributing block grants without regard to the intra-provincial variation this report documents.

F.3 Local governments should be supported, as a matter of priority, to establish functioning WASH units and secure adequate technical human resource capacity, since this report's findings on local deprivation cannot be acted upon by local governments not yet equipped to use them. Capacity-building investment should be treated as a precondition for effective use of the WASH Equity Index.

G. Integrating Nepal's WASH data architecture: Census, MICS, and NWASH-MIS

How should future Census, MICS, and NWASH-MIS be integrated? This report was able to produce national and local-level WASH evidence only through extensive manual reconciliation of three data sources that use different classifications, reference periods, and geographic identifiers.

Incomplete NWASH-MIS data across several municipalities and indicator fields further limited how far this report's MICS- and census-based findings could be cross-checked against administrative monitoring data, meaning some conclusions in this report rest on survey and census evidence alone, without administrative corroboration. Both the manual reconciliation across these three sources and the underlying gaps in NWASH-MIS data need to be resolved for the recurring national monitoring recommended above to be reliable.

G.1 Establish a standing joint technical working group between the National Statistics Office and the Department of Water Supply and Sewerage Management to harmonize classification systems, geographic identifiers, and reference periods across the Census, MICS, and NWASH-MIS ahead of each future round, rather than reconciling them retrospectively as this report has had to do.

G.2 Act directly on the findings of Nepal's own 2025 JMP Safely Managed On-Site Sanitation (SMOSS) pilot assessment, which identified specific gaps between NWASH-MIS's current questionnaire and the data required for global SDG 6.2 monitoring.

G.3 Use the harmonization methodology developed for this report's local-level estimation, described in Chapter 6, as the starting template for future integration work, since it already demonstrates a validated approach to reconciling these specific data sources.

G.4 Treat the ongoing restructuring of federal water sector institutions as the occasion to formalize these inter-agency data-sharing protocols directly, rather than allowing institutional transition to disrupt data continuity built up over multiple survey rounds.

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Annex A Field validation of the WASH estimates

A.1 Background and rationale

The local-level WASH estimates and equity indices presented in this report are derived from the data integration of the National Population and Housing Census (NPHC) 2021 and Nepal Multiple Indicator Cluster Survey (MICS) 2024/25, following the methodology described in Chapter 5.

Although both sources are nationally credible, these model-based estimates reflect conditions at the time of data collection and are subject to statistical uncertainty. In the intervening period, infrastructure may have expanded, deteriorated, or changed due to local investments. To ensure quality assurance and assess whether the figures align with current ground realities, the National Statistics Office (NSO) conducted field verification missions across selected local levels in 2026.

The field verification served as a vital qualitative and contextual mechanism for triangulation. The missions generally validated the preliminary estimates for drinking water, open defecation, and unimproved sanitation.

A.2 Objectives

The general objective was to validate the WASH estimates and the JMP service-level classification used in this report against the situation in selected local levels. The specific objectives were:

- To validate draft JMP estimates and equity indices using local knowledge, records, and official information,
- To assess data sources, reporting practices, definitions, data gaps, and information reliability,
- To observe the availability, accessibility, functionality, and condition of WASH facilities and services,
- To assess sewerage, wastewater, and solid waste management practices,
- To identify changes since the data reference period and their key drivers, and
- To identify any inconsistencies and contextual issues that require correction or clarification before finalization.

A.3 Methodology and coverage

Field verification was conducted to assess the current status of drinking water and sanitation services and to validate the findings and estimates presented in this report. The verification focused on the availability, accessibility, functionality, and recent development of water supply and sanitation facilities, particularly changes that have occurred since the 2021 NPHC. Information

were collected through field observations, consultations with local government representatives and other concerned stakeholders, and review of relevant records and documents.

A field validation team was formed with the participation of the Chief Statistician, Deputy Chief Statistician, Directors and other officials from the Population Section, Chiefs of selected Statistics Coordination Offices (SCOs), and representatives from UN-Habitat. The teams conducted field visits using a structured checklist to ensure systematic and consistent assessment across the selected local levels. During the visits, the teams held consultations and meetings with representatives of local levels, relevant departments, service providers, and community members. These interactions helped the teams understand the current condition of water and sanitation services, recent improvements and investments.

The field verification covered 33 local levels in 22 districts across six provinces, including rural municipalities, municipalities, and sub-metropolitan cities. The verification was conducted by nine field validation teams covering selected local levels in Sudurpashchim, Lumbini, Madhesh, Koshi, Karnali, and Bagmati provinces, as presented in the following table.

Local levels covered by the field verification

SN	Province	District	Local level	Type
1	Koshi	Bhojpur	Bhojpur	Municipality
		Bhojpur	Arun	Rural municipality
		Sankhuwasabha	Khandbari	Municipality
		Sankhuwasabha	Chichila	Rural municipality
		Terhathum	Myanglung	Municipality
		Terhathum	Laligurans	Municipality
		Terhathum	Chhathar	Rural municipality
2	Madhesh	Bara	Kalaiya	Sub-metropolitan city
		Parsa	Parsagadhi	Municipality
		Sarlahi	Basbaria	Rural municipality
		Sarlahi	Kaudena	Rural municipality
		Mahottari	Pipara	Rural municipality

SN	Province	District	Local level	Type
3	Bagmati	Dolakha	Bhimeshwor	Municipality
		Sindhupalchwok	Balephi	Rural municipality
		Sindhupalchwok	Sunkoshi	Rural municipality
		Makwanpur	Bhimphedi	Rural municipality
		Makwanpur	Hetauda	Sub-metropolitan city
		Sindhuli	Hariharpurgadhi	Rural municipality
4	Lumbini	Rupandehi	Siddharthanagar	Municipality
		Arghakhanchi	Sandhikharka	Municipality
		Arghakhanchi	Bhumikasthan	Municipality
		Gulmi	Resunga	Municipality
		Banke	Duduwa	Rural municipality
		Kapilvastu	Bijayanagar	Rural municipality
		Kapilvastu	Maharajgunj	Municipality
		Kapilvastu	Yasodhara	Rural municipality
5	Karnali	Surkhet	Birendranagar	Municipality
6	Sudurpashchim	Kanchanpur	Beldandi	Rural municipality
		Kailali	Kailari	Rural municipality
		Kailali	Janaki	Rural municipality
		Dadeldhura	Amargadhi	Municipality
		Doti	Dipayal Silgadhi	Municipality
		Baitadi	Dashrathchand	Municipality

A.3.1 Methods

The methods were qualitative and observational. The teams followed a common purpose but adapted their work to the local context. They used the following methods.

- Consultations and discussions with chairperson of the local level, Chief Executive Officers, ward chairpersons and secretaries, planning, engineering, water supply and WASH technical staff, statistics and computer officers, and in some place's members of the public and community groups.

- Structured checklist discussion. The checklist used for the discussion incorporates:
  - i) Recording general information of respondents,
  - ii) Respondents' own estimates of the proportion of households at each JMP service level,
  - iii) Main water sources, service providers and toilet types,
  - iv) Perceived change since 2021 and its causes,
  - v) A rating of the preliminary estimates, and
  - vi) Team's own observations.

Respondents figured out their own estimates first and were shown the preliminary model-based values only afterwards to avoid anchoring. They then rated the preliminary JMP ladder values, the Drinking Water Equity Index (DWEI) and the Sanitation Equity Index (SEI) as very realistic, reasonably realistic, slightly over- or under-estimated, or in need of major revision.

- Briefing and cross-checking. Officials were briefed on the JMP classification, the report's indicators and their local level's rank among the 753 local levels, and then gave their assessment of whether the estimates were realistic. Reported and administrative data were cross-checked with local records and focal persons.

- Direct observation of water sources and supply lines, public taps, storage, sewers and septic tanks, drainage and wastewater, public toilets, households, wards, parks, solid waste dumping sites, public spaces, and WASH facilities in schools and health institutions.

- Review of records and reference data, including NHPC 2021 and MICS 2024/25 results, local administrative records, and the JMP literature of the WHO/UNICEF.

A.4 Major Findings

A.4.1 Overall assessment of the estimates

Koshi Province. The validation team visited the Arun, Chichila, and Chhathar local levels to assess the consistency of preliminary estimates against ground conditions. For drinking water, the team and local officials generally considered all five ladder estimates to be reasonably realistic. Similarly, sanitation estimates for open defecation and unimproved sanitation were broadly consistent with local observations. However, some notable differences were reported regarding shared toilets. To address this, the team revisited the data to identify and resolve any inconsistencies.

Madhesh Province. In Mahottari and Sarlahi, the field teams found the information presented in the draft report broadly consistent with the situation observed on the ground. The visits to

Kalaiya Sub-Metropolitan City (Bara) and Parsagadhi Municipality (Parsa) provided qualitative information on the current status of drinking water, sanitation, wastewater, drainage, and solid waste management. However, the field observations did not produce sufficiently comparable local-level quantitative data to directly assess the report's estimates.

The field observations indicated that the availability and distribution of drinking water services are gradually improving in terms of coverage and quantity. However, water quality monitoring remains limited, as regular testing facilities and adequate laboratory services are not readily available. Sanitation services, particularly wastewater management, drainage, and solid waste management, remain inadequate and require further improvement. Overall, the findings suggest progress in the expansion of drinking water services, while greater attention is still needed to ensure water quality, improved sanitation, and effective solid waste management.

Bagmati Province. The validation team visited selected local levels to assess current WASH conditions. Hetauda Sub-Metropolitan City had relatively well-developed piped water supply and institutional arrangements, while Bhimeshwor Municipality was found to have a generally very good drinking water situation. In Bhimphedi Rural Municipality, no clear evidence of significant improvement in water and sanitation services since NPHC 2021 was observed, and post-2021 developments were recommended for verification through administrative records and project documents. In Hariharpurgadhi Rural Municipality, services are largely managed by community-based water user committees, with the local government expanding household coverage through the "One House, One Tap" approach. Overall, the findings show varying levels of WASH service development across the visited local levels.

Lumbini Province. The validation team visited selected districts and local levels across Lumbini Province to assess whether the Water Equity Index, Sanitation Equity Index, and combined Water Supply and Sanitation Equity Index reflect the current situation on the ground. Overall, the field observations and consultations with local officials indicated that the indices broadly correspond with ground realities. Officials in Sandhikharka Municipality considered the reported indices reasonably realistic, while officials in Resunga Municipality found the drinking water estimates reasonably realistic and the sanitation index largely consistent with the local situation. In Banke and Kapilvastu, the team found the JMP WASH indicators and the WASH Equity Index broadly valid, while noting that these estimates are based primarily on Census 2021 data and may not fully capture subsequent changes in water supply coverage and sanitation practices. In Bhumikasthan Municipality, officials considered that the Drinking Water Equity Index and Sanitation Equity Index may be slightly underestimated. Overall, the field validation supports the general reliability of the reported indices, while also highlighting the need to consider recent improvements and changes in WASH services when interpreting the estimates.

Karnali Province: The field validation team visited Birendranagar Municipality in Surkhet to assess the current status of WASH services. Drinking water services have improved, and a major water supply project is under construction, which is expected to further improve water availability

and address existing supply challenges upon completion. The overall sanitation and solid waste management situation was found to be satisfactory. However, sewerage management remains inadequate and requires further improvement.

Sudurpashchim Province. The field validation team visited six selected local levels in five districts- Kanchanpur, Kailali, Dadeldhura, Doti and Baitadi districts, to assess the reported WASH situation against administrative records and field observations. The team identified some discrepancies, inconsistencies, and data gaps between the reported figures, available administrative records, and conditions observed on the ground. However, these differences were not quantified in the field validation report.

A.5 Conclusions

The field validation largely supports the reliability of the local-level estimates presented in the report and confirms the overall geographic patterns of WASH conditions. Local officials broadly validated the drinking water estimates, as well as the baselines for open defecation and unimproved sanitation. Where field findings differed from the model, variations were primarily driven by local infrastructure changes since 2021. These include notable improvements in water supply and toilet coverage in hilly areas, contrasted against persistent Tarai-region challenges such as non-functional piped schemes, localized open-defecation slippage, and unmonitored groundwater quality.

In terms of data verification limits, while safely managed drinking water shares could not be fully verified locally due to a widespread lack of contamination testing, the final modeled framework successfully accounts for these field constraints to present a unified, coherent data set.

Beyond baseline measurements, several structural WASH challenges remain consistent across all surveyed provinces. These include irregular water-quality testing, inadequate sewerage infrastructure, lagging solid-waste management outside major market areas, and seasonal water source depletion in the hills. Ultimately, the finalized estimates provide a robust and credible baseline for evidence-based planning, policy targeting, and resource allocation across Nepal. However, to ensure effective implementation, these indices must be interpreted alongside the contextual field findings, particularly when evaluating local levels with aggressive post-2021 water investments or areas experiencing open-defecation slippage.

Annex B Question on main source of drinking water: Population Census

NPHC	Question	Response options
2001 (Form 2)	Q.1 What is the main source of drinking water for your household?	1. Tap (Pipe) 2. Well 3. Tube-well 4. Spout water 5. River/Stream 6. Other
2011 (Schedule 1)	Q.3 What is the main source of drinking water for your household?	1. Tap/Pipe 2. Tube-well/Hand-Pump 3. Covered well/Kuwa 4. Uncovered well/Kuwa 5. Spout water 6. River/Stream 7. Other
2021	Q.6 What is the main source of drinking water for your household?	1. Tap/Pipe (Inside house compound) 2. Tap/Pipe (Outside house compound) 3. Tube-well/Hand-Pump 4. Covered well/Kuwa 5. Uncovered well/Kuwa 6. Spout water 7. River/Stream 8. Jar/Bottle 9. Other
Note: For NPHC 2021: Improved sources include options 1, 2, 3, 4, and 8.		

Annex C Question on main source of drinking water: MICS 2024/25

Question (Household Questionnaire)	Response options (Code)
WS1. What is the main source of drinking water used by members of your household? If unclear, probe to identify the place from which members of this household most often collect drinking water (collection point).	**PIPED WATER**
	Piped into dwelling — 11
	Piped into courtyard/compound — 12
	Piped to neighbor — 13
	Public tap/standpipe — 14
	Tube well / borehole — 21
	DUG WELL
	Protected well — 31
	Unprotected well — 32

Question (Household Questionnaire)	Response options (Code)
	SPRING
	Protected spring — 41
	Unprotected spring — 42
	Rainwater — 51
	DELIVERED WATER
	Tanker-truck — 61
	Cart with small tank — 71
	Surface water (river, dam, lake, pond, stream, canal, irrigation channel) — 81
	PACKAGED WATER
	Bottled water — 91
	Jar / dispenser refill — 93
	Other (specify) — 96
Note: NMICS 2024/25 categorizes options 11, 12, 13, 14, 21, 31, 41, 51, 61, 71, 91, and 93 as improved sources. It is also important to note that the NMICS includes separate questions regarding water sources used for washing and cooking. Additionally, the survey incorporates specific modules to measure the accessibility, availability, and quality of drinking water used by households.	

Annex D Question on toilet facility – Population Census

NPHC	Question	Response options
2001 (Form 2)	Q.1 What is the type of toilet used by this household (HH)?	1. Flush/Modern 2. Ordinary 3. No Toilet
2011 (Schedule 1)	Q.3 What type of toilet facility are you using in your household?	1. Flush (Public Sewerage) 2. Flush (Septic Tank) 3. Ordinary 4. No Toilet
2021	Q.6 What type of toilet facility are you using in your household?	1. Flush Toilet (Public Sewerage) 2. Flush Toilet (Septic Tank) 3. Ordinary Toilet 4. Public Toilet 5. No Toilet

Annex E Question on sanitation facility: MICS 2024/25

Question	Response options
WS11. What kind of toilet facility do members of your household usually use? If 'Flush' or 'Pour flush', probe: Where does it flush to? If not possible to determine, ask permission to observe the facility.	**FLUSH / POUR FLUSH**
	Flush to piped sewer system — 11
	Flush to septic tank — 12
	Flush to pit/cesspool — 13
	Flush to open drain — 14
	Flush to don't know where — 18
	PIT LATRINE
	Ventilated improved pit latrine (with slab) — 21
	Single pit latrine with slab — 22
	Twin pit latrine with slab — 24
	Pit latrine without slab / open pit — 23
	Composting toilet — 31
	Container-based sanitation — 32
	Bucket — 41
	No facility / bush / field — 95
	Other (specify) — 96
Beyond question WS11, the NMICS includes additional questions to determine whether households are using safely managed sanitation facilities.	

Annex Tables (Comparison tables for water)

Table AW. 1 Main source of drinking water by regions and province, census 2011- 2021

Area	census year	Improved source					Unimproved source					Total
		Tap/Pipe (inside and out-side dwelling /yard)	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total	Uncovered (well/Dug-well)	Spout	River/Stream	Other	Total	
National	2011	47.8	35.1	2.4		85.4	4.7	5.7	1.1	3.1	14.6	100.0
	2021	57.0	29.8	1.5	4.6	92.9	2.1	3.9	0.4	0.7	7.1	100.0
Ecological belt												
Mountain	2011	76.5	0.0	0.7		77.3	3.0	16.1	2.6	1.0	22.7	100.0
	2021	87.0	0.0	0.5	0.0	87.5	1.2	10.4	0.7	0.2	12.5	100.0
Hill	2011	72.0	3.1	3.5		78.6	6.2	9.2	1.6	4.4	21.4	100.0
	2021	76.5	2.1	1.8	9.7	90.1	2.7	6.0	0.5	0.7	9.9	100.0
Tarai	2011	19.3	72.3	1.7		93.3	3.5	0.7	0.5	2.0	6.7	100.0
	2021	35.8	58.1	1.4	0.7	96.0	1.8	1.3	0.2	0.7	4.0	100.0
Province												
Koshi	2011	44.0	44.1	1.0		89.0	4.7	4.4	0.8	1.2	11.0	100.0
	2021	54.4	40.0	0.8	0.4	95.6	1.6	2.2	0.2	0.3	4.4	100.0
Madhesh	2011	10.5	81.8	0.5		92.7	4.0	0.4	0.3	2.6	7.3	100.0
	2021	22.6	71.8	0.7	0.2	95.3	2.2	1.2	0.1	1.2	4.7	100.0
Bagmati	2011	67.2	8.8	5.3		81.3	4.6	5.5	0.7	7.9	18.7	100.0
	2021	68.0	4.8	2.3	16.9	91.9	2.7	4.0	0.2	1.1	8.1	100.0
Gandaki	2011	80.0	2.3	3.0		85.2	5.0	8.1	0.7	0.9	14.8	100.0
	2021	85.1	1.6	1.2	3.1	90.9	1.6	6.9	0.4	0.3	9.1	100.0
Lumbini	2011	41.9	44.3	2.4		88.7	5.2	3.2	1.3	1.6	11.3	100.0
	2021	57.5	32.8	2.6	1.3	94.1	2.3	2.6	0.4	0.6	5.9	100.0
Karnali	2011	61.4	0.5	1.8		63.6	7.2	24.1	4.0	1.1	36.4	100.0
	2021	80.1	0.4	2.1	0.1	82.7	2.5	13.3	1.2	0.3	17.3	100.0
SudurPashchim	2011	40.3	39.8	1.6		81.8	3.4	10.2	2.8	1.8	18.2	100.0
	2021	53.3	37.1	0.6	0.2	91.2	1.4	6.2	0.9	0.3	8.8	100.0

Area	census year	Improved source					Unimproved source					Total
		Tap/Pipe (inside and out-side dwelling /yard)	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total	Uncovered (well/Dug-well)	Spout	River/Stream	Other	Total	
DEGURBA categories												
Urban	2011											
	2021	60.0	17.9	1.7	15.0	94.7	1.3	2.8	0.1	1.1	5.3	100.0
Peri-urban	2011											
	2021	33.1	60.3	1.6	0.6	95.6	1.8	1.8	0.1	0.8	4.4	100.0
Rural	2011											
	2021	79.8	7.4	1.3	0.1	88.5	3.2	7.2	0.9	0.2	11.5	100.0
Urban Rural Municipalities - 4 Categories												
Metro City	2011	60.1	20.3	4.3		84.7	1.0	2.0	0.1	12.1	15.3	100.0
	2021	57.6	15.0	1.2	21.6	95.4	1.0	2.0	0.1	1.5	4.6	100.0
Sub-metro City	2011	45.9	39.7	4.3		89.8	5.4	1.8	0.9	2.2	10.2	100.0
	2021	60.6	26.7	4.9	1.9	94.0	3.1	1.9	0.3	0.7	6.0	100.0
Urban Munic-ipal	2011	41.8	41.8	2.7		86.3	5.0	5.4	0.9	2.5	13.7	100.0
	2021	52.7	33.8	1.6	4.6	92.7	2.3	4.0	0.3	0.7	7.3	100.0
Rural Munic-ipal	2011	52.5	29.8	1.3		83.5	5.4	8.1	1.8	1.3	16.5	100.0
	2021	62.6	28.6	0.8	0.2	92.2	1.9	4.9	0.5	0.4	7.8	100.0
Urban/Rural Municipalities												
Urban Munic-ipal	2011	61.4	0.5	1.8		63.6	7.2	24.1	4.0	1.1	36.4	100.0
	2021	80.1	0.4	2.1	0.1	82.7	2.5	13.3	1.2	0.3	17.3	100.0
Rural Munic-ipal	2011	40.3	39.8	1.6		81.8	3.4	10.2	2.8	1.8	18.2	100.0
		53.3	37.1	0.6	0.2	91.2	1.4	6.2	0.9	0.3	8.8	100.0

Table AW. 2 Main source of drinking water by districts (Percent of total households), census 2011-2021

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
National	2011	47.8	35.1	2.4		85.4	4.7	5.7	1.1	3.1	14.6	100.0	5,423,297
	2021	57.0	29.8	1.5	4.6	92.9	2.1	3.9	0.4	0.7	7.1	100.0	6,660,841
Koshi	2011	44.0	44.1	1.0		89.0	4.7	4.4	0.8	1.2	11.0	100.0	991,750
	2021	54.4	40.0	0.8	0.4	95.6	1.6	2.2	0.2	0.3	4.4	100.0	1,190,755
Taplejung	2011	90.5	0.0	0.2		90.7	1.8	5.4	0.7	1.3	9.3	100.0	26,471
	2021	96.5		0.1	0.1	96.7	0.8	1.9	0.3	0.3	3.3	100.0	27,776
Sankhu-wasabha	2011	67.6	0.0	1.3		68.9	8.3	20.3	1.8	0.6	31.1	100.0	34,615
	2021	78.8		2.0	0.1	80.9	2.3	15.8	0.8	0.2	19.1	100.0	39,118
Solukhum-bu	2011	88.8	0.0	0.4		89.2	2.9	5.9	1.7	0.3	10.8	100.0	23,758
	2021	94.9		0.4	0.0	95.3	0.8	3.5	0.2	0.1	4.7	100.0	26,239
Okhald-hung	2011	82.6	0.1	1.9		84.6	7.9	4.8	2.0	0.8	15.4	100.0	32,466
	2021	91.5		0.7	0.1	92.2	1.8	4.9	1.0	0.1	7.8	100.0	34,286
Khotang	2011	78.1	0.1	1.9		80.0	8.4	9.4	1.6	0.6	20.0	100.0	42,647
	2021	88.8		1.2	0.3	90.3	3.5	5.6	0.4	0.1	9.7	100.0	41,720
Bhojpur	2011	68.4	0.2	2.5		71.0	10.2	17.4	1.0	0.3	29.0	100.0	39,393
	2021	88.8		1.2	0.0	90.1	2.3	7.2	0.3	0.1	9.9	100.0	38,580
Dhankuta	2011	81.7	0.1	1.8		83.5	8.8	6.1	1.0	0.6	16.5	100.0	37,616
	2021	92.3		1.0	0.1	93.4	2.8	3.3	0.3	0.1	6.6	100.0	37,616

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Terhathum	2011	77.6	0.1	0.9		78.6	5.2	14.9	0.4	1.0	21.4	100.0	22,084
	2021	93.2		0.6	0.0	93.8	1.4	4.6	0.1	0.1	6.2	100.0	21,845
Panchthar	2011	71.5	0.2	1.5		73.2	10.4	13.7	2.1	0.6	26.8	100.0	41,176
	2021	94.3	0.1	0.5	0.0	95.0	1.9	2.4	0.5	0.2	5.0	100.0	42,437
Ilam	2011	73.3	4.7	1.0		79.0	7.8	10.3	1.3	1.6	21.0	100.0	64,477
	2021	85.7	6.0	0.8	0.2	92.7	3.6	2.7	0.7	0.4	7.3	100.0	70,501
Jhapa	2011	21.7	72.8	1.1		95.6	2.7	0.2	0.1	1.3	4.4	100.0	184,384
	2021	40.1	56.8	1.1	0.1	98.1	1.2	0.4	0.0	0.2	1.9	100.0	245,019
Morang	2011	18.9	78.0	0.3		97.3	0.7	0.5	0.3	1.2	2.7	100.0	213,870
	2021	26.9	70.0	0.3	1.3	98.4	0.4	0.6	0.0	0.5	1.6	100.0	272,160
Sunsari	2011	28.8	67.6	0.4		96.8	0.7	0.5	0.2	1.7	3.2	100.0	162,279
	2021	42.3	55.2	0.4	0.2	98.0	0.6	1.0	0.1	0.3	2.0	100.0	212,407
Udayapur	2011	43.4	34.5	1.4		79.3	16.0	1.3	2.2	1.2	20.7	100.0	66,514
	2021	56.2	31.3	2.9	0.2	90.5	6.5	2.3	0.4	0.2	9.5	100.0	81,051
Madhesh	2011	10.5	81.8	0.5		92.7	4.0	0.4	0.3	2.6	7.3	100.0	932,087
	2021	22.6	71.8	0.7	0.2	95.3	2.2	1.2	0.1	1.2	4.7	100.0	1,156,383
Saptari	2011	1.7	94.4	0.3		96.3	1.1	0.1	0.1	2.4	3.7	100.0	121,064
	2021	4.6	93.4	0.4	0.1	98.6	0.7	0.1	0.0	0.5	1.4	100.0	146,816
Siraha	2011	5.5	84.3	0.3		90.1	6.9	0.1	0.6	2.3	9.9	100.0	117,929
	2021	15.7	78.6	1.0	0.3	95.6	2.7	0.5	0.2	1.0	4.4	100.0	148,549

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Dhanusa	2011	13.0	75.1	0.9		89.0	7.5	0.2	0.2	3.1	11.0	100.0	138,225
	2021	15.6	75.3	1.1	0.3	92.3	5.9	0.9	0.1	0.9	7.7	100.0	177,091
Mahottari	2011	14.1	76.3	0.2		90.6	5.8	1.2	0.3	2.1	9.4	100.0	111,298
	2021	30.2	63.2	0.7	0.1	94.3	1.5	1.6	0.0	2.5	5.7	100.0	137,886
Sarlahi	2011	11.8	77.2	1.0		90.0	6.3	0.2	0.5	3.0	10.0	100.0	132,803
	2021	25.7	67.6	1.0	0.2	94.5	3.5	0.8	0.1	1.2	5.5	100.0	164,824
Rautahat	2011	7.0	88.2	0.4		95.5	1.2	0.1	0.1	3.0	4.5	100.0	106,652
	2021	26.8	69.2	0.5	0.2	96.7	0.6	1.4	0.1	1.3	3.3	100.0	137,025
Bara	2011	17.2	78.9	0.3		96.3	1.1	0.2	0.2	2.2	3.7	100.0	108,600
	2021	35.2	60.6	0.3	0.1	96.2	0.8	2.0	0.0	1.0	3.8	100.0	131,179
Parsa	2011	14.4	81.0	0.3		95.7	0.5	1.3	0.1	2.4	4.3	100.0	95,516
	2021	32.9	62.0	0.2	0.3	95.3	0.6	3.0	0.0	1.0	4.7	100.0	113,013
Bagmati	2011	67.2	8.8	5.3		81.3	4.6	5.5	0.7	7.9	18.7	100.0	1,269,144
	2021	68.0	4.8	2.3	16.9	91.9	2.7	4.0	0.2	1.1	8.1	100.0	1,567,917
Dolakha	2011	77.9		0.4		78.3	3.3	16.7	1.2	0.5	21.7	100.0	45,658
	2021	92.9		0.3	0.0	93.2	1.5	4.9	0.2	0.1	6.8	100.0	49,493
Sindh-upalchok	2011	80.7	0.0	1.1		81.8	1.9	14.9	0.6	0.8	18.2	100.0	66,635
	2021	88.4	0.0	0.3	0.1	88.7	1.7	9.1	0.3	0.2	11.3	100.0	71,697
Rasuwa	2011	87.9		0.1		88.0	1.0	9.3	1.1	0.7	12.0	100.0	9,741
	2021	93.7		0.1		93.8	0.7	4.8	0.4	0.2	6.2	100.0	11,131

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Dhading	2011	84.5	0.1	1.3		86.0	4.1	8.4	0.8	0.6	14.0	100.0	73,842
	2021	85.4	0.3	0.6	0.2	86.6	2.1	10.6	0.6	0.1	13.4	100.0	83,622
Nuwakot	2011	87.6	0.1	1.0		88.7	3.8	5.8	0.6	1.1	11.3	100.0	59,194
	2021	87.8		1.3	0.2	89.2	2.2	8.1	0.4	0.1	10.8	100.0	68,646
Kathman-du	2011	62.0	8.0	6.7		76.7	1.3	4.4	0.3	17.3	23.3	100.0	435,544
	2021	55.0Ft-able 4.5	2.6	2.2	35.1	94.9	1.1	2.3		1.6	5.1	100.0	542,892
Bhaktapur	2011	77.9	3.8	7.0		88.7	2.7	4.9	0.1	3.6	11.3	100.0	68,557
	2021	61.5	2.0	5.5	24.0	93.0	2.6	2.7		1.6	7.0	100.0	108,406
Lalitpur	2011	68.6	1.0	9.8		79.3	1.8	4.3	0.2	14.4	20.7	100.0	109,505
	2021	56.3	0.6	2.5	31.6	91.0	2.4	2.8		3.9	9.0	100.0	140,130
Ka-vrepalan-chok	2011	79.1	0.3	6.2		85.6	6.5	5.9	0.7	1.4	14.4	100.0	80,651
	2021	79.8	0.3	4.6	1.8	86.5	4.5	8.1	0.6	0.3	13.5	100.0	91,330
Ramech-hap	2011	79.5	0.1	2.4		82.0	7.8	6.3	2.8	1.1	18.0	100.0	43,883
	2021	91.1		0.9	0.0	92.0	2.8	3.8	1.2	0.1	8.0	100.0	46,466
Sindhuli	2011	58.1	6.4	2.7		67.1	24.2	3.7	4.2	0.7	32.9	100.0	57,544
	2021	68.1	4.6	5.4	0.8	78.8	14.6	5.8	0.7	0.1	21.2	100.0	69,317
Makwan-pur	2011	73.5	5.0	2.4		80.9	13.3	4.1	0.9	0.8	19.1	100.0	86,045
	2021	82.4	5.6	1.5	0.1	89.6	5.9	3.7	0.6	0.2	10.4	100.0	105,620
Chitawan	2011	35.0	49.3	8.0		92.2	5.5	0.5	0.4	1.5	7.8	100.0	132,345
	2021	67.9	27.0	1.3	0.4	96.6	1.7	1.2	0.2	0.2	3.4	100.0	179,167

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Gandaki	2011	80.0	2.3	3.0		85.2	5.0	8.1	0.7	0.9	14.8	100.0	577,682
	2021	85.1	1.6	1.2	3.1	90.9	1.6	6.9	0.4	0.3	9.1	100.0	661,632
Gorkha	2011	62.8	0.0	2.3		65.2	5.1	28.0	1.2	0.4	34.8	100.0	66,458
	2021	76.6		1.1	0.1	77.8	2.0	19.7	0.4	0.1	22.2	100.0	71,729
Manang	2011	97.6				97.6		1.8	0.3	0.3	2.4	100.0	1,448
	2021	98.2				98.2	0.1	1.6	0.1	0.1	1.8	100.0	1,547
Mustang	2011	91.6	0.0	0.0		91.7	0.2	2.3	5.3	0.5	8.3	100.0	3,305
	2021	90.2		0.6	0.0	90.8	0.2	5.5	3.2	0.2	9.2	100.0	3,606
Myagdi	2011	87.4	0.0	0.5		87.9	1.9	8.2	1.5	0.5	12.1	100.0	27,727
	2021	90.8		0.1	0.1	90.9	0.4	8.2	0.4	0.1	9.1	100.0	28,766
Kaski	2011	92.3	0.1	1.0		93.5	1.5	2.8	0.4	1.9	6.5	100.0	125,459
	2021	81.5	0.2	0.5	11.6	93.7	0.7	5.0	0.3	0.4	6.3	100.0	160,416
Lamjung	2011	88.1	0.2	0.9		89.2	2.5	7.4	0.4	0.5	10.8	100.0	42,048
	2021	91.7		0.2	0.2	92.1	1.0	6.0	0.8	0.2	7.9	100.0	44,074
Tanahu	2011	75.0	0.3	5.5		80.8	11.7	6.3	0.5	0.6	19.2	100.0	78,286
	2021	86.3		2.3	0.8	89.3	3.6	6.4	0.5	0.2	10.7	100.0	88,513
Nawal-parasi (East)	2011	58.8	18.6	9.3		86.7	9.3	2.4	0.4	1.2	13.3	100.0	66,915
	2021	80.0	10.9	3.8	0.1	94.7	2.3	2.3	0.3	0.4	5.3	100.0	93,850
Syangja	2011	82.7	0.1	3.9		86.7	5.7	6.7	0.6	0.3	13.3	100.0	68,856
	2021	89.5	0.4	0.7	0.0	90.6	1.4	7.5	0.3	0.2	9.4	100.0	68,923
Parbat	2011	82.5	0.1	0.7		83.2	2.1	13.6	0.6	0.4	16.8	100.0	35,698
	2021	94.1		0.1	0.0	94.2	0.9	4.6	0.1	0.2	5.8	100.0	36,112

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Baglung	2011	88.8	0.1	0.4		89.3	3.3	5.0	1.5	0.8	10.7	100.0	61,482
	2021	91.7	0.1	0.1	1.0	92.9	0.8	5.6	0.5	0.2	7.1	100.0	64,096
Lumbini	2011	41.9	44.3	2.4		88.7	5.2	3.2	1.3	1.6	11.3	100.0	884,757
	2021	57.5	32.8	2.6	1.3	94.1	2.3	2.6	0.4	0.6	5.9	100.0	1,141,345
Rukum (East)	2011	79.1	0.1	0.2		79.3	1.7	14.9	3.8	0.2	20.7	100.0	11,202
	2021	88.1		0.1		88.2	0.7	10.6	0.5	0.0	11.8	100.0	12,878
Rolpa	2011	76.9	0.1	0.5		77.5	8.7	9.2	3.8	0.8	22.5	100.0	43,735
	2021	89.2		0.2	0.0	89.5	2.4	7.2	0.5	0.4	10.5	100.0	52,206
Pyuthan	2011	78.3	0.8	0.8		79.9	8.2	8.0	3.0	0.9	20.1	100.0	47,716
	2021	89.1	0.7	1.5	0.0	91.4	2.1	6.0	0.4	0.1	8.6	100.0	56,195
Gulmi	2011	88.6	0.0	1.5		90.1	4.5	3.7	1.0	0.7	9.9	100.0	64,887
	2021	95.2		0.4	0.0	95.7	1.1	2.6	0.5	0.1	4.3	100.0	66,100
Ar-ghakhan-chi	2011	75.5	1.0	3.9		80.4	8.4	8.7	1.9	0.6	19.6	100.0	46,826
	2021	89.2	1.4	1.2	0.9	92.6	2.2	4.0	1.1	0.1	7.4	100.0	48,449
Palpa	2011	77.3	1.8	2.3		81.3	6.7	8.1	2.6	1.2	18.7	100.0	59,260
	2021	89.1	1.6	1.0	0.1	91.8	2.5	5.3	0.2	0.1	8.2	100.0	64,991
Nawal-parasi (West)	2011	20.2	77.0	0.4		97.6	0.4	0.5	0.0	1.5	2.4	100.0	61,845
	2021	42.6	51.5	0.3	2.2	96.6	0.8	2.0	0.2	0.5	3.4	100.0	82,709
Rupan-dehi	2011	38.4	59.1	0.2		97.7	0.1	0.3	0.0	1.8	2.3	100.0	163,835
	2021	59.8	38.0	0.1	0.5	98.4	0.3	0.9	0.0	0.4	1.6	100.0	238,171

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Kapilbastu	2011	10.2	85.0	0.4		95.6	1.3	0.6	0.2	2.3	4.4	100.0	91,264
	2021	31.1	65.3	0.2	0.8	97.4	0.5	0.7	0.1	1.4	2.6	100.0	121,861
Dang	2011	40.9	14.4	12.7		68.0	21.0	4.6	4.2	2.2	32.0	100.0	116,347
	2021	56.1	12.1	16.0	0.3	84.6	10.2	2.9	1.6	0.7	15.4	100.0	162,266
Banke	2011	14.6	80.5	0.9		96.0	1.3	0.3	0.1	2.2	4.0	100.0	94,693
	2021	36.2	50.9	0.3	7.3	94.7	0.9	3.2	0.0	1.1	5.3	100.0	129,234
Bardiya	2011	7.4	90.4	0.2		98.1	0.3	0.3	0.1	1.2	1.9	100.0	83,147
	2021	28.2	69.4	0.2	0.7	98.5	0.5	0.5	0.0	0.4	1.5	100.0	106,285
Karnali	2011	61.4	0.5	1.8		63.6	7.2	24.1	4.0	1.1	36.4	100.0	298,174
	2021	80.1	0.4	2.1	0.1	82.7	2.5	13.3	1.2	0.3	17.3	100.0	366,037
Dolpa	2011	64.8		0.1		64.9	1.7	18.9	14.2	0.3	35.1	100.0	7,466
	2021	79.1		0.2		79.3	1.6	15.1	3.9	0.1	20.7	100.0	9,380
Mugu	2011	75.3		0.2		75.5	1.2	17.2	5.0	1.1	24.5	100.0	9,600
	2021	62.6		0.0	0.0	62.6	0.3	34.1	2.8	0.1	37.4	100.0	12,430
Humla	2011	69.9		0.1		70.0	0.7	26.9	2.1	0.3	30.0	100.0	9,437
	2021	83.7	0.0	0.0		83.8	0.2	13.9	0.8	1.4	16.2	100.0	11,204
Jumla	2011	80.0		0.1		80.2	0.4	14.8	3.6	1.0	19.8	100.0	19,291
	2021	82.8		0.1		82.8	0.2	15.9	0.9	0.2	17.2	100.0	24,422
Kalikot	2011	58.0		1.0		59.0	1.5	34.8	3.9	0.9	41.0	100.0	23,008
	2021	74.3	0.0	0.2	0.0	74.5	0.9	23.8	0.8	0.1	25.5	100.0	26,770

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Dailekh	2011	51.8	0.1	2.0		53.9	10.5	32.8	1.8	1.0	46.1	100.0	48,915
	2021	79.6		1.0	0.0	80.7	2.3	16.4	0.5	0.1	19.3	100.0	54,594
Jajarkot	2011	56.0	0.1	0.4		56.5	5.6	31.7	5.3	1.0	43.5	100.0	30,468
	2021	84.0		0.2	0.1	84.2	1.0	13.5	0.9	0.3	15.8	100.0	37,453
Rukum (West)	2011	71.5	0.1	0.6		72.2	5.3	19.7	2.3	0.6	27.8	100.0	30,635
	2021	91.6		0.1	0.0	91.6	0.8	7.0	0.5	0.0	8.4	100.0	37,290
Salyan	2011	57.7	0.1	2.5		60.3	12.4	22.1	4.3	0.9	39.7	100.0	46,524
	2021	84.3		1.3	0.0	85.6	3.1	9.9	1.3	0.1	14.4	100.0	54,672
Surkhet	2011	60.9	1.8	3.5		66.2	9.1	18.4	4.5	1.7	33.8	100.0	72,830
	2021	74.9	1.7	6.3	0.4	83.3	5.2	9.5	1.5	0.5	16.7	100.0	97,822
Sudur-Pashchim	2011	40.3	39.8	1.6		81.8	3.4	10.2	2.8	1.8	18.2	100.0	469,703
	2021	53.3	37.1	0.6	0.2	91.2	1.4	6.2	0.9	0.3	8.8	100.0	576,772
Bajura	2011	68.5	0.0	0.3		68.7	3.5	23.5	3.4	0.9	31.3	100.0	24,888
	2021	89.3		0.1	0.0	89.5	0.3	9.4	0.6	0.2	10.5	100.0	28,041
Bajhang	2011	67.1	0.0	1.9		69.0	6.4	17.3	5.9	1.5	31.0	100.0	33,773
	2021	86.3		1.1		87.4	1.3	10.1	0.9	0.2	12.6	100.0	38,025
Darchula	2011	82.6		0.6		83.3	1.7	8.4	3.0	3.6	16.7	100.0	24,604
	2021	93.7		0.5	0.0	94.1	0.9	4.1	0.7	0.2	5.9	100.0	28,381
Baitadi	2011	68.3	0.2	5.1		73.5	9.0	10.3	5.0	2.2	26.5	100.0	45,167
	2021	83.6		1.1	0.0	84.7	3.8	9.7	1.7	0.1	15.3	100.0	49,407

Area	census year	Improved source					Unimproved source					To-tal%	Total house-holds
		Tap/Piped	Tube-well/Hand-pump	Covered (well/Dug-well)	Jar/Bottled	Total Improved	Uncovered (well/ Dug-well)	Spout	River/Stream	Other	Total Unimproved		
Dadeld-hura	2011	70.5	0.2	2.8		73.6	7.0	10.8	5.5	3.0	26.4	100.0	27,023
	2021	85.0	0.7	2.4	0.1	88.2	2.4	7.4	1.8	0.2	11.8	100.0	31,172
Doti	2011	63.5	0.1	2.5		66.1	6.0	19.9	7.0	1.0	33.9	100.0	41,383
	2021	76.6		1.1	0.1	77.8	3.9	14.1	4.1	0.1	22.2	100.0	45,140
Achham	2011	55.5	0.2	4.5		60.2	5.0	32.3	1.8	0.7	39.8	100.0	48,318
	2021	78.0	0.6	0.8	0.1	79.5	2.0	17.2	1.2	0.1	20.5	100.0	49,567
Kailali	2011	12.9	81.0	0.2		94.1	1.1	1.8	1.3	1.7	5.9	100.0	142,413
	2021	30.9	64.2	0.2	0.5	95.9	0.7	2.5	0.4	0.6	4.1	100.0	195,872
Kanchan-pur	2011	9.6	87.1	0.2		96.9	0.1	0.5	0.4	2.0	3.1	100.0	82,134
	2021	19.4	78.6	0.2	0.1	98.3	0.3	0.9	0.1	0.4	1.7	100.0	111,167

Table AW. 3 Use of improved drinking water source, on-premises access and availability in sufficient quantities by, National, Urban/Rural, Province, wealth quintile and household head education, MICS 2019 & 2024/25

Area	Use of improved drinking water sources (Percentage of population using improved sources of drinking water) (MICS Table WS.1.1)		Use of improved drinking water sources on-premises (Percentage of population using improved sources of drinking water on premises (within their dwelling/yard/plot) (MICS Table WS.1.2)		Availability of drinking water in sufficient quantities in the last 12 months (all sources)* (Percentage of population with a water source with sufficient drinking water available when needed in the last 12 months) (MICS Table WS.1.5)		Use of water source with and without affected by any natural hazard in the last 12 months Percentage of population whose water supply was affected by at least one natural hazard or not affected by any. (MICS Table WS1.2S2)	
	2019	2024/25	2019	2024/25	2019	2024/25	Affected	Not-affected
National	97.1	98.2	76.9	90.0	80.3	78.3	13.4	86.6
Urban Rural Municipalities								
Urban	97.3	98.9	80.4	92.0	81.6	80.2	10.7	89.3
Rural	96.7	96.8	69.7	86.1	77.7	74.3	18.7	81.3
Province								
Koshi	97.1	97.9	88.4	93.3	82.8	79.1	13.0	87.0
Rural	97.0	97.5	85.8	93.0	74.4	77.0	17.0	83.0
Urban	97.2	98.2	90.0	93.5	87.9	80.6	10.4	89.6
Madhesh	97.7	99.0	82.8	93.2	93.2	88.5	2.7	97.3
Rural	99.4	97.5	79.0	89.5	96.5	92.2	2.2	97.8
Urban	97.0	99.5	84.2	94.4	91.9	87.3	2.9	97.1
Bagmati	97.3	98.5	74.2	88.7	70.8	73.1	20.1	79.9
Rural	94.8	95.7	58.6	81.6	75.8	58.9	38.9	61.1
Kathmandu Valley Urban	97.7	99.6	77.2	90.1	64.5	77.9	9.6	90.4
Other Urban	98.0	99.0	78.9	91.7	80.0	76.3	22.4	77.6

Area	Use of improved drinking water sources (Percentage of population using improved sources of drinking water) (MICS Table WS.1.1)		Use of improved drinking water sources on-premises (Percentage of population using improved sources of drinking water on premises (within their dwelling/yard/plot) (MICS Table WS.1.2)		Availability of drinking water in sufficient quantities in the last 12 months (all sources)* (Percentage of population with a water source with sufficient drinking water available when needed in the last 12 months) (MICS Table WS.1.5)		Use of water source with and without affected by any natural hazard in the last 12 months Percentage of population whose water supply was affected by at least one natural hazard or not affected by any. (MICS Table WS1.2S2)	
	2019	2024/25	2019	2024/25	2019	2024/25	Affected	Not-affected
Gandaki	96.5	98.6	74.7	92.6	80.1	68.9	18.0	82.0
Rural	95.7	98.8	71.3	90.4	74.9	65.4	22.6	77.4
Urban	97.0	98.5	76.6	93.6	82.9	70.5	15.8	84.2
Lumbini	98.2	98.4	84.2	91.5	89.4	87.3	5.0	95.0
Rural	98.2	98.1	77.4	90.1	84.8	84.5	7.3	92.7
Urban	98.2	98.6	88.8	92.6	92.5	89.6	3.1	96.9
Karnali	94.2	93.9	39.4	77.3	59.5	54.5	34.8	65.2
Rural	93.1	92.1	39.4	72.2	57.6	56.6	33.1	66.9
Urban	95.2	95.5	39.4	81.7	61.2	52.7	36.2	63.8
Sudurpashchim	95.4	98.2	59.8	83.2	67.3	73.3	19.7	80.3
Rural	94.9	95.1	46.2	71.6	60.6	62.0	29.8	70.2
Urban	95.7	99.9	69.8	89.6	72.2	79.6	14.1	85.9
Level of education of household head								
None	96.3	97.6	72.6	88.3	81.0	78.4	12.5	87.5
ECED	97.3	97.7	77.4	87.6	68.9	75.0	17.7	82.3
Basic (Gr 1-8)	97.1	98.2	77.5	88.9	79.8	76.9	15.0	85.0
Grade 1-5	97.6	98.5	76.2	88.6	79.4	76.6	15.9	84.1

Area	Use of improved drinking water sources (Percentage of population using improved sources of drinking water) (MICS Table WS.1.1)		Use of improved drinking water sources on-premises (Percentage of population using improved sources of drinking water on premises (within their dwelling/yard/plot) (MICS Table WS.1.2)		Availability of drinking water in sufficient quantities in the last 12 months (all sources)* (Percentage of population with a water source with sufficient drinking water available when needed in the last 12 months) (MICS Table WS.1.5)		Use of water source with and without affected by any natural hazard in the last 12 months Percentage of population whose water supply was affected by at least one natural hazard or not affected by any. (MICS Table WS1.2S2)	
	2019	2024/25	2019	2024/25	2019	2024/25	Affected	Not-affected
Grade 6-8	97.8	97.8	79.5	89.4	80.5	77.4	13.6	86.4
Secondary (Gr 9-12)	98.2	98.8	80.9	92.9	80.1	78.9	13.0	87.0
Grade 9-10	96.6	98.6	82.1	92.7	79.5	79.1	13.6	86.4
Grade 11-12	98.2	99.1	77.8	93.3	81.8	78.5	11.8	88.2
Higher	100.0	98.6	85.4	94.8	79.7	82.0	11.6	88.4
Wealth index quintile								
Lowest	91.9	94.7	45.4	76.9	59.5	64.6	24.7	75.4
Lower	97.5	98.5	74.7	90.1	84.4	77.2	14.1	85.9
Middle	98.5	98.6	85.3	91.8	90.0	81.6	11.1	88.9
Higher	98.7	99.6	90.2	93.8	89.9	84.5	8.4	91.6
Highest	98.8	99.6	89.0	96.1	77.8	83.4	8.7	91.3

** Water availability from all sources is considered here due to negligible proportion using unimproved sources.*

Table AW. 4 Use of improved drinking water source, on-premises access and availability in sufficient quantities by, Ecological belt and DEGURBA categories, MICS 2019 & 2024/25

Area	Use of improved drinking water sources (Percentage of population using improved sources of drinking water) (MICS Table WS.1.1)		Use of improved drinking water sources on premises (Percentage of population using improved sources of drinking water on premises (within their dwelling/yard/plot) (MICS Table WS.1.2)		Availability of drinking water in sufficient quantities in the last 12 months (all sources)* (Percentage of household members with a water source with sufficient drinking water available when needed in the last 12 months) (MICS Table WS.1.5)		Use of water source with and without affected by any natural hazard in the last 12 months Percentage of population whose water supply was affected by at least one or not affected by any natural hazard (MICS Table WS.1.2S2)	
	2019	2024/25	2019	2024/25	2019	2024/25	Affected	Not-affected
Total	97.1	98.2	76.9	90.0	80.3	78.3	13.4	86.6
Ecological belt								
Mountain	98.2	96.0	53.2	76.3	58.2	55.3	34.0	66.0
Hill	95.5	97.7	67.7	87.9	67.4	71.1	20.4	79.6
Tarai	98.4	99.0	88.2	93.2	94.8	87.7	4.5	95.5
DEGURBA classification								
Urban	98.9	99.5	83.6	92.0	78.7	79.9	9.5	90.5
Peri-urban	97.5	98.9	87.7	92.5	93.1	88.1	5.5	94.5
Rural	95.0	96.3	59.5	84.5	67.9	64.5	26.6	73.4
DEGURBA classification by Ecological Belt								
Mountain	98.2	96.0	53.2	76.3	58.2	55.3	34.0	66.0
Urban	99.6	99.2	83.1	82.3	37.9	68.2	10.9	14.1
Peri-urban	-	60.4	-	0.0	-	42.9	4.4	25.6
Rural	98.1	96.1	50.4	76.6	60.1	52.6	19.1	16.7

Area	Use of improved drinking water sources (Percentage of population using improved sources of drinking water) (MICS Table WS.1.1)		Use of improved drinking water sources on premises (Percentage of population using improved sources of drinking water on premises (within their dwelling/yard/plot) (MICS Table WS.1.2)		Availability of drinking water in sufficient quantities in the last 12 months (all sources)* (Percentage of household members with a water source with sufficient drinking water available when needed in the last 12 months) (MICS Table WS.1.5)		Use of water source with and without affected by any natural hazard in the last 12 months Percentage of population whose water supply was affected by at least one or not affected by any natural hazard (MICS Table WS.1.2S2)	
	2019	2024/25	2019	2024/25	2019	2024/25	Affected	Not-affected
Hill	95.5	97.7	67.7	87.9	67.4	71.1	20.4	79.6
Urban	98.3	99.2	74.8	89.5	67.2	76.6	7.2	4.3
Peri-urban	95.1	98.9	81.2	90.7	79.9	78.4	7.4	6.6
Rural	93.5	96.4	59.3	86.0	64.7	65.2	13.6	11.3
Tarai	98.4	97.9	88.2	93.2	94.8	87.7	4.5	95.5
Urban	99.8	99.9	96.2	96.2	96.9	85.4	2.7	1.5
Peri-urban	97.9	99.2	88.7	93.2	95.3	90.3	1.4	1.8
Rural	98.0	95.8	69.3	85.3	87.7	73.8	9.3	3.8
DEGURBA classification by Province								
Koshi	97.1	97.9	88.4	93.3	82.8	79.1	13.0	87.0
Urban	99.5	99.2	95.2	96.9	90.2	81.7	9.8	90.2
Peri-urban	99.0	95.8	94.7	96.2	97.2	87.8	6.8	93.2
Rural	94.0	97.9	78.9	89.1	64.6	70.4	20.0	80.0
Madhesh	97.7	99.0	82.8	93.2	93.2	88.5	2.7	97.3
Urban	99.4	100.0	95.1	95.1	97.4	82.3	5.4	94.6
Peri-urban	96.6	98.8	81.4	93.6	92.8	91.3	1.4	98.6
Rural	100.0	100.0	46.9	81.2	80.0	76.9	9.3	90.7
Bagmati	97.3	98.5	74.2	88.7	70.8	73.1	20.1	79.9
Urban	98.8	99.5	77.5	89.7	66.8	78.4	10.7	89.3
Peri-urban	94.7	98.6	86.3	87.0	80.2	83.4	15.7	84.3
Rural	95.4	97.0	57.4	86.6	73.5	58.7	38.5	61.5

Area	Use of improved drinking water sources (Percentage of population using improved sources of drinking water) (MICS Table WS.1.1)		Use of improved drinking water sources on premises (Percentage of population using improved sources of drinking water on premises (within their dwelling/yard/plot) (MICS Table WS.1.2)		Availability of drinking water in sufficient quantities in the last 12 months (all sources)* (Percentage of household members with a water source with sufficient drinking water available when needed in the last 12 months) (MICS Table WS.1.5)		Use of water source with and without affected by any natural hazard in the last 12 months Percentage of population whose water supply was affected by at least one or not affected by any natural hazard (MICS Table WS.1.2S2)	
	2019	2024/25	2019	2024/25	2019	2024/25	Affected	Not-affected
Gandaki	96.5	98.6	74.7	92.6	80.1	68.9	18.0	82.0
Urban	98.2	98.9	79.3	87.8	82.0	80.5	5.7	94.3
Peri-urban	92.4	99.1	72.6	93.9	86.5	72.0	16.8	83.2
Rural	96.8	98.1	72.5	89.3	76.9	61.0	24.9	75.1
Lumbini	98.2	98.4	84.2	91.5	89.4	87.3	5.0	95.0
Urban	100.0	100.0	93.4	96.5	93.4	88.9	3.3	96.7
Peri-urban	98.9	99.0	91.2	92.2	96.4	91.8	2.2	97.8
Rural	96.2	95.7	68.5	86.0	76.2	75.3	12.7	87.3
Karnali	94.2	93.9	39.4	77.3	59.5	54.5	34.8	65.2
Urban	98.4	95.2	62.4	78.6	65.3	52.0	31.7	68.3
Peri-urban	100.0	97.9	85.5	89.7	77.1	43.5	48.8	51.2
Rural	93.2	93.3	32.7	76.1	57.3	55.9	34.3	65.7
Sudurpashchim	95.4	98.2	59.8	83.2	67.3	73.3	19.7	80.3
Urban	96.4	99.7	72.4	93.7	68.6	79.1	14.0	86.0
Peri-urban	99.6	98.4	98.1	85.7	98.4	85.9	7.0	93.0
Rural	93.7	97.5	43.9	77.3	56.5	62.5	30.5	69.5

** Water availability from all sources is considered here due to negligible proportion using unimproved sources.*

Table AW. 5 Percent distributions of the main reasons households were unable to access water in sufficient quantities when needed the last time it happened in the last 12 months by, national, urban/rural, province, household head education, wealth quintile and source, 2024/25

Area	Main reason that the household was unable to access water in sufficient quantities the last time it happened in the last 12 months (MICS Table WS.1.5S)						
	Source not functional	Source not accessible	Water not available	Water too expensive	Other	DK/ Miss-ing	Total
National	40.2	43.6	0.4	6.5	8.0	1.4	100.0
Area of residence							
Urban	38.6	43.0	0.6	7.1	8.9	1.9	100.0
Rural	42.5	44.5	0.1	5.5	6.7	0.6	100.0
Province							
Koshi	47.2	36.3	1.5	1.7	10.3	3.0	100.0
Rural	39.4	43.4	0.3	0.0	15.1	1.7	100.0
Urban	52.6	31.3	2.2	2.9	7.0	4.0	100.0
Madhesh	13.4	59.5	0.0	18.2	5.4	3.5	100.0
Rural	17.3	49.6	0.0	28.9	4.2	0.0	100.0
Urban	12.6	61.8	0.0	15.7	5.7	4.2	100.0
Bagmati	54.1	38.3	0.4	3.7	3.5	0.0	100.0
Rural	64.1	33.3	0.0	2.2	0.4	0.0	100.0
Kathmandu Valley Urban	47.2	33.0	1.4	6.0	12.3	0.1	100.0
Other Urban	47.1	48.8	0.0	3.8	0.4	0.0	100.0
Gandaki	37.4	41.5	0.0	11.1	10.0	0.1	100.0
Rural	32.9	50.7	0.0	10.4	6.0	0.0	100.0
Urban	40.4	35.3	0.0	11.6	12.7	0.1	100.0
Lumbini	27.7	52.8	0.0	2.0	16.0	1.6	100.0
Rural	28.7	61.1	0.0	1.8	8.4	0.0	100.0
Urban	26.5	43.3	0.0	2.1	24.7	3.4	100.0
Karnali	29.2	53.3	0.4	2.3	14.3	0.5	100.0
Rural	32.8	46.7	0.5	3.6	16.3	0.0	100.0

Area	Main reason that the household was unable to access water in sufficient quantities the last time it happened in the last 12 months (MICS Table WS.1.5S)						
	Source not functional	Source not accessible	Water not available	Water too expensive	Other	DK/ Miss-ing	Total
Urban	26.5	58.2	0.4	1.2	12.7	0.9	100.0
Sudurpashchim	50.6	32.6	0.0	12.6	1.9	2.4	100.0
Rural	42.1	42.8	0.0	11.7	0.6	2.8	100.0
Urban	58.8	22.6	0.0	13.4	3.1	2.1	100.0
Level of education of household head							
None	36.5	45.5	0.3	10.0	6.9	0.8	100.0
ECED	42.7	22.7	20.4	0.0	14.1	0.0	100.0
Basic (Gr 1-8)	42.9	42.5	0.2	5.5	6.8	2.1	100.0
Grade 1-5	42.0	44.5	0.1	5.2	4.8	3.3	100.0
Grade 6-8	44.2	39.2	0.3	6.1	10.0	0.3	100.0
Secondary (Gr 9-12)	42.1	42.6	0.3	3.1	10.7	1.3	100.0
Grade 9-10	45.6	42.3	0.0	1.9	10.2	0.0	100.0
Grade 11-12	35.3	43.2	0.8	5.4	11.7	3.6	100.0
Higher	35.2	47.5	0.0	6.6	10.2	0.4	100.0
Wealth index quintile							
Lowest	39.3	46.3	0.1	6.4	7.4	0.4	100.0
Lower	35.4	50.8	0.3	7.9	5.2	0.4	100.0
Middle	46.1	37.3	1.0	7.7	6.9	1.1	100.0
Higher	42.8	37.6	0.3	6.4	12.6	0.3	100.0
Highest	39.0	41.2	0.4	3.0	10.3	6.1	100.0
Type of water sources							
Improved sources	40.7	43.2	0.4	6.6	7.7	1.4	100.0
Piped water	45.8	40.3	0.4	5.0	6.9	1.6	100.0
Tube well/Borehole	18.5	54.4	0.0	16.4	10.0	0.8	100.0
Protected well or spring	23.0	55.8	0.0	0.0	21.2	0.0	100.0
Unimproved sources	21.6	56.1	0.0	3.7	18.7	0.0	100.0
Unprotected well or spring	17.7	61.0	0.0	4.1	17.2	0.0	100.0
Surface water	(54.9)	(19.5)	0.0	0.0	(25.7)	0.0	100.0

(): Figures based on fewer than 25 unweighted cases

Table AW. 6 Percent distributions of the main reasons households were unable to access water in sufficient quantities when needed the last time it happened in the last 12 months by, ecological belt, DEGURBA categories, MICS 2024/25

Area	Main reason that the household was unable to access water in sufficient quantities the last time it happened in the last 12 months (MICS Table WS.1.5S)						
	Source not functional	Source not accessible	Water not available	Water too expensive	Other	DK/ Miss-ing	Total
National	40.2	43.6	0.4	6.5	8.0	1.4	100.0
Ecological belt							
Mountain	53.1	38.5	0.5	4.6	2.8	0.5	100.0
Hill	43.1	44.0	0.5	4.4	7.5	0.5	100.0
Tarai	29.2	44.9	0.1	11.3	11.2	3.3	100.0
DEGURBA classification							
Urban	38.9	44.8	0.8	3.8	7.6	4.1	100.0
Peri-urban	27.4	46.9	0.0	11.7	13.6	0.4	100.0
Rural	46.4	41.6	0.3	5.4	5.8	0.5	100.0
DEGURBA by ecological belt classification							
Mountain	53.1	38.5	0.5	4.6	2.8	0.5	100.0
Urban	43.8	48.8	0.0	5.1	2.2	0.0	100.0
Peri-urban							
Rural	55.5	35.8	0.6	4.5	3.0	0.6	100.0
Hill	43.1	44.0	0.5	4.4	7.5	0.5	100.0
Urban	43.2	40.2	1.5	3.6	10.6	0.9	100.0
Peri-urban	41.4	43.9	0.0	4.7	10.1	0.0	100.0
Rural	43.4	45.4	0.2	4.6	5.8	0.5	100.0
Tarai	29.2	44.9	0.1	11.3	11.2	3.3	100.0
Urban	31.1	50.7	0.0	3.8	4.5	9.9	100.0
Peri-urban	21.2	48.0	0.0	15.0	15.2	0.6	100.0
Rural	49.7	26.1	0.4	12.9	10.7	0.2	100.0
DEGURBA by Province							
Koshi	47.2	36.3	1.5	1.7	10.3	3.0	100.0
Urban	55.0	26.4	4.4	0.4	4.3	9.5	100.0
Peri-urban	55.6	29.0	0.0	3.9	11.5	0.0	100.0

Area	Main reason that the household was unable to access water in sufficient quantities the last time it happened in the last 12 months (MICS Table WS.1.5S)						
	Source not functional	Source not accessible	Water not available	Water too expensive	Other	DK/ Miss-ing	Total
Rural	40.1	43.9	0.7	1.4	12.6	1.3	100.0
Madhesh	13.4	59.5	0.0	18.2	5.4	3.5	100.0
Urban	7.5	76.1	0.0	5.7	2.2	8.5	100.0
Peri-urban	8.0	54.0	0.0	29.2	8.8	0.0	100.0
Rural	76.4	12.0	0.0	11.6	0.0	0.0	100.0
Bagmati	54.1	38.3	0.4	3.7	3.5	0.0	100.0
Urban	45.0	41.6	0.4	3.9	8.9	0.1	100.0
Peri-urban	48.7	40.3	0.0	6.8	4.2	0.0	100.0
Rural	60.4	36.0	0.4	3.0	0.3	0.0	100.0
Gandaki	37.4	41.5	0.0	11.1	10.0	0.1	100.0
Urban	46.0	34.9	0.0	5.0	14.1	0.0	100.0
Peri-urban	46.6	34.9	0.0	4.0	14.5	0.0	100.0
Rural	32.0	45.4	0.0	15.1	7.4	0.1	100.0
Lumbini	27.7	52.8	0.0	2.0	16.0	1.6	100.0
Urban	33.8	34.0	0.0	0.0	20.7	11.4	100.0
Peri-urban	12.8	55.2	0.0	2.3	29.7	0.0	100.0
Rural	41.0	56.3	0.0	2.3	0.4	0.0	100.0
Karnali	29.2	53.3	0.4	2.3	14.3	0.5	100.0
Urban	18.9	66.7	0.0	1.5	12.9	0.0	100.0
Peri-urban	7.4	72.6	0.0	0.0	20.0	0.0	100.0
Rural	33.8	48.1	0.6	2.7	14.0	0.7	100.0
Sudurpashchim	50.6	32.6	0.0	12.6	1.9	2.4	100.0
Urban	74.2	11.9	0.0	10.1	0.0	3.8	100.0
Peri-urban	18.0	52.2	0.0	19.2	6.2	4.3	100.0
Rural	55.1	32.0	0.0	10.9	0.8	1.2	100.0

Table AW. 7 Percentage of population whose water supply was affected by the type of natural hazard, in the last 12 months, by national, urban/rural, household head education, wealth quintile, and type of water source, MICS 2024/25

Area	Natural hazards that affected the water supply in the last 12 months (MICS Table WS.1.2S)				
	Flood	Drought	Landslide	Other	Affected by at least one natural hazard
National	6.9	5.6	5.6	0.6	13.4
Area of residence					
Urban	5.6	4.7	4.2	0.6	10.7
Rural	9.6	7.4	8.5	0.5	18.7
Province					
Koshi	7.5	5.3	4.7	0.5	13.0
Rural	10.2	6.3	6.3	0.1	17.0
Urban	5.7	4.6	3.7	0.7	10.4
Madhesh	1.5	1.1	0.1	0.1	2.7
Rural	1.0	1.4	0.0	0.2	2.2
Urban	1.7	1.0	0.1	0.1	2.9
Bagmati	12.8	8.4	9.9	0.3	20.1
Rural	24.0	15.7	21.3	0.4	38.9
Kathmandu Valley Urban	6.8	2.6	3.0	0.4	9.6
Other Urban	13.8	12.1	12.2	0.3	22.4
Gandaki	10.0	4.2	9.7	0.9	18.0
Rural	13.1	4.5	10.6	1.2	22.6
Urban	8.6	4.0	9.3	0.7	15.8
Lumbini	1.5	3.1	1.1	0.2	5.0
Rural	2.8	3.5	2.5	0.2	7.3
Urban	0.4	2.9	0.0	0.2	3.1
Karnali	13.3	19.4	14.5	3.2	34.8
Rural	15.1	14.5	16.2	2.1	33.1
Urban	11.8	23.5	13.1	4.2	36.2
Sudurpashchim	7.3	6.8	8.5	1.0	19.7

Area	Natural hazards that affected the water supply in the last 12 months (MICS Table WS.1.2S)				
	Flood	Drought	Landslide	Other	Affected by at least one natural hazard
Rural	9.0	12.7	13.6	0.5	29.8
Urban	6.4	3.5	5.7	1.4	14.1
Level of education of household head					
None	6.1	5.8	5.1	0.4	12.5
ECED	5.0	13.2	4.4	1.3	17.7
Basic (Gr 1-8)	8.0	6.2	6.4	0.4	15.0
Grade 1-5	8.9	6.8	6.9	0.3	15.9
Grade 6-8	6.6	5.3	5.8	0.4	13.6
Secondary (Gr 9-12)	7.0	4.9	5.9	0.9	13.0
Grade 9-10	7.0	5.1	6.7	1.1	13.6
Grade 11-12	7.1	4.3	4.4	0.4	11.8
Higher	6.5	4.2	3.7	1.2	11.6
Wealth index quintile					
Lowest	11.6	11.7	11.5	1.0	24.6
Lower	6.7	6.2	6.1	0.6	14.1
Middle	6.1	4.5	4.3	0.3	11.1
Higher	5.2	2.4	3.5	0.4	8.4
Highest	5.1	3.4	2.7	0.6	8.7
Type of water sources					
Improved sources	6.8	5.5	5.6	0.6	13.2
Piped water	10.8	8.4	9.9	0.8	20.7
Tube well/Borehole	1.3	1.7	0.1	0.2	3.2
Protected well or spring	7.0	5.4	3.4	0.8	11.9
Unimproved sources	14.1	12.3	6.2	1.6	26.3
Unprotected well or spring	14.8	10.8	6.5	1.0	24.7
Surface water	15.2	27.2	8.1	10.0	47.9

Table AW. 8 Percentage of population whose water supply was affected by the type of natural hazard, in the last 12 months, by ecological belt, DEGURBA categories, wealth quintile, household head education and type of source, MICS 2024/25

Area	Natural hazards that affected the water supply in the last 12 months (MICS Table WS.1.2S)				
	Flood	Drought	Landslide	Other	Affected by at least one natural hazard
National	6.9	5.6	5.6	0.6	13.4
Ecological belt					
Mountain	17.3	16.4	18.4	1.0	34.0
Hill	10.5	8.3	9.5	0.8	20.4
Tarai	2.4	1.9	0.5	0.4	4.5
DEGURBA classification					
Urban	5.5	3.6	3.0	0.4	9.5
Peri-urban	2.4	2.7	1.7	0.3	5.5
Rural	13.9	11.1	12.8	1.0	26.6
DEGURBA by ecological belt					
Mountain	17.3	16.4	18.4	1.0	34.0
Urban	10.9	14.1	9.5	1.7	26.7
Peri-urban	4.4	25.6	0.0	0.0	25.6
Rural	19.1	16.7	20.9	0.8	35.8
Hill	10.5	8.3	9.5	0.8	20.4
Urban	7.2	4.3	4.4	0.3	11.8
Peri-urban	7.4	6.6	8.3	0.8	16.5
Rural	13.6	11.3	13.2	1.1	27.3
Tarai	2.4	1.9	0.5	0.4	4.5
Urban	2.7	1.5	0.6	0.5	4.8
Peri-urban	1.4	1.8	0.3	0.2	3.2
Rural	9.3	3.8	2.1	0.9	
DEGURBA by Province					
Koshi	7.5	5.3	4.7	0.5	13.0
Urban	6.1	2.5	2.7	0.5	9.8
Peri-urban	4.0	3.4	1.5	0.9	6.8

Area	Natural hazards that affected the water supply in the last 12 months (MICS Table WS.1.2S)				
	Flood	Drought	Landslide	Other	Affected by at least one natural hazard
Rural	11.3	8.4	8.5	0.1	20.0
Madhesh	1.5	1.1	0.1	0.1	2.7
Urban	3.0	2.1	0.0	0.3	5.4
Peri-urban	0.8	0.6	0.1	0.0	1.4
Rural	5.2	4.8	0.0	0.8	9.3
Bagmati	12.8	8.4	9.9	0.3	20.1
Urban	7.5	3.8	3.1	0.4	10.7
Peri-urban	9.3	5.9	9.1	0.5	15.7
Rural	23.8	17.8	22.0	0.2	38.5
Gandaki	10.0	4.2	9.7	0.9	18.0
Urban	4.2	1.3	2.9	0.0	5.7
Peri-urban	6.9	4.0	8.3	1.0	16.8
Rural	14.9	5.7	14.1	1.2	24.9
Lumbini	1.5	3.1	1.1	0.2	5.0
Urban	0.0	2.4	0.9	0.6	3.3
Peri-urban	0.1	2.1	0.0	0.0	2.2
Rural	6.0	6.1	3.9	0.4	12.7
Karnali	13.3	19.4	14.5	3.2	34.8
Urban	7.4	21.4	14.1	1.6	31.7
Peri-urban	4.9	41.3	13.4	3.0	48.8
Rural	15.3	17.2	14.7	3.6	34.3
Sudoorpashchim	7.3	6.8	8.5	1.0	19.7
Urban	7.3	2.6	8.2	0.7	14.0
Peri-urban	2.8	3.7	0.0	0.7	7.0
Rural	10.3	10.5	14.4	1.4	30.5
Level of education of household head					
None	6.1	5.8	5.1	0.4	12.5
ECED	5.0	13.2	4.4	1.3	17.7

Area	Natural hazards that affected the water supply in the last 12 months (MICS Table WS.1.2S)				
	Flood	Drought	Landslide	Other	Affected by at least one natural hazard
Basic (Gr 1-8)	8.0	6.2	6.4	0.4	15.0
Lower Basic (Gr 1-5)	8.9	6.8	6.9	0.3	15.9
Upper Basic (Gr 6-8)	6.7	5.3	5.8	0.4	13.6
Secondary (Gr 9-12)	7.0	4.9	5.9	0.9	13.0
Lower Secondary (Gr 9-10)	7.0	5.1	6.7	1.1	13.6
Upper Secondary (Gr 11-12)	7.1	4.3	4.4	0.4	11.8
Higher	6.5	4.2	3.7	1.2	11.6
Wealth quintile index					
Lowest	11.6	11.7	11.5	1.0	24.7
Lower	6.7	6.2	6.1	0.6	14.1
Middle	6.1	4.5	4.3	0.3	11.1
Higher	5.2	2.4	3.5	0.4	8.4
Highest	5.1	3.4	2.7	0.6	8.7
Type of water Source					
Improved sources	6.8	5.5	5.6	0.6	13.2
Piped water	10.8	8.4	9.9	0.8	20.7
Tube well/Borehole	1.3	1.7	0.1	0.2	3.2
Protected well or spring	7.0	5.4	3.4	0.8	11.9
Unimproved sources	14.1	12.3	6.2	1.6	26.3
Unprotected well or spring	14.8	10.8	6.5	1.0	24.7

Table AW. 9 Drinking water at source and household with faecal contamination and arsenic level, by National, Province, Urban/Rural, wealth quintile and education of household head, MICS 2019 & 2024/25

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
National	75.3	46.1	24.7	53.9	85.1	61.2	2.8	3.9	0.5	1.0
Urban-Rural Municipalities										
Urban	72.1	39.6	27.9	60.4	82.3	57.0	3.3	3.8	0.6	1.2
Rural	81.8	58.9	18.2	41.1	90.9	69.4	1.6	4.0	0.2	0.7
Province										
Koshi	60.7	58.2	39.3	41.8	81.8	62.1	0.2	3.2	0.0	0.0
Rural	71.2	76.4	28.8	23.6	82.2	73.0	0.0	4.7	0.0	0.0
Urban	54.3	45.3	45.7	54.7	81.6	54.4	0.4	2.2	0.0	0.0
Madhesh	67.4	28.3	32.6	71.7	89.8	65.0	9.8	9.5	2.1	3.8
Rural	63.3	24.5	36.7	75.5	94.5	56.0	8.7	7.5	0.8	2.7
Urban	69.1	29.5	30.9	70.5	88.0	67.9	10.3	10.1	2.6	4.2
Bagmati	76.7	42.9	23.3	57.1	73.1	47.4	0.3	0.6	0.3	0.2
Rural	93.9	65.0	6.1	35	95.9	70.6	0.0	2.2	0.0	0.7
Kathmandu Valley Urban	72.3	24.0	27.7	76	60.3	23.2	0.5	0.3	0.5	0.0

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Other Urban	72.9	52.1	27.1	47.9	85.2	65.3	0.0	0.0	0.0	0.0
Gandaki	85.1	68.3	14.9	31.7	82.9	75.8	0.3	0.1	0.3	0.0
Rural	95.8	85.1	4.2	14.9	89.2	86.0	0.0	0.3	0.0	0.0
Urban	79.7	59.9	20.3	40.1	79.6	70.7	0.4	0.0	0.4	0.0
Lumbini	82.6	41.3	17.4	58.7	90.9	61.0	1.1	2.3	0.0	0.4
Rural	85.1	49.2	14.9	50.8	87.9	67.5	0.0	2.0	0.0	0.0
Urban	80.9	34.8	19.1	65.2	93.0	55.7	1.9	2.6	0.0	0.7
Karnali	89.1	70.0	10.9	30	90.3	74.3	0.0	0.9	0.0	0.0
Rural	89.7	66.9	10.3	33.1	95.1	74.0	0.0	1.1	0.0	0.0
Urban	88.6	72.7	11.4	27.3	85.9	74.6	0.0	0.8	0.0	0.0
Sudoorpashchim	83.2	43.3	16.8	56.7	98.9	61.6	6.3	8.4	0.4	1.5
Rural	90.4	56.7	9.6	43.3	100	66.0	1.9	10.9	0.9	2.5
Urban	78.1	36.1	21.9	63.9	98.1	59.2	9.3	7.1	0.0	0.9
Level of education of household head										
None	79	48.1	21	51.9	91.3	67.3	3.6	4.8	0.8	2.1
ECED	74.0	35.9	26	64.1	-	36.6		8.1		0.0

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Basic (Gr 1-8)	75.9	49.4	24.1	50.6	88	63.6	1.6	3.4	0.5	0.6
Lower Basic (Gr 1-5)	73.6	50.2	26.4	49.8	89.2	63.7	1.5	3.3	0.2	0.5
Upper Basic (Gr 6-8)	79.9	48.3	20.1	51.7	86	63.6	1.7	3.5	0.9	0.7
Secondary (Gr 9-12)	71.6	43.7	28.4	56.3	77.7	57.6	3.1	2.9	0.0	0.4
Lower Secondary (Gr 9-10)	73.3	44.1	26.7	55.9	75.8	57.6	4.2	4.0	0.0	0.4
Upper Secondary (Gr 11-12)	67.3	42.9	32.7	57.1	82.8	57.4	0.5	0.5	0.0	0.3
Higher	63.2	29.6	36.8	70.4	60	31.3	2.6	4.0	1.0	0.0
Wealth index quintile										
Lowest	89.7	67.4	10.3	32.6	95.8	79.5	0.7	2.7	0.4	0.4
Lower	79.5	54.6	20.5	45.4	91.6	71.7	2.8	4.5	0.2	1.4
Middle	72.3	43.0	27.7	57	87.9	63.2	4.6	7.0	1.1	1.9
Higher	69.8	37.8	30.2	62.2	86.2	54.1	3.1	3.5	0.2	0.4
Highest	64.5	28.3	35.5	71.7	64.5	38.8	2.7	1.7	0.6	1.0

Table AW. 10 Drinking water at source and household with faecal contamination and arsenic level, by ecological belt, DEGURBA categories and type of source, MICS 2019 & 2024/25

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6)		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
National	75.3	46.1	24.7	53.9	85.1	61.2	2.8	3.9	0.5	1.0
Urban-Rural Municipalities										
Urban	69.4	31.4	30.6	68.6	74.6	44.0	4.5	2.2	0.8	1.2
Peri-urban	67.2	35.4	32.8	64.6	86.8	59.8	3.8	7.4	0.7	1.7
Rural	89.0	71.0	11.0	29.0	92.3	76.9	0.1	0.9	0.0	0.1
Ecological Belt										
Mountain	86.1	70.1	13.9	29.9	93.4	72.2	0.0	0.5	0.2	0.0
Hill	84.5	58.9	15.5	41.1	80.5	62.1	0.2	0.4	0.9	0.1
Tarai	65.9	31.6	34.1	68.4	88.4	59.0	5.4	7.4	0.5	2.0
Ecological Belt by DEGURBA classification										
Mountain	86.1	70.1	13.9	29.9	93.4	72.2	0.0	0.5	0.0	0.0
Urban	89.5	62.6	10.5	37.4	95.8	63.8	0.0	0.0	0.0	0.0
Peri-urban	-	(100.0)	-	0.0	-	76.9	-	0.0	-	0.0

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6)		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Rural	85.8	71.3	14.2	28.7	93.2	74.2	0.0	0.6	0.0	0.0
Hill	84.5	58.9	15.5	41.1	80.5	62.1	0.2	0.4	0.2	0.1
Urban	73.6	30.7	26.4	69.3	65.3	35.5	0.3	0.3	0.3	0.0
Peri-urban	86.4	59.8	13.6	40.2	78.4	64.5	0.5	0.0	0.5	0.0
Rural	92.0	75.4	8.0	24.6	92.5	78.1	0.0	0.7	0.0	0.2
Tarai	65.9	31.6	34.1	68.4	88.4	59.0	5.4	7.4	0.9	2.0
Urban	62.5	29.0	37.5	71.0	88.0	53.0	10.5	4.9	1.6	2.8
Peri-urban	64.5	29.9	35.5	70.1	88.2	58.8	4.3	9.0	0.7	2.0
Rural	80.1	49.4	19.9	50.6	90.8	74.1	0.8	2.1	0.0	0.0
Province										
Koshi	60.7	58.2	39.3	41.8	81.8	62.1	0.2	3.2	0.0	0.0
Urban	64.4	34.6	35.6	65.4	93.4	45.6	0.0	0.0	0.0	0.0
Peri-urban	35.0	39.5	65.0	60.5	69.1	52.9	0.6	7.4	0.0	0.0
Rural	85.8	84.8	14.2	15.2	89.7	77.4	0.0	1.3	0.0	0.0
Madhesh	67.4	28.3	32.6	71.7	89.8	65.0	9.8	9.5	2.1	3.8
Urban	67.8	21.1	32.2	78.9	82.6	62.4	17.6	6.3	3.6	

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6)		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Peri-urban	69.8	29.5	30.2	70.5	94.6	64.2	7.7	11.1	1.7	
Rural	47.7	41.1	52.3	58.9	76.8	86.0	0.0	0.0	0.0	
Bagmati	76.7	42.9	23.3	57.1	73.1	47.4	0.3	0.6	0.3	0.2
Urban	68.3	29.0	31.7	71.0	60.9	30.5	0.4	0.3	0.4	0.0
Peri-urban	84.6	50.3	15.4	49.7	84.6	64.1	0.0	0.0	0.0	0.0
Rural	92.2	60.2	7.8	39.8	96.5	66.5	0.0	1.6	0.0	0.5
Gandaki	85.1	68.3	14.9	31.7	82.9	75.8	0.3	0.1	0.3	0.0
Urban	74.8	37.7	25.2	62.3	75.2	50.5	0.0	0.5	0.0	0.0
Peri-urban	81.9	69.8	18.1	30.2	73.9	74.5	1.6	0.0	1.6	0.0
Rural	92.8	82.5	7.2	17.5	90.7	88.8	0.0	0.0	0.0	0.0
Lumbini	82.6	41.3	17.4	58.7	90.9	61.0	1.1	2.3	0.0	0.4
Urban	72.7	33.7	27.3	66.3	93.9	43.5	4.6	6.1	0.0	0.8
Peri-urban	78.4	30.9	21.6	69.1	91.6	56.5	0.8	2.3	0.0	0.5
Rural	93.9	71.6	6.1	28.4	88.5	83.9	0.0	0.0	0.0	0.0
Karnali	89.1	70.0	10.9	30.0	90.3	74.3	0.0	0.9	0.0	0.0
Urban	82.4	61.0	17.6	39.0	83.8	66.6	0.0	0.0	0.0	0.0
Peri-urban	100.0	67.5	0.0	32.5	52.5	54.1	0.0	0.0	0.0	0.0

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6)		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Rural	89.1	72.0	10.9	28.0	94.7	78.0	0.0	1.3	0.0	0.0
Sudoor-pash-chim	83.2	43.3	16.8	56.7	98.9	61.6	6.3	8.4	0.4	1.5
Urban	75.3	39.7	24.7	60.3	100.0	60.8	12.5	4.6	0.0	0.0
Peri-urban	61.9	18.2	38.1	81.8	97.0	46.9	16.8	23.4	1.8	4.8
Rural	92.9	60.7	7.1	39.3	99.2	71.1	0.9	0.5	0.0	0.0
Type of water source										
Improved sources	75.0	45.1	25	54.9	84.5	60.5	2.9	3.8	0.5	1.0
Piped water	84.5	60.4	15.5	39.6	86.2	64.8	0.4		0.0	
Into dwelling	-	43.9	-	56.1	-	46.0	-	1.4	-	0.0
To yard/ plot	-	63.7	-	36.3	-	68.2	-	0.7	-	0.0
To neighbor	-	64.9	-	35.1	-	84.9	-	2.8	-	2.1

Area	Source drinking water with fecal contamination (Percentage of population whose source water was tested and found with E.coli (point of collection)) (MICS Table WS.1.6)		Source drinking water free from fecal contamination (Percentage of population whose source water was tested and found with no E.coli (point of collection)) (MICS Table WS.1.6)		Household drinking water with fecal contamination (Percentage of population whose household drinking water was tested and found with E. coli (point of use)) (MICS Table WS.1.7)		Arsenic contamination of source drinking water 10 ppb (WHO standard) (Percentage of population whose source drinking water was tested and found with >10 ppb arsenic level) (MICS Table WS.1.10 & WS.1.11S)		Arsenic contamination of source drinking water 50 ppb (National standard) (Percentage of population whose source water was tested and found with >50 ppb arsenic level)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Public tap/ stand-pipe	-	61.5	-	38.5	-	66.6	-	0.0	-	0.0
Tube well/ Bore-hole	62.6	26.6	37.4	73.4	87.2	59.0	6.6	9.4	1.2	2.8
Pro-tected well or spring	95.3	67.4	4.7	32.6	87.1	71.4	0.0	0.5	0.0	0.0
Bottled/ Jar water	60.8	ss	39.2	-	56.5	ss	ss	ss	ss	ss
Jar/dis-penser refill	-	20.8	-	79.2	-	33.1	ss	0.4	ss	0.0
Unim-proved sources	84.7	88.9	15.3	11.1	98.0	86.9	1.5	5.0	0.8	0.0

Table AW. 11 At least basic and safely managed drinking water services at household free from E.coli with and without arsenic, MICS 2019 & 2024/25

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/ plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
National	95.4	98.0	19.1	47.5	18.2	47.3	19.0	47.4
Urban-Rural Municipalities								
Urban	95.8	98.8	21.9	53.4	21.0	53.2	21.9	53.2
Rural	94.5	96.4	13.4	36.0	12.7	35.8	13.3	35.8
Province								
Koshi	95.7	97.8	34.7	39.0	34.5	39.0	34.7	39.0
Rural	94.6	97.1	21.6	24.3	21.6	24.3	21.6	24.3
Urban	96.4	98.2	42.8	49.0	42.4	49.0	42.8	49.0
Madhesh	97.3	99.0	24.5	66.1	21.5	66	24.3	66
Rural	99.2	97.5	27.7	68.3	23.8	67.7	26.9	67.7
Urban	96.5	99.5	23.3	65.4	20.7	65.4	23.3	65.4
Bagmati	94.6	98.4	14.9	48	15	47.8	15	47.8
Rural	92.1	95.4	2.5	32.1	2.5	32.1	2.5	32.1
Kathmandu Valley Urban	95.9	99.6	16.1	58.5	16.1	58.1	16.1	58.1

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Other Urban	93.9	98.9	21.8	45.3	22.3	45.3	22.3	45.3
Gandaki	94.9	98.5	10.5	28.2	10.5	28.2	10.5	28.2
Rural	93.7	98.7	2.2	11.6	2.2	11.6	2.2	11.6
Urban	95.5	98.5	14.7	36.6	14.7	36.6	14.7	36.6
Lumbini	97.2	98.3	14.8	54	14.7	53.6	14.7	53.6
Rural	96.3	97.9	13.4	44	13.4	44	13.4	44
Urban	97.8	98.6	15.7	62.4	15.6	61.6	15.6	61.6
Karnali	88.6	93.4	3.5	22.1	3.5	21.9	3.5	21.9
Rural	88.9	91.6	4.2	23.7	4.2	23.2	4.2	23.2
Urban	88.2	95.0	2.9	20.7	2.9	20.7	2.9	20.7
Sudurpashchim	93.4	97.2	14.7	43.8	11.9	43.6	14.7	43.8
Rural	91.3	93.2	6.3	30.6	5.8	30	6.3	30.7
Urban	94.9	99.5	20.6	50.8	16.3	50.8	20.7	50.8
Main source of drinking water								
Improved sources	98.2	99.8	19.6	48.3	18.8	48.1	19.6	48.1

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Piped water	97.9	99.8	9.9	34.3	9.9	34.0	9.9	34.0
Tube well/ Borehole	99.9	99.8	33.6	66.9	31.4	66.6	33.6	66.6
Protected well or spring	87.9	99.8	1.7	11.4	1.7	11.4	1.7	11.4
Education of household head								
None	94.2	97.4	15.8	44.8	15.6	44.6	16.1	44.6
ECED	96.0	97.7	26.0	52.4		52.4		52.4
Basic (Gr 1-8)	95.7	98.0	19.0	44.4	18.2	44.3	18.9	44.3
Lower Basic (Gr 1-5)	96.4	98.3	21.0	44.8	20.5	44.6	21	44.6
Upper Basic (Gr 6-8)	96.0	97.6	15.5	43.9	14.4	43.9	15.1	43.9
Secondary (Gr 9-12)	96.2	98.7	20.4	50.6	18.9	50.3	20.4	50.4
Lower Secondary (Gr 9-10)	95.2	98.6	20.8	50.3	18.8	50.3	20.8	50.3

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Upper Secondary (Gr 11-12)	96.9	99.0	19.5	51	19.2	50.2	19.5	50.5
Higher	-	98.5	34.2	66.4	32.6	66.4	33.5	66.4
Wealth index quintile								
Lowest	87.0	94.0	3.9	26.1	3.9	26.1	3.9	26.1
Lower	96.2	98.3	14.9	38.1	14.3	37.7	15	37.7
Middle	97.8	98.6	22.9	49.3	22	49	23	49.2
Higher	98.2	99.0	27	57.4	26	57.4	27	57.4
Highest	97.6	98.6	27.2	66	26	65.8	27	65.8

Table AW. 12 At least basic and safely managed drinking water services at household free from E.coli with and without arsenic- Ecological belt, DEGURBA categories and province, MICS 2019 & 2024/25

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/ plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
National	95.4	98.0	19.1	47.5	18.2	47.3	19.0	47.4
Ecological Belt								
Mountain	95.6	95.3	4.2	24.0	4.3	24.8	4.3	24.8
Hill	92.3	96.8	9.0	33.1	9.0	33.3	9.0	33.4
Tarai	98.1	98.9	29.7	62.0	28.0	57.6	29.6	60.5
DEGURBA classification								
Urban	97.3	98.4	23.8	58.1	22.1	56.5	23.7	56.6
Peri-urban	97.4	98.7	28.0	58.5	27.1	54.3	27.9	57.7
Rural	91.6	96.0	5.4	23.0	5.5	23.4	5.5	23.6
Ecological belt by DEGURBA classification								
Mountain	95.6	95.3	4.2	24.0	4.3	24.8	4.3	24.8
Urban	98.8	99.0	0.0	36.3	-	36.7	-	36.7
Peri-urban	-	29.1	-	-	-	-	-	0.0
Rural	95.3	96.0	4.6	21.4	4.7	22.1	4.7	22.1

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/ plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Hill	92.3	96.8	9.0	33.1	9.0	33.3	9.0	33.4
Urban	95.4	97.5	16.2	54.0	16.2	54.5	16.2	54.7
Peri-urban	94.4	98.7	8.8	35.7	8.8	34.8	8.8	34.8
Rural	89.5	95.9	3.8	19.6	3.8	20.0	3.8	20.2
Tarai	98.1	98.9	29.7	62.0	28.0	57.6	29.6	60.5
Urban	99.8	99.5	35.8	65.9	31.2	61.1	35.3	61.3
Peri-urban	97.9	99.0	30.7	63.6	29.7	58.6	30.7	62.8
Rural	96.0	96.4	12.5	41.3	12.7	41.4	12.7	42.2
DEGURBA by Province								
Koshi	95.7	97.8	34.7	39.0	34.5	39.0	34.7	39.0
Urban	98.9	99.8	30.9	56.2	30.9	55.9	30.9	55.9
Peri-urban	99.0	99.2	62.4	56.9	61.8	53.8	62.4	57.1
Rural	91.0	95.5	7.6	15.4	7.6	14.4	7.6	15.0
Madhesh	97.3	99.0	24.5	66.1	21.5	66.0	24.3	66.0
Urban	99.4	100.0	29.5	74.2	22.9	67.8	29.5	67.8
Peri-urban	96.5	98.8	21.6	64.7	19.9	58.0	21.3	62.9

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/ plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Rural	95.9	100.0	30.3	52.0	30.3	52.0	30.3	52.0
Bagmati	94.6	98.4	14.9	48.0	15.0	47.8	15.0	47.8
Urban	96.0	97.4	19.9	55.6	19.9	55.7	19.9	56.0
Peri-urban	94.7	98.3	15.4	43.4	15.7	42.1	15.7	42.1
Rural	91.1	96.9	2.9	33.4	2.9	34.1	2.9	34.7
Gandaki	94.9	98.5	10.5	28.2	10.5	28.2	10.5	28.2
Urban	96.5	98.6	22.2	53.9	22.2	56.9	22.2	56.9
Peri-urban	90.5	99.1	11.7	25.9	11.8	25.6	11.8	25.6
Rural	95.2	97.9	2.6	10.6	2.6	11.5	2.6	11.5
Lumbini	97.2	98.3	14.8	54.0	14.7	53.6	14.7	53.6
Urban	99.4	98.4	27.3	62.7	25.8	54.3	25.8	54.3
Peri-urban	98.9	99.0	17.5	64.0	17.5	64.3	17.5	64.9
Rural	93.4	95.3	4.8	21.1	4.8	21.3	4.8	21.3
Karnali	88.6	93.4	3.5	22.1	3.5	21.9	3.5	21.9
Urban	95.2	94.4	14.5	24.9	14.5	26.2	14.5	26.2

Area	Use of at least basic drinking water services (Percentage of household members using improved sources of drinking water either on premises (within their dwelling/yard/plot) or within 30 minutes round trip collection time) (MICS Table WS.1.2 & WS.3.9)		Use of safely managed drinking water services (Percentage of population with an improved drinking water source located on premises, whose source water was tested and free of E. coli and available when needed) (MICS Table WS.1.8 & WS.3.9		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=10ppb arsenic1 (MICS Table WS.1.12S)		Percentage of household members with an improved drinking water source located on premises, free of E.coli, available when needed and <=50ppb arsenic2 (MICS Table WS.1.12S)	
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Peri-urban	98.0	96.8	0.0	32.5	0.0	34.0	0.0	34.0
Rural	87.0	93.0	2.4	19.7	2.4	21.5	2.4	21.5
Sudurpashchim	93.4	97.2	14.7	43.8	11.9	43.6	14.7	43.8
Urban	95.3	99.5	24.7	51.1	15.6	51.0	24.7	51.9
Peri-urban	99.6	97.2	38.1	63.0	32.3	46.0	38.1	60.0
Rural	90.8	96.3	3.7	28.5	3.7	29.3	3.7	29.3

Annex Tables (Comparison tables for sanitation)

Table AS. 1 Percentage of households with types of toilet, by province, ecological belt, urban rural and district, NPHC 2011 and 2021

Area	Flush toilet-connected to sewerage		Flush toilet-connected to septic tank		Ordinary toilet		Public toilet		No toilet		Not reported		Total	
	% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		Total number of households in census	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
National	8.3	9.8	33.5	55.1	19.5	30.1		0.5	38.2	4.5	0.6		5,423,297	6,660,841
Province														
Koshi	1.5	2.2	32.7	61.0	35.1	33.1		0.5	30.3	3.2	0.4		991,750	1,190,755
Madhesh	1.3	2.7	14.9	35.8	9.9	48.6		0.9	72.7	12.0	1.2		932,087	1,156,383
Bagmati	31.1	32.7	35.9	49.6	15.1	16.2		0.3	17.2	1.2	0.7		1,269,144	1,567,917
Gandaki	1.1	2.8	62.9	75.9	21.1	20.1		0.3	14.5	1.0	0.4		577,682	661,632
Lumbini	1.6	4.0	35.0	58.6	17.9	31.4		0.4	45.0	5.6	0.5		884,757	1,141,345
Karnali	0.8	2.2	27.3	60.2	23.1	34.6		0.4	48.2	2.6	0.6		298,174	366,037
Sudurpashchim	1.0	2.0	30.0	62.2	15.7	30.9		0.6	52.7	4.4	0.6		469,703	576,772
Ecological Belt														
Mountain	0.4	1.0	26.8	69.2	32.4	27.5		0.3	39.9	2.0	0.5		363,698	409,260
Hill	16.4	19.2	37.0	59.3	21.3	19.8		0.3	24.9	1.5	0.5		2,532,041	2,945,030
Tarai	1.3	2.6	30.9	49.5	15.8	39.7		0.7	51.2	7.6	0.8		2,527,558	3,306,551
Urban Rural 4 category														
Metropolis	44.7	39.3	41.9	47.4	8.5	11.8		0.3	4.2	1.1	0.7		586,297	657,208
Sub-metropolis	1.6	3.0	53.8	68.7	19.0	25.0		0.4	24.8	2.9	0.8		329,499	453,184

Area	Flush toilet-connected to sewerage		Flush toilet-connected to septic tank		Ordinary toilet		Public toilet[18]		No toilet		Not reported [19]		Total	
	% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		Total number of households in census	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
Municipality	6.2	9.6	34.8	54.1	20.3	31.4		0.5	38.0	4.5	0.7		2,599,749	3,364,307
GaunPalika	1.0	2.8	25.5	56.0	21.8	34.7		0.5	51.2	6.0	0.5		1,907,752	2,186,142
Urban Rural 2 category														
Urban Municipalities	12.2	13.3	37.8	54.6	18.2	27.9		0.5	31.1	3.8	0.7		3,515,545	4,474,699
Rural Municipalities	1.0	2.8	25.5	56.0	21.8	34.7		0.5	51.2	6.0	0.5		1,907,752	2,186,142
District														
Taplejung	0.8	1.0	17.2	72.6	55.4	24.4		0.3	26.1	1.8	0.5		26,471	27,776
Sankhuwasabha	0.0	0.6	15.5	71.3	62.3	26.3		0.4	21.8	1.5	0.4		34,615	39,118
Solukhumbu	2.6	2.0	19.7	83.5	52.9	12.2		0.6	24.6	1.8	0.2		23,758	26,239
Okhaldhunga	1.6	4.2	16.6	74.5	51.8	19.4		0.6	29.2	1.3	0.7		32,466	34,286
Khotang	1.3	3.1	13.7	61.6	47.9	32.5		0.4	36.6	2.4	0.5		42,647	41,720
Bhojpur	2.4	2.7	10.6	59.1	51.0	35.9		0.3	35.9	1.9	0.1		39,393	38,580
Dhankuta	1.3	2.1	29.9	71.3	45.7	25.0		0.2	22.8	1.4	0.2		37,616	37,616
Terhathum	1.4	2.7	24.0	77.2	49.4	18.3		0.2	24.8	1.7	0.3		22,084	21,845
Panchthar	2.2	3.5	20.6	75.3	65.1	19.9		0.2	11.8	1.1	0.3		41,176	42,437
Ilam	2.0	2.8	31.8	73.1	56.1	22.1		0.3	9.5	1.7	0.5		64,477	70,501
Jhapa	1.6	1.0	42.5	60.3	29.7	35.6		0.4	25.8	2.6	0.4		184,384	245,019
Morang	1.4	2.5	39.6	54.3	22.4	37.7		0.5	36.2	5.0	0.4		213,870	272,160
Sunsari	1.7	2.7	40.9	56.2	20.7	36.5		0.6	36.1	4.1	0.5		162,279	212,407

[18] Census 2011 did not have public toilet as separate category.
[19] Census 2021 had no non-response for question related to having a toilet.

Area	Flush toilet-connected to sewerage		Flush toilet-connected to septic tank		Ordinary toilet		Public toilet[18]		No toilet		Not reported [19]		Total	
	% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		Total number of households in census	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
District														
Udayapur	1.0	2.1	28.5	50.2	21.8	44.0		0.5	48.4	3.2	0.3		66,514	81,051
Saptari	1.7	2.3	11.1	25.7	6.5	57.8		1.4	79.3	12.8	1.4		121,064	146,816
Siraha	1.3	2.5	12.0	35.7	7.1	51.6		1.0	78.7	9.2	0.8		117,929	148,549
Dhanusa	1.7	2.4	16.2	42.3	15.5	41.9		0.8	64.9	12.6	1.7		138,225	177,091
Mahottari	1.0	2.4	14.4	29.2	11.5	52.3		0.7	72.5	15.4	0.6		111,298	137,886
Sarlahi	1.2	2.3	16.3	36.6	7.9	51.1		0.9	73.6	9.1	1.1		132,803	164,824
Rautahat	0.9	2.7	10.0	35.1	12.1	47.7		0.9	75.5	13.5	1.5		106,652	137,025
Bara	1.0	3.3	16.1	34.6	9.5	52.3		0.7	72.4	9.1	1.1		108,600	131,179
Parsa	1.2	4.3	24.3	47.9	8.4	31.4		0.8	65.0	15.6	1.2		95,516	113,013
Dolakha	0.1	0.3	38.6	74.8	30.6	24.0		0.1	30.4	0.7	0.3		45,658	49,493
Sindhupalchok	0.5	1.2	34.8	82.9	28.3	14.8		0.3	35.9	0.9	0.5		66,635	71,697
Rasuwa	0.1	1.2	36.9	67.2	19.3	28.5		0.5	43.3	2.6	0.4		9,741	11,131
Dhading	0.3	1.8	46.2	63.6	23.5	31.4		0.5	29.6	2.7	0.4		73,842	83,622
Nuwakot	1.7	3.1	36.1	73.0	20.7	21.9		0.4	40.7	1.6	0.9		59,194	68,646
Kathmandu	68.9	66.8	19.7	23.4	9.5	9.5		0.2	1.2	0.1	0.8		435,544	542,892
Bhaktapur	48.2	54.2	38.1	37.5	10.1	7.9		0.2	3.0	0.2	0.6		68,557	108,406
Lalitpur	44.8	45.4	38.8	43.3	11.1	10.9		0.2	4.3	0.2	1.0		109,505	140,130
Kavrepalanchok	8.5	14.1	49.4	66.2	14.3	17.2		0.4	26.9	2.1	0.9		80,651	91,330
Ramechhap	1.6	3.3	37.7	79.2	23.2	15.7		0.2	36.6	1.7	1.0		43,883	46,466
Sindhuli	1.1	1.2	21.2	73.6	10.9	21.6		0.4	66.4	3.3	0.4		57,544	69,317
Makwanpur	1.2	3.1	42.7	65.9	15.4	24.6		0.6	40.3	5.9	0.3		86,045	105,620

Area	Flush toilet-connected to sewerage		Flush toilet-connected to septic tank		Ordinary toilet		Public toilet[18]		No toilet		Not reported [19]		Total	
	% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		Total number of households in census	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
District														
Udayapur	1.0	2.1	28.5	50.2	21.8	44.0		0.5	48.4	3.2	0.3		66,514	81,051
Saptari	1.7	2.3	11.1	25.7	6.5	57.8		1.4	79.3	12.8	1.4		121,064	146,816
Siraha	1.3	2.5	12.0	35.7	7.1	51.6		1.0	78.7	9.2	0.8		117,929	148,549
Dhanusa	1.7	2.4	16.2	42.3	15.5	41.9		0.8	64.9	12.6	1.7		138,225	177,091
Mahottari	1.0	2.4	14.4	29.2	11.5	52.3		0.7	72.5	15.4	0.6		111,298	137,886
Sarlahi	1.2	2.3	16.3	36.6	7.9	51.1		0.9	73.6	9.1	1.1		132,803	164,824
Rautahat	0.9	2.7	10.0	35.1	12.1	47.7		0.9	75.5	13.5	1.5		106,652	137,025
Bara	1.0	3.3	16.1	34.6	9.5	52.3		0.7	72.4	9.1	1.1		108,600	131,179
Parsa	1.2	4.3	24.3	47.9	8.4	31.4		0.8	65.0	15.6	1.2		95,516	113,013
Dolakha	0.1	0.3	38.6	74.8	30.6	24.0		0.1	30.4	0.7	0.3		45,658	49,493
Sindhupalchok	0.5	1.2	34.8	82.9	28.3	14.8		0.3	35.9	0.9	0.5		66,635	71,697
Rasuwa	0.1	1.2	36.9	67.2	19.3	28.5		0.5	43.3	2.6	0.4		9,741	11,131
Dhading	0.3	1.8	46.2	63.6	23.5	31.4		0.5	29.6	2.7	0.4		73,842	83,622
Nuwakot	1.7	3.1	36.1	73.0	20.7	21.9		0.4	40.7	1.6	0.9		59,194	68,646
Kathmandu	68.9	66.8	19.7	23.4	9.5	9.5		0.2	1.2	0.1	0.8		435,544	542,892
Bhaktapur	48.2	54.2	38.1	37.5	10.1	7.9		0.2	3.0	0.2	0.6		68,557	108,406
Lalitpur	44.8	45.4	38.8	43.3	11.1	10.9		0.2	4.3	0.2	1.0		109,505	140,130
Kavrepalanchok	8.5	14.1	49.4	66.2	14.3	17.2		0.4	26.9	2.1	0.9		80,651	91,330
Ramechhap	1.6	3.3	37.7	79.2	23.2	15.7		0.2	36.6	1.7	1.0		43,883	46,466
Sindhuli	1.1	1.2	21.2	73.6	10.9	21.6		0.4	66.4	3.3	0.4		57,544	69,317
Makwanpur	1.2	3.1	42.7	65.9	15.4	24.6		0.6	40.3	5.9	0.3		86,045	105,620

Area	Flush toilet-connected to sewerage		Flush toilet-connected to septic tank		Ordinary toilet		Public toilet[18]		No toilet		Not reported [19]		Total	
	% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		Total number of households in census	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
District														
Chitawan	1.3	2.1	72.6	69.6	19.9	26.3		0.5	5.9	1.5	0.4		132,345	179,167
Gorkha	0.7	4.5	40.5	72.3	31.5	21.2		0.7	27.0	1.3	0.4		66,458	71,729
Manang	0.1	2.0	47.5	93.9	17.4	1.7		0.5	34.6	1.8	0.3		1,448	1,547
Mustang	0.8	1.1	41.1	73.7	21.1	18.2		1.1	36.6	5.9	0.5		3,305	3,606
Myagdi	0.7	2.7	51.7	76.7	28.9	18.7		0.3	18.6	1.6	0.2		27,727	28,766
Kaski	1.1	1.6	91.4	89.7	6.3	8.2		0.2	0.8	0.3	0.4		125,459	160,416
Lamjung	0.8	3.5	58.1	75.9	21.5	19.7		0.3	19.1	0.7	0.3		42,048	44,074
Tanahu	1.2	2.3	62.4	71.7	19.7	24.7		0.3	16.1	1.0	0.6		78,286	88,513
Nawalparasi (East)	1.2	2.7	59.6	71.7	16.9	24.2		0.3	21.8	1.2	0.5		66,915	93,850
Syangja	1.1	3.8	53.0	73.0	35.3	21.9		0.3	10.4	1.0	0.2		68,856	68,923
Parbat	1.3	3.2	63.9	50.5	24.9	45.1		0.3	9.7	0.9	0.2		35,698	36,112
Baglung	1.3	2.9	54.0	73.7	24.5	21.8		0.3	19.8	1.3	0.5		61,482	64,096
Rukum (East)	0.9	5.1	7.2	46.2	15.4	42.7		0.2	76.3	5.8	0.2		11,202	12,878
Rolpa	0.8	6.4	13.7	71.5	6.8	19.8		0.2	78.4	2.1	0.4		43,735	52,206
Pyuthan	0.8	4.9	41.3	75.3	28.8	17.9		0.3	28.8	1.7	0.3		47,716	56,195
Gulmi	1.0	3.7	52.4	84.8	28.1	10.3		0.2	18.4	1.1	0.2		64,887	66,100
Arghakhanchi	0.9	5.0	34.1	83.7	36.3	10.0		0.2	28.4	1.1	0.3		46,826	48,449
Palpa	8.3	11.3	46.7	77.1	21.0	10.7		0.2	23.7	0.7	0.3		59,260	64,991
Nawalparasi (West)	0.8	3.5	30.4	35.6	12.6	55.8		0.6	55.6	4.4	0.7		61,845	82,709
Rupandehi	1.1	3.0	42.9	61.9	13.7	31.0		0.4	41.5	3.7	0.8		163,835	238,171
Kapilbastu	0.8	3.5	22.9	40.7	7.0	33.1		0.6	68.4	22.0	0.8		91,264	121,861

Area	Flush toilet-connected to sewerage		Flush toilet-connected to septic tank		Ordinary toilet		Public toilet[18]		No toilet		Not reported [19]		Total	
	% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		% of households in census		Total number of households in census	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
District														
Dang	1.2	3.0	44.3	67.2	14.9	26.8		0.4	39.1	2.6	0.5		116,347	162,266
Banke	1.7	2.9	30.4	41.8	15.6	45.2		0.6	51.7	9.5	0.6		94,693	129,234
Bardiya	1.2	3.8	18.6	44.0	28.7	48.2		0.5	51.3	3.5	0.2		83,147	106,285
Dolpa	0.0	2.0	33.4	45.1	17.1	44.1		0.8	49.2	8.0	0.3		7,466	9,380
Mugu	0.0	0.2	13.9	25.1	33.3	68.5		0.7	51.6	5.5	1.1		9,600	12,430
Humla		0.5	27.4	14.2	22.7	79.4		0.5	49.8	5.4	0.1		9,437	11,204
Jumla	0.0	1.4	33.5	51.6	35.2	44.0		0.4	30.7	2.7	0.6		19,291	24,422
Kalikot	0.0	0.6	20.1	80.8	36.1	14.8		0.3	43.1	3.5	0.6		23,008	26,770
Dailekh	0.8	3.5	33.3	44.1	14.2	50.0		0.4	51.0	2.1	0.7		48,915	54,594
Jajarkot	1.0	3.5	16.5	55.1	26.0	38.3		0.3	56.2	2.8	0.4		30,468	37,453
Rukum (West)	0.8	2.8	13.9	57.6	23.6	37.8		0.4	61.4	1.4	0.3		30,635	37,290
Salyan	0.8	2.6	16.8	71.0	10.7	24.2		0.2	70.8	2.0	0.8		46,524	54,672
Surkhet	1.3	1.7	41.7	73.6	27.7	22.0		0.4	28.6	2.2	0.6		72,830	97,822
Bajura	0.0	1.5	13.5	66.1	24.1	30.5		0.3	61.5	1.6	0.8		24,888	28,041
Bajhang	0.0	0.3	18.1	64.7	11.1	32.6		0.2	69.9	2.1	0.9		33,773	38,025
Darchula	0.0	1.2	38.2	67.3	8.2	30.1		0.2	53.3	1.2	0.3		24,604	28,381
Baitadi	0.9	1.9	32.2	57.4	9.3	39.0		0.5	57.1	1.3	0.4		45,167	49,407
Dadeldhura	1.2	3.7	40.3	79.0	16.5	15.4		0.3	41.5	1.7	0.5		27,023	31,172
Doti	1.2	3.9	24.3	59.0	15.9	33.3		0.5	58.3	3.4	0.4		41,383	45,140
Achham	1.0	1.8	32.0	73.2	13.9	20.9		0.3	52.4	3.8	0.6		48,318	49,567
Kailali	1.3	2.2	30.8	48.9	16.6	40.8		1.0	50.8	7.2	0.6		142,413	195,872
Kanchanpur	1.1	1.5	33.3	76.1	20.1	17.2		0.6	44.8	4.7	0.7		82,134	111,167

Table AS. 2 Percentage of households with types of toilet, by DEGURBA and caste/ethnicity group of household head, NPHC 2021

Area	Flush toilet-public sewerage	Flush toilet-septic tank	Ordinary toilet	Public toilet	No toilet	Total
	% of households in census	% of households in census	% of households in census	% of households in census	% of households in census	Total numer of households in census
National	9.8	55.1	30.1	0.5	4.5	6,660,841
Province						
Koshi	**2.2**	**61.0**	**33.1**	**0.5**	**3.2**	**1,190,755**
Urban	2.3	73.1	23.1	0.4	1.2	276,653
Peri-urban	2.0	50.8	41.4	0.6	5.2	478,709
Rural	2.4	64.6	30.4	0.4	2.2	435,393
Madhesh	**2.7**	**35.8**	**48.6**	**0.9**	**12.0**	**1,156,383**
Urban	3.7	46.9	40.2	0.8	8.3	232,493
Peri-urban	2.5	32.1	51.2	0.9	13.2	846,336
Rural	1.8	42.6	45.0	0.6	10.0	77,554
Bagmati	**32.7**	**49.6**	**16.2**	**0.3**	**1.2**	**1,567,917**
Urban	55.0	35.0	9.5	0.2	0.2	900,589
Peri-urban	3.2	68.9	26.3	0.5	1.1	212,285
Rural	2.1	69.6	24.6	0.4	3.3	455,043
Gandaki	**2.8**	**75.9**	**20.1**	**0.3**	**1.0**	**661,632**
Urban	1.7	88.0	9.8	0.2	0.3	176,572
Peri-urban	2.6	79.1	17.4	0.3	0.6	148,476
Rural	3.5	68.0	26.7	0.4	1.4	336,584
Lumbini	**4.0**	**58.6**	**31.4**	**0.4**	**5.6**	**1,141,345**
Urban	4.1	79.1	15.1	0.3	1.4	208,602
Peri-urban	3.7	45.4	41.4	0.5	8.9	549,382
Rural	4.3	66.3	25.9	0.3	3.2	383,361
Karnali	**2.2**	**60.2**	**34.6**	**0.4**	**2.6**	**366,037**
Urban	2.2	68.3	27.7	0.5	1.3	62,162
Peri-urban	2.7	80.9	15.2	0.2	1.0	17,950
Rural	2.2	57.1	37.4	0.3	3.0	285,925

Area	Flush toilet-public sewerage	Flush toilet-septic tank	Ordinary toilet	Public toilet	No toilet	Total
	% of households in census	% of households in census	% of households in census	% of households in census	% of households in census	Total numer of households in census
Sudurpashchim	**2.0**	**62.2**	**30.9**	**0.6**	**4.4**	**576,772**
Urban	**1.5**	**73.7**	**21.4**	**0.5**	**2.8**	**81,930**
Peri-urban	1.9	58.4	32.6	0.8	6.4	178,941
Rural	2.2	61.3	32.4	0.5	3.7	315,901
DEGURBA by ecological belt						
Mountain	1.0	69.2	27.5	0.3	2.0	409,260
Urban	1.1	78.0	19.4	0.4	1.2	51,462
Peri-urban	-	-	-	-	-	-
Rural	0.9	68.0	28.6	0.3	2.1	357,798
Hill	**19.2**	**59.3**	**19.8**	**0.3**	**1.5**	**2,945,030**
Urban	45.4	43.9	10.1	0.2	0.3	1,109,159
Peri-urban	3.7	75.1	19.9	0.3	1.0	276,612
Rural	3.3	67.5	26.6	0.3	2.3	1,559,259
Tarai	**2.6**	**49.5**	**39.7**	**0.7**	**7.6**	**3,306,551**
Urban	2.7	67.1	26.3	0.5	3.5	778,380
Peri-urban	2.6	43.6	43.9	0.7	9.2	2,155,467
Rural	2.3	47.0	43.1	0.7	6.9	372,704
Grouping of caste/ethnicity						
Hill Castes	11.8	65.0	22.1	0.2	0.9	2,175,388
Madhesh/ Tarai Caste	4.9	39.6	45.0	0.7	9.8	877,913
Mountain/ Hill Janajatis	14.6	59.7	23.1	0.4	2.2	1,891,940
Tarai Janajatis	3.9	43.9	44.8	0.8	6.5	572,919
Hill Dalits	5.0	59.5	31.6	0.5	3.3	592,275
Madhesh/ Tarai Dalit	2.5	23.1	48.3	1.4	24.6	277,875
Religious/ Linguistic groups	4.5	39.1	44.4	0.8	11.3	239,244
Others, Foreigners & Not stated	27.0	45.9	22.2	0.9	4.0	33,287

Table AS. 3 Percentage of population with improved, at least basic and safely managed sanitation services and disposal of excreta by province, education of household head and wealth quintile index, MICS 2019 & 2024/25.

Area	Use of improved sanitation facilities (Percentage of population using improved sanitation facilities)		Use of at least basic sanitation services (Percentage of population using improved sanitation facilities which are not shared with other households)		Safely managed on-site sanitation (Percentage of population with improved on-site sanitation facilities where wastes are safely disposed of in situ (excluding shared and inadequately contained)		Using improved on-site sanitation facilities (excluding shared and inadequately contained)					
							With safe disposal of excreta in situ (percentage of population) (MICS Table WS.3.4 & WS.3.8)		With unsafe disposal of excreta (percentage of population)		With excreta removed off-site for treatment (percentage of population)	
	2019	2024/25	2019	2024/25	2019 [20]	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
National	93.8	92.8	79.2	79.9	61.1	39.9	61.1	39.9	1.4	5.1	0.8	2.5
Urban-Rural Municipalities												
Urban	94.7	93.9	77.0	79.2	54.9	37.1	54.9	37.1	1.8	5.7	1.2	2.9
Rural	92.0	90.7	83.8	81.1	73.9	45.6	73.9	45.6	0.4	3.9	0.1	1.5
Province												
Koshi	**95.2**	**95.6**	**85.8**	**81.9**	**69.4**	**48.7**	**69.4**	**48.7**	**2.2**	**2.8**	**0.3**	**3.3**
Rural	93.8	95.6	85.4	85.8	74.6	50.4	74.6	50.4	0.4	2.1	0.1	3.3
Urban	96.1	95.6	86.1	79.3	66.2	47.5	66.2	47.5	3.3	3.3	0.3	3.3
Madhesh	**83.6**	**85.6**	**73.3**	**78.3**	**66.1**	**28.2**	**66.1**	**28.2**	**1.3**	**13.7**	**0.3**	**3.1**
Rural	81.3	81.0	73.0	75.3	68.1	26.6	68.1	26.6	0.8	12.8	0.4	2.6
Urban	84.5	87.1	73.5	79.3	65.4	28.6	65.4	28.6	1.6	14	0.2	3.3
Bagmati	**97.8**	**97.2**	**70.8**	**78.2**	**36.7**	**38.7**	**36.7**	**38.7**	**1**	**2.5**	**1.9**	**2.7**
Rural	95.9	92.9	85.1	82.2	74.5	65.9	74.5	65.9	0	2	0	0.4
Kathmandu Valley Urban	98.5	99.4	65.8	73.2	17.0	14.3	17	14.3	1.4	1.7	3	1.8
Other Urban	97.7	97.0	71.0	83.0	50.6	56.5	50.6	56.5	1	4.2	1.2	5.9
Gandaki	**98.7**	**99.4**	**82.7**	**88.1**	**66.5**	**63.3**	**66.5**	**63.3**	**0.9**	**2.5**	**0.5**	**0.8**
Rural	98.9	98.6	91.3	90.1	75.2	67.5	75.2	67.5	0.2	1.4	0	0.1

Area	Use of improved sanitation facilities (Percentage of population using improved sanitation facilities)		Use of at least basic sanitation services (Percentage of population using improved sanitation facilities which are not shared with other households)		Safely managed on-site sanitation (Percentage of population with improved on-site sanitation facilities where wastes are safely disposed of in situ (excluding shared and inadequately contained)		Using improved on-site sanitation facilities (excluding shared and inadequately contained)					
							With safe disposal of excreta in situ (percentage of population) (MICS Table WS.3.4 & WS.3.8)		With unsafe disposal of excreta (percentage of population)		With excreta removed off-site for treatment (percentage of population)	
	2019	2024/25	2019	2024/25	2019 [20]	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Province												
Urban	98.6	99.7	78.1	87.2	61.9	61.3	61.9	61.3	1.3	3	0.7	1.1
Lumbini	**94.9**	**91.0**	**83.4**	**80.2**	**69.1**	**40.4**	**69.1**	**40.4**	**2**	**4**	**1.1**	**2.8**
Rural	91.6	88.4	84.2	80.3	76.3	46.0	76.3	46	0.9	3.2	0.2	1.5
Urban	97.2	93.0	82.9	80.1	64.2	36.0	64.2	36	2.8	4.7	1.8	3.9
Karnali	**94.0**	**93.4**	**86.2**	**76.8**	**76.4**	**31.9**	**76.4**	**31.9**	**0**	**1.6**	**0.2**	**0.3**
Rural	92.8	91.2	85.2	72.7	74.5	30.1	74.5	30.1	0	1.7	0	0
Urban	95.1	95.2	87.0	80.2	78.1	33.4	78.1	33.4	0.1	1.5	0.3	0.5
Sudurpashchim	**95.7**	**90.1**	**85.2**	**76.7**	**67.7**	**34.1**	**67.7**	**34.1**	**0.4**	**3.1**	**0.4**	**1.1**
Rural	94.9	89.6	87.2	79.5	73.9	27.9	73.9	27.9	0.1	2.4	0	0.2
Urban	96.4	90.3	83.8	75.1	63.3	37.5	63.3	37.5	0.7	3.5	0.6	1.7
Education of household head												
None	89.1	88.3	78.9	78.3	65.0	36.6	65.0	36.6	0.9	4.7	0.7	1.7
Basic (Gr 1-8)	95.6	92.5	80.5	78.1	63.7	40.9	63.7	40.9	1.3	5.2	0.9	2.3
Lower Basic (Gr 1-5)	95.1	91.8	81.9	78.2	65.0	41.2	65	41.2	1.1	4.9	0.3	2.6
Upper Basic (Gr 6-8)	96.3	93.4	78.2	78.0	61.7	40.5	61.7	40.5	1.6	5.6	1.8	1.9
Secondary (Gr 9-12)	97.5	98.0	77.2	83.7	55.2	43.4	55.2	43.4	2	5.7	1	3.2

Area	Use of improved sanitation facilities (Percentage of population using improved sanitation facilities)		Use of at least basic sanitation services (Percentage of population using improved sanitation facilities which are not shared with other households)		Safely managed on-site sanitation (Percentage of population with improved on-site sanitation facilities where wastes are safely disposed of in situ (excluding shared and inadequately contained)		Using improved on-site sanitation facilities (excluding shared and inadequately contained)					
							With safe disposal of excreta in situ (percentage of population) (MICS Table WS.3.4 & WS.3.8)		With unsafe disposal of excreta (percentage of population)		With excreta removed off-site for treatment (percentage of population)	
	2019	2024/25	2019	2024/25	2019 [20]	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Province												
Lower Secondary (Gr 9-10)	97.4	97.9	78.8	84.9	57.9	44.6	57.9	44.6	1.8	7	0.9	3
Upper Secondary (Gr 11-12)	97.7	98.3	72.9	81.1	48.1	41.1	48.1	41.1	2.4	3.3	1.3	3.5
Higher	99.4	98.9	77.1	82.3	44.0	40.0	44	40	2.3	5	0.9	4.6
Wealth quintile												
Lowest	**89.1**	**84.3**	**81.7**	**73.8**	**71.9**	**36.8**	**71.9**	**36.8**	**0.1**	**2.1**	**0**	**0.6**
Lower	88.9	87.5	81.0	76.5	70.1	39.5	70.1	39.5	0.5	5.1	0	1
Middle	93.1	94.5	82.1	81.0	66.5	40.6	66.5	40.6	0.9	5.2	0.9	1.7
Higher	**98.3**	**98.4**	**78.0**	**79.4**	**60.6**	**42.0**	**60.6**	**42**	**2.2**	**7.1**	**1.1**	**3.6**
Highest	99.6	99.3	73.3	88.6	36.5	40.8	36.5	40.8	3.1	6	2.2	5.3

20 In the absence of information on the proportion of onsite sanitation facilities effectively containing wastes, on-site facilities that have never been emptied or don't know if ever emptied were considered safely managed in 2019. This was a simple presumption that they were safely containing waste irrespective of their leakage. But the containment status was captured in 2024/25 by introducing a new question which captures causes of failures like flooding, overflown or ruptures. Hence, the 2019 and 2024/25 figures for safely managed facilities are not directly comparable. The same applies to 2019 and 2024/25 figures of disposal status of on-site facilities.

Table AS. 4 Percentage of population with handwashing facility at home with soap or water or both, by province, education of household head and wealth quintile index, MICS 2019 & 2024/25.

Area	Handwashing facility at home (Percentage of population)					
	With water		With soap or detergent		Both water and soap	
	2019	2024/25	2019	2024/25	2019	2024/25
National	90.8	97.0	87.0	88.5	80.7	86.4
Urban-Rural Municipalities						
Urban	93.7	97.5	90.5	90.8	85.6	88.9
Rural	84.7	96.0	79.7	84.0	70.7	81.2
Province						
Koshi	94.8	97.8	87.1	83.9	84.6	82.0
Rural	91.4	97.7	80.6	79.6	76.9	78.1
Urban	96.8	97.9	91.0	86.9	89.3	84.7
Madhesh	92.5	96.3	86.4	84.5	79.3	83.1
Rural	89.7	95.9	81.8	82.4	73.7	80.6
Urban	93.6	96.4	88.2	85.1	81.5	83.9
Bagmati	94.4	97.2	93.5	95.9	88.2	93.7
Rural	84.3	95.6	81.1	89.7	69.0	86.7
Kathmandu Valley Urban	98.3	96.8	98.3	98.2	96.1	95.4
Other Urban	93.6	98.8	92.5	96.9	85.2	96.2
Gandaki	95.0	98.1	91.8	96.3	88.1	94.8
Rural	93.3	96.5	87.4	93.3	83.2	90.8
Urban	95.9	98.9	94.1	97.6	90.7	96.7
Lumbini	94.3	98.3	89.5	82.6	84.6	81.0
Rural	90.5	98.0	84.7	79.1	77.9	77.6
Urban	96.8	98.6	92.7	85.4	89.2	83.7
Karnali	70.3	94.2	68.3	86.9	55.2	81.8
Rural	62.4	91.6	61.5	84.6	46.7	77.0
Urban	77.4	96.4	74.5	88.8	62.9	85.9

Area	Handwashing facility at home (Percentage of population)					
	With water		With soap or detergent		Both water and soap	
	2019	2024/25	2019	2024/25	2019	2024/25
Sudoorpash-chim	71.2	95.1	72.7	93.9	57.6	89.7
Rural	63.6	91.6	70.0	90.7	51.0	84.5
Urban	76.8	97.0	74.6	95.7	62.4	92.6
Education of household head						
None	86.7	95.9	80.8	83.0	72.2	80.3
Basic (Gr 1-8)	91.2	96.8	87.6	88.2	81.2	86.0
Lower Basic (Gr 1-5)	90.8	96.4	86.3	87.2	79.4	84.5
Upper Basic (Gr 6-8)	92.0	97.5	89.6	89.8	84.0	88.2
Secondary (Gr 9-12)	95.1	98.2	93.4	94.0	90.2	92.3
Lower Secondary (Gr 9-10)	95.1	98.2	92.6	93.4	89.6	91.8
Upper Secondary (Gr 11-12)	94.9	98.3	95.6	95.2	92.0	93.4
Higher	97.1	99.1	97.0	97.5	94.9	96.9
Wealth quintile						
Lowest	70.0	91.0	66.4	75.2	49.8	70.1
Lower	91.2	97.5	83.5	83.8	76.5	81.9
Middle	95.4	98.2	88.7	87.8	85.3	86.2
Higher	97.0	98.6	95.8	96.5	93.0	95.0
Highest	99.5	99.6	99.7	99.1	99.0	98.7

Annex Tables (JMP Ladder: Water, sanitation and handwashing)

Table AG. 1 JMP classification of drinking water, sanitation and handwashing by Province, education of household head and wealth quintile index, MICS 2019 and 2024/25

Area	Drinking water								Sanitation								Handwashing						% of population with at least basic drinking water, sanitation and hand washing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Total	95.4	98.0	1.7	0.2	2.7	1.6	0.2	0.1	79.2	79.9	15.3	12.9	0.5	1.5	5.0	5.5	80.6	86.2	17.8	12.9	1.5	0.7	0.1	0.1	62.3	69.8
Area of residence																										
Urban	95.8	98.8	1.5	0.1	2.6	1.0	0.2	0.1	77.0	79.2	18.3	14.6	0.5	1.5	4.2	4.5	85.5	88.8	13.0	10.5	1.4	0.5	0.1	0.2	64.2	71.6
Rural	94.5	96.4	2.2	0.4	3.0	2.9	0.3	0.3	83.8	81.1	9.0	9.6	0.6	1.7	6.7	7.6	70.7	81.1	27.6	17.7	1.6	1.1	0.1	0.1	58.5	66.3
Province																										
Koshi	95.7	97.8	1.3	0.1	2.8	2.0	0.1	0.2	85.8	81.9	10.7	13.7	0.8	1.5	2.6	2.7	84.5	81.9	14.6	17.2	0.8	0.8	0.1	0.1	72.0	67.8
Rural	94.6	97.1	2.3	0.3	2.8	2.2	0.2	0.4	85.4	85.8	9.6	9.9	1.1	0.7	4.0	3.6	76.9	78.0	22.0	21.4	1.2	0.5	0.0	0.1	66.3	66.7
Urban	96.4	98.2	0.8	0.0	2.8	1.8	0.0	0.0	86.1	79.3	11.4	16.3	0.7	2.0	1.7	2.0	89.2	84.6	10.1	14.3	0.5	1.0	0.2	0.1	75.4	68.5
Madhesh	97.3	99.0	0.4	0.0	2.2	0.9	0.1	0.0	73.3	78.3	10.8	7.3	0.1	0.7	15.8	13.7	79.3	83.0	18.4	16.6	2.3	0.3	0.0	0.1	57.9	67.7
Rural	99.2	97.5	0.2	0.0	0.6	2.5	0.0	0.0	73.0	75.3	8.6	5.7	0.2	0.5	18.1	18.6	73.7	80.6	24.4	19.0	1.8	0.3	0.0	0.1	55.6	63.2

Area	Drinking water: At least basic service 2019	Drinking water: At least basic service 2024/25	Drinking water: Limited service 2019	Drinking water: Limited service 2024/25	Drinking water: Unimproved 2019	Drinking water: Unimproved 2024/25	Drinking water: Surface water 2019	Drinking water: Surface water 2024/25	Sanitation: At least basic service 2019	Sanitation: At least basic service 2024/25	Sanitation: Limited service 2019	Sanitation: Limited service 2024/25	Sanitation: Unimproved 2019	Sanitation: Unimproved 2024/25	Sanitation: Open defecation 2019	Sanitation: Open defecation 2024/25	Handwashing: At least basic service 2019	Handwashing: At least basic service 2024/25	Handwashing: Limited facility 2019	Handwashing: Limited facility 2024/25	Handwashing: No facility 2019	Handwashing: No facility 2024/25	Handwashing: No permission to see 2019	Handwashing: No permission to see 2024/25	% of population with at least basic drinking water, sanitation and hand washing 2019	% of population with at least basic drinking water, sanitation and hand washing 2024/25
Province																										
Urban	96.5	99.5	0.5	0.0	2.9	0.4	0.1	0.0	73.5	79.3	11.6	7.8	0.1	0.8	14.9	12.1	81.5	83.8	16.0	15.8	2.5	0.2	0.0	0.1	58.9	69.1
Bagmati	94.6	98.4	2.6	0.1	2.3	1.3	0.4	0.1	70.8	78.2	27.5	18.9	0.5	0.6	1.1	1.9	87.9	93.4	10.6	5.8	1.3	0.5	0.3	0.3	59.8	73.2
Rural	92.1	95.4	2.7	0.3	4.4	3.9	0.7	0.4	85.1	82.2	11.9	10.7	0.4	1.3	2.5	5.7	68.8	86.7	29.8	11.8	1.0	1.6	0.4	0.0	56.9	69.9
Kathmandu Valley Urban	95.9	99.6	1.9	0.1	1.8	0.2	0.5	0.0	65.8	73.2	32.9	25.9	0.8	0.1	0.3	0.0	95.8	94.8	3.1	4.3	0.7	0.4	0.3	0.5	61.3	70.7
Other Urban	93.9	98.9	4.1	0.1	2.0	1.0	0.0	0.1	71.0	83.0	27.2	14.0	0.1	1.0	1.8	2.0	85.0	96.2	12.4	3.8	2.5	0.0	0.2	0.0	58.8	79.4
Gandaki	94.9	98.5	1.7	0.0	3.3	1.3	0.2	0.1	82.7	88.1	16.4	11.3	0.2	0.4	0.8	0.2	88.1	94.8	11.4	5.0	0.5	0.1	0.0	0.1	69.8	83.1
Rural	93.7	98.7	2.0	0.1	4.1	0.9	0.3	0.3	91.3	90.1	7.9	8.4	0.2	1.1	0.6	0.3	83.2	90.6	16.5	8.7	0.2	0.4	0.0	0.2	71.6	82.5
Urban	95.5	98.5	1.5	0.0	2.8	1.5	0.2	0.0	78.1	87.2	20.9	12.6	0.2	0.1	0.9	0.1	90.7	96.7	8.6	3.3	0.7	0.0	0.0	0.0	68.8	83.4
Lumbini	97.2	98.3	1.0	0.1	1.8	1.6	0.0	0.0	83.4	80.2	11.9	10.7	0.7	1.3	4.0	7.7	84.6	80.8	13.6	18.1	1.8	0.9	0.1	0.2	70.2	67.2

Area	Drinking water										Sanitation								Handwashing						% of population with at least basic drinking water, sanitation and hand washing	
	At least basic service		Limited service		Unimproved		Surface water				At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
Province	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25			2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Urban	94.9	99.5	0.8	0.4	4.0	0.1	0.3	0.0			83.8	75.1	13.7	15.2	0.7	7.1	1.8	2.6	62.4	92.5	36.9	6.9	0.7	0.4	0.0	0.1	52.1	70.8
Rural	91.3	93.2	3.6	2.0	4.5	4.5	0.6	0.4			87.2	79.5	8.2	10.1	0.8	6.2	3.8	4.2	50.9	84.3	48.1	14.2	0.9	1.2	0.0	0.2	41.8	63.5
Suduor-pashchim	93.4	97.2	2.0	1.0	4.2	1.7	0.4	0.1			85.2	76.7	11.4	13.4	0.8	6.8	2.6	3.2	57.6	89.6	41.6	9.5	0.8	0.7	0.0	0.1	47.8	68.2
Urban	88.2	95.0	6.9	0.5	4.8	3.5	0.1	1.0			87.0	80.2	9.2	15.0	0.3	3.0	3.5	1.8	62.9	85.9	34.7	12.6	2.3	1.6	0.0	0.0	51.0	66.6
Rural	88.9	91.6	4.1	0.5	5.5	6.4	1.4	1.5			85.2	72.7	8.3	18.5	0.0	1.8	6.5	6.9	46.5	76.9	49.1	18.6	4.0	4.5	0.4	0.0	38.4	54.9
Karnali	88.6	93.4	5.6	0.5	5.1	4.9	0.7	1.2			86.2	76.8	8.8	16.6	0.1	2.5	4.9	4.1	55.1	81.8	41.6	15.3	3.1	2.9	0.2	0.0	45.0	61.2
Urban	97.8	98.6	0.4	0.0	1.8	1.4	0.0	0.0			82.9	80.1	14.5	12.9	0.6	0.6	2.0	6.4	89.1	83.4	9.3	15.1	1.4	1.1	0.1	0.4	73.5	69.1
Rural	96.3	97.9	1.9	0.2	1.8	1.9	0.0	0.0			84.2	80.3	8.0	8.1	0.9	2.1	6.9	9.4	77.8	77.6	19.8	21.8	2.2	0.6	0.1	0.0	65.3	64.9

Area	Drinking water								Sanitation								Handwashing						% of population with at least basic drinking water, sanitation and hand washing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Education of household head																								
None	78.9	78.3	10.2	10.0	1.3	1.9	9.6	9.7	78.9	78.3	10.2	10.0	1.3	1.9	9.6	9.7	72.1	80.2	25.7	18.7	2.0	1.0	0.1	0.1	55.9	64.2
ECED		79.1		14.0		1.5		5.4		79.1		14.0		1.5		5.4		92.7		7.3		0.0		0.0	64.2	76.6
Basic (Gr 1-8)	80.5	78.1	15.8	14.3	0.4	1.9	3.3	5.4	80.5	78.1	15.8	14.3	0.4	1.9	3.3	5.4	81.2	85.9	17.2	13.4	1.6	0.6	0.0	0.1	63.6	68.4
Lower Basic (Gr 1-5)	81.9	78.2	14.1	13.6	0.6	1.9	3.4	6.2	81.9	78.2	14.1	13.6	0.6	1.9	3.4	6.2	79.4	84.4	18.8	14.8	1.8	0.7	0.1	0.1	65.1	67.6
Upper Basic(Gr 6-8)	78.2	78.0	18.5	15.4	0.2	1.8	3.0	4.3	78.2	78.0	18.5	15.4	0.2	1.8	3.0	4.3	84.0	88.1	14.7	11.3	1.3	0.5	0.0	0.1	67.3	69.6
Second-ary (Gr 9-12)	77.2	83.7	20.6	14.2	0.7	0.7	1.4	1.2	77.2	83.7	20.6	14.2	0.7	0.7	1.4	1.2	90.0	92.1	9.1	7.2	0.7	0.5	0.2	0.2	69.0	76.8
Lower Secondary (Gr 9-10)	78.8	84.9	19.0	12.7	0.7	0.7	1.4	1.4	78.8	84.9	19.0	12.7	0.7	0.7	1.4	1.4	89.5	91.6	9.6	7.9	0.8	0.3	0.1	0.2	62.7	77.6
Upper Secondary (Gr 11-12)	72.9	81.1	25.1	17.2	0.8	0.8	1.2	0.8	72.9	81.1	25.1	17.2	0.8	0.8	1.2	0.8	91.5	93.2	7.6	5.8	0.3	0.8	0.6	0.2	71.2	75.3

Area	Drinking water								Sanitation								Handwashing								% of population with at least basic drinking water, sanitation and hand washing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Higher 11-12)	77.1	82.3	22.7	16.6	0.2	1.1	0.0	0.0	77.1	82.3	22.7	16.6	0.2	1.1	0.0	0.0	94.7	96.8	4.7	3.0	0.5	0.1	0.2	0.1	(53.3)	79.1
Wealth quintile index																										
Lowest	87	94	4.9	0.7	7.5	4.7	0.6	0.5	81.7	73.8	8.9	10.5	0.9	2.9	8.5	12.7	49.7	69.9	46.3	27.8	3.8	2.2	0.1	0.2	38.0	52.1
Lower	96.2	98.3	1.3	0.2	2.4	1.4	0	0.1	81.0	76.5	8.8	11.1	0.5	2.0	9.7	10.5	76.4	81.9	21.4	17.6	2.0	0.5	0.1	0.0	61.6	64.0
Middle	97.8	98.6	0.7	0	1.5	1.3	0	0.1	82.1	81.0	11.6	13.5	0.5	1.6	5.7	3.8	85.2	86.2	13.8	13.4	1.0	0.4	0.1	0.1	68.9	70.1
Higher	98.2	99.5	0.5	0.1	1.2	0.3	0.1	0	78.0	79.4	20.7	18.9	0.3	0.9	0.9	0.6	93.0	94.8	6.7	4.7	0.3	0.3	0.0	0.2	72.5	75.4
Highest	97.6	99.6	1.2	0	0.9	0.4	0.3	0	73.3	88.6	26.3	10.6	0.3	0.3	0.0	0.0	98.8	98.5	0.8	1.2	0.2	0.1	0.2	0.2	70.8	87.4

Table AG. 2 JMP classification of drinking water, sanitation and handwashing by DEGURBA categories, MICS 2019 and 2024/25

Area	Drinking water								Sanitation								Handwashing								% of population with at least basic drinking water, sanitation and handwashing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
Ecological belt																										
Total	95.4	98.0	1.7	0.2	2.7	1.6	0.2	0.1	79.2	79.9	15.3	12.9	0.5	1.5	5.0	5.5	80.6	86.2	17.8	12.9	1.5	0.7	0.1	0.1	62.3	69.8
Mountain	95.6	95.3	2.7	0.6	1.6	3.0	0.1	1.0	81.4	80.9	14.1	13.8	0.5	1.4	4.0	3.8	58.1	81.8	40.4	16.1	1.1	2.1	0.4	0.0	46.1	65.9
Hill	92.3	96.8	3.2	0.3	4.1	2.1	0.4	0.2	78.8	81.5	19.1	15.5	0.6	1.0	1.5	1.8	79.5	89.0	18.9	10.4	1.5	0.5	0.1	0.1	59.1	71.4
Tarai	98.1	98.9	0.3	0.0	1.6	1.0	0.1	0.0	79.4	78.4	11.9	10.5	0.4	2.1	8.3	9.1	84.5	84.4	13.9	14.8	1.5	0.7	0.1	0.2	67.3	68.6
DEGURBA categories																										
Urban	97.3	98.4	1.7	0.1	0.8	0.5	0.3	0.0	69.0	75.1	27.3	21.5	0.6	1.4	3.1	1.7	91.7	92.2	7.1	7.0	1.1	0.5	0.1	0.3	62.7	69.5
Peri-urban	97.4	98.7	0.2	0.1	2.5	1.1	0.0	0.0	80.6	79.6	11.1	9.3	0.4	1.6	7.9	9.5	84.2	84.6	14.3	14.6	1.3	0.7	0.1	0.1	67.8	70.3
Rural	91.6	96.0	3.5	0.4	4.6	3.2	0.4	0.4	86.5	84.4	9.4	10.3	0.6	1.6	3.4	3.7	67.2	83.3	30.7	15.8	1.9	1.0	0.1	0.0	56.1	69.1

Area	Drinking water								Sanitation								Handwashing								% of population with at least basic drinking water, sanitation and handwashing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
DEGURBA by Province																										
Koshi	95.7	97.8	1.3	0.1	2.8	2.0	0.1	0.2	85.8	81.9	10.7	13.7	0.8	1.5	2.6	2.7	84.5	81.9	14.6	17.2	0.8	0.8	0.1	0.1	72.0	67.8
Urban	98.9	99.8	0.7	0.0	0.5	0.1	0.0	0.0	84.8	70.9	14.3	26.0	0.9	1.9	0.0	0.6	97.6	88.9	2.4	10.5	0.0	0.6	0.0	0.0	82.7	63.7
Peri-urban	99.0	99.2	0.0	0.0	1.0	0.8	0.0	0.0	84.1	83.7	10.8	11.5	0.8	0.5	4.3	3.9	90.0	85.6	9.6	12.5	0.1	1.7	0.3	0.2	76.4	74.6
Rural	91.0	95.5	3.0	0.3	5.7	3.8	0.2	0.4	88.1	85.8	9.0	9.5	0.9	2.1	2.0	2.6	73.0	75.3	25.2	24.6	1.8	0.1	0.0	0.0	62.7	63.8
Madhesh	97.3	99.0	0.4	0.0	2.2	0.9	0.1	0.0	73.3	78.3	10.8	7.3	0.1	0.7	15.8	13.7	79.3	83.0	18.4	16.6	2.3	0.3	0.0	0.1	57.9	67.7
Urban	99.4	100.0	0.0	0.0	0.2	0.0	0.4	0.0	67.8	80.9	17.3	10.6	0.0	0.7	15.0	7.8	89.1	85.8	9.7	14.0	1.2	0.0	0.0	0.3	61.2	71.9
Peri-urban	96.5	98.8	0.2	0.0	3.4	1.2	0.0	0.0	75.2	77.8	8.0	6.5	0.1	0.7	16.6	15.0	74.8	82.4	22.3	17.3	2.9	0.3	0.0	0.0	56.2	66.6
Rural	95.9	100.0	4.1	0.0	0.0	0.0	0.0	0.0	77.9	75.7	10.1	4.9	0.6	0.0	11.5	19.4	82.5	81.4	16.6	17.2	0.9	1.4	0.0	0.0	60.5	66.2
Bagmati	94.6	98.4	2.6	0.1	2.3	1.3	0.4	0.1	70.8	78.2	27.5	18.9	0.5	0.6	1.1	1.9	87.9	93.4	10.6	5.8	1.3	0.5	0.3	0.3	59.8	73.2
Urban	96.0	97.4	2.7	0.1	0.8	0.5	0.4	0.0	62.9	73.7	36.3	25.0	0.5	0.2	0.1	0.4	94.3	95.6	4.7	3.8	0.9	0.3	0.2	0.4	57.9	70.1

Area	Drinking water								Sanitation								Handwashing								% of population with at least basic drinking water, sanitation and handwashing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
DEGURBA by Province																										
Rural	93.4	95.3	2.8	0.4	3.8	4.3	0.0	0.0	87.6	91.1	7.7	7.6	1.1	0.5	3.6	0.9	75.1	78.8	21.4	20.5	3.5	0.7	0.0	0.0	64.4	68.0
Peri-urban	98.9	99.0	0.0	0.0	1.1	1.0	0.0	0.0	82.4	76.9	12.3	8.5	0.2	1.6	5.0	13.0	88.2	78.5	11.0	20.5	0.6	0.9	0.1	0.1	72.8	66.2
Urban	99.4	98.4	0.6	0.0	0.0	0.0	0.0	0.0	77.8	76.5	19.6	22.3	1.7	1.2	0.9	0.0	92.4	91.0	5.5	7.2	2.1	1.0	0.0	0.9	73.6	69.3
Lumbini	97.2	98.3	1.0	0.1	1.8	1.6	0.0	0.0	83.4	80.2	11.9	10.7	0.7	1.3	4.0	7.7	84.6	80.8	13.6	18.1	1.8	0.9	0.1	0.2	70.2	67.2
Rural	95.2	97.9	1.5	0.1	2.9	1.7	0.4	0.2	89.8	90.7	8.7	8.2	0.3	0.8	1.3	0.3	84.0	91.8	15.8	7.8	0.2	0.3	0.0	0.1	72.8	83.0
Peri-urban	90.5	99.1	2.0	0.0	7.6	0.9	0.0	0.0	82.3	89.6	17.5	10.0	0.2	0.2	0.0	0.2	92.4	97.7	6.8	2.3	0.8	0.0	0.0	0.0	72.8	86.9
Urban	96.5	98.6	1.7	0.0	1.8	1.1	0.0	0.0	71.9	81.0	27.7	19.0	0.0	0.0	0.4	0.0	92.5	97.0	6.6	3.0	0.9	0.0	0.0	0.0	63.6	78.1
Gandaki	94.9	98.5	1.7	0.0	3.3	1.3	0.2	0.1	82.7	88.1	16.4	11.3	0.2	0.4	0.8	0.2	88.1	94.8	11.4	5.0	0.5	0.1	0.0	0.1	69.8	83.1
Rural	91.1	96.9	4.3	0.1	4.1	2.7	0.4	0.3	83.2	82.2	12.8	11.5	0.3	1.3	3.6	5.0	67.5	89.4	29.8	9.4	2.3	1.2	0.5	0.0	54.9	71.9
Peri-urban	94.7	98.3	0.0	0.3	5.1	1.2	0.2	0.1	80.4	85.3	17.8	13.0	0.8	0.7	0.9	1.0	94.6	94.5	3.9	5.5	1.1	0.0	0.3	0.0	72.8	81.1

Area	Drinking water								Sanitation								Handwashing								% of population with at least basic drinking water, sanitation and handwashing	
	At least basic service		Limited service		Unimproved		Surface water		At least basic service		Limited service		Unimproved		Open defecation		At least basic service		Limited facility		No facility		No permission to see			
	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25	2019	2024/25
DEGURBA by Province																										
Rural	90.8	96.3	2.9	1.2	5.7	2.2	0.7	0.3	85.8	82.6	10.6	9.6	0.6	3.4	3.0	4.4	49.3	87.5	49.8	12.0	0.8	0.5	0.0	0.0	39.5	71.2
Peri-urban	99.6	97.2	0.0	1.2	0.4	1.6	0.0	0.0	91.8	72.4	6.3	14.8	0.4	10.7	1.5	2.1	74.6	89.6	25.4	9.3	0.0	0.9	0.0	0.2	69.4	64.7
Urban	95.3	99.5	1.1	0.2	3.6	0.3	0.0	0.0	74.1	69.0	21.3	20.5	1.8	8.6	2.9	1.9	67.7	94.8	30.6	3.7	1.7	1.1	0.0	0.4	51.6	66.7
Suduor-pashchim	93.4	97.2	2.0	1.0	4.2	1.7	0.4	0.1	85.2	76.7	11.4	13.4	0.8	6.8	2.6	3.2	57.6	89.6	41.6	9.5	0.8	0.7	0.0	0.1	47.8	68.2
Rural	87.0	93.0	6.2	0.4	6.0	5.3	0.8	1.4	87.1	77.0	7.3	16.1	0.2	1.7	5.5	5.1	50.3	79.9	46.6	17.0	2.9	3.1	0.2	0.0	41.0	60.3
Peri-urban	98.0	96.8	2.0	1.1	0.0	2.1	0.0	0.0	85.6	81.5	14.4	18.5	0.0	0.0	0.0	0.0	90.0	96.9	10.0	3.1	0.0	0.0	0.0	0.0	76.5	76.7
Urban	95.2	94.4	3.2	0.8	1.2	4.0	0.4	0.9	78.0	73.9	17.6	18.3	0.0	6.8	4.4	1.0	69.7	84.7	21.7	12.2	8.7	3.0	0.0	0.0	55.2	59.8
Karnali	88.6	93.4	5.6	0.5	5.1	4.9	0.7	1.2	86.2	76.8	8.8	16.6	0.1	2.5	4.9	4.1	55.1	81.8	41.6	15.3	3.1	2.9	0.2	0.0	45.0	61.2

Annex Tables (Local Levels)

Annex Table 6a Estimated distribution of the household population across JMP drinking water service ladders by local level

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
1	Phaktanlung RM	Taplejung	Koshi	0.0	0.6	0.0	94.5	4.9	11791
2	Mikwakhola RM	Taplejung	Koshi	0.0	0.2	0.0	91.1	8.7	7964
3	Meringden RM	Taplejung	Koshi	0.0	0.6	0.0	87.5	11.9	11838
4	Maiwakhola RM	Taplejung	Koshi	0.1	1.0	0.0	88.1	10.8	10213
5	Aatharai Tribeni RM	Taplejung	Koshi	1.3	2.2	0.0	90.3	6.3	12296
6	Phungling UM	Taplejung	Koshi	0.2	1.4	0.0	69.8	28.6	28449
7	Pathivara Yangwarak RM	Taplejung	Koshi	0.7	1.8	0.0	90.6	6.9	11806
8	Sirijanga RM	Taplejung	Koshi	0.2	0.4	0.0	93.1	6.3	14114
9	Sidingba RM	Taplejung	Koshi	0.1	0.4	0.0	89.5	10.0	10979
10	Bhotkhola RM	Sankhuwasabha	Koshi	3.2	1.9	0.0	86.6	8.3	6438
11	Makalu RM	Sankhuwasabha	Koshi	0.4	2.4	0.0	89.9	7.3	13424
12	Silichong RM	Sankhuwasabha	Koshi	0.0	0.3	0.0	94.9	4.9	10296
13	Chichila RM	Sankhuwasabha	Koshi	0.3	0.3	0.0	94.0	5.4	6577
14	Sabhapokhari RM	Sankhuwasabha	Koshi	0.1	2.0	0.0	86.5	11.3	9970

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
15	Khandabari UM	Sankhuwasabha	Koshi	0.0	2.9	0.0	45.9	51.1	35565
16	Panchakhapan UM	Sankhuwasabha	Koshi	0.8	6.3	0.0	63.7	29.2	16348
17	Chainapur UM	Sankhuwasabha	Koshi	2.7	2.2	0.0	63.6	31.5	26799
18	Madi UM	Sankhuwasabha	Koshi	1.8	6.7	0.6	45.4	45.4	13273
19	Dharmadevi UM	Sankhuwasabha	Koshi	0.6	1.3	0.0	65.6	32.4	16053
20	Khumbu Pasanglhamu RM	Solukhumbu	Koshi	0.1	0.4	0.0	90.3	9.2	8720
21	Mahakulung RM	Solukhumbu	Koshi	0.3	0.5	0.0	91.1	8.2	11847
22	Sotang RM	Solukhumbu	Koshi	0.6	2.8	0.0	89.3	7.3	9025
23	Mapya Dudhkoshi RM	Solukhumbu	Koshi	0.1	0.3	0.0	92.9	6.7	12648
24	Thulung Dudhkoshi RM	Solukhumbu	Koshi	0.3	0.5	0.0	90.6	8.6	18354
25	Necha Salyan RM	Solukhumbu	Koshi	0.0	2.2	0.0	87.0	10.8	11381
26	Solu Dudhakunda UM	Solukhumbu	Koshi	0.1	0.6	0.0	69.3	29.9	25678
27	Likhu Pike RM	Solukhumbu	Koshi	0.0	0.7	0.0	88.5	10.7	5334
28	Chishankhu Gadhi RM	Okhaldhunga	Koshi	0.8	2.8	0.0	91.6	4.8	13844
29	Siddhicharan UM	Okhaldhunga	Koshi	0.5	1.7	0.0	66.4	31.4	27351
30	Molung RM	Okhaldhunga	Koshi	0.3	2.4	0.0	92.3	5.0	16440

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
31	Khiji Demba RM	Okhaldhunga	Koshi	0.7	1.1	0.0	92.2	6.0	15559
32	Likhu RM	Okhaldhunga	Koshi	0.2	1.1	0.0	94.3	4.3	12104
33	Champadevi RM	Okhaldhunga	Koshi	0.2	1.5	0.0	91.8	6.5	16311
34	Sunkoshi RM	Okhaldhunga	Koshi	0.7	2.2	0.0	90.6	6.5	17783
35	Manebhanjyang RM	Okhaldhunga	Koshi	4.0	1.4	0.0	89.2	5.4	19597
36	Kepilasgadhi RM	Khotang	Koshi	0.1	4.2	0.0	86.5	9.2	13231
37	Aiselukharka RM	Khotang	Koshi	0.3	1.1	0.0	91.8	6.8	13217
38	Rawa Besi RM	Khotang	Koshi	0.1	3.1	0.0	91.0	5.8	11199
39	Halesi Tuwachung UM	Khotang	Koshi	0.9	12.2	0.0	59.6	27.3	27078
40	Diktel Rupakot Majhuwagadhi UM	Khotang	Koshi	0.3	2.4	0.0	65.5	31.7	43008
41	Sakela RM	Khotang	Koshi	0.4	1.4	0.0	88.2	10.1	9623
42	Diprung Chuichumma RM	Khotang	Koshi	0.6	1.7	0.0	93.2	4.5	16305
43	Khotehang RM	Khotang	Koshi	0.6	2.9	0.0	88.7	7.8	16846
44	Jante Dhunga RM	Khotang	Koshi	0.2	3.9	0.0	89.1	6.7	12016
45	Baraha Pokhari RM	Khotang	Koshi	0.3	2.1	0.0	91.4	6.2	11397

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
46	Shadananda UM	Bhojpur	Koshi	0.1	2.5	0.0	62.9	34.5	29342
47	Salpa Silichho RM	Bhojpur	Koshi	0.2	0.7	0.0	90.4	8.7	12284
48	Temkemaiyum RM	Bhojpur	Koshi	0.3	0.9	0.0	90.7	8.1	15464
49	Bhojpur UM	Bhojpur	Koshi	0.1	0.8	0.0	65.9	33.2	26007
50	Arun RM	Bhojpur	Koshi	1.1	2.9	0.0	86.5	9.5	14591
51	Pauwa Dunma RM	Bhojpur	Koshi	0.2	5.6	0.0	85.9	8.3	12107
52	Ramprasad Rai RM	Bhojpur	Koshi	0.4	1.5	0.0	90.3	7.8	15673
53	Hatuwagadhi RM	Bhojpur	Koshi	0.0	5.2	0.0	85.1	9.6	16175
54	Aamchowk RM	Bhojpur	Koshi	0.3	2.3	0.0	86.1	11.2	14968
55	Mahalaxmi UM	Dhankuta	Koshi	0.0	7.8	0.0	37.2	55.0	22182
56	Pakhribas UM	Dhankuta	Koshi	0.1	3.4	0.0	68.7	27.7	19104
57	Chhathar Jorpati RM	Dhankuta	Koshi	0.3	1.8	0.0	90.6	7.3	16456
58	Dhankuta UM	Dhankuta	Koshi	0.9	2.5	0.0	67.6	29.1	35983
59	Shahidbhumi RM	Dhankuta	Koshi	0.1	4.1	0.0	86.1	9.7	17767
60	Sangurigadhi RM	Dhankuta	Koshi	0.3	1.3	0.0	88.6	9.9	19561
61	Chaubise RM	Dhankuta	Koshi	0.2	4.3	0.0	86.5	9.1	17677
62	Aatharai RM	Terhathum	Koshi	0.1	1.6	0.0	86.5	11.8	18156

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
63	Phedap RM	Terhathum	Koshi	0.1	2.4	0.0	88.4	9.1	15169
64	Menchhayayem RM	Terhathum	Koshi	0.0	0.7	0.0	88.0	11.3	6678
65	Myanglung UM	Terhathum	Koshi	0.3	2.0	0.0	62.1	35.7	18750
66	Laligurans UM	Terhathum	Koshi	0.0	0.4	0.0	78.0	21.6	15329
67	Chhathar RM	Terhathum	Koshi	0.2	1.3	0.0	87.6	11.0	14197
68	Yangbarak RM	Panchthar	Koshi	0.0	0.5	0.0	94.9	4.6	16821
69	Hilihan RM	Panchthar	Koshi	0.1	1.2	0.0	94.7	3.9	19085
70	Falelung RM	Panchthar	Koshi	0.0	0.5	0.0	88.9	10.5	20361
71	Phidim UM	Panchthar	Koshi	0.5	1.3	0.0	69.5	28.7	48495
72	Falgunanda RM	Panchthar	Koshi	0.1	2.8	0.0	91.4	5.7	21289
73	Kummayak RM	Panchthar	Koshi	3.3	5.7	0.0	85.0	5.9	12746
74	Tumbewa RM	Panchthar	Koshi	0.6	6.3	0.0	86.0	7.1	11189
75	Miklajung RM	Panchthar	Koshi	0.2	2.1	0.0	90.4	7.4	21061
76	Mai Jogmai RM	Ilam	Koshi	0.2	0.7	0.0	90.6	8.4	19131
77	Sandakpur RM	Ilam	Koshi	1.4	0.5	0.0	92.8	5.3	15444
78	Illam UM	Ilam	Koshi	0.2	1.4	0.0	68.3	30.1	50085
79	Deumai UM	Ilam	Koshi	0.3	0.6	0.0	71.2	27.9	30969

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
80	Fakfokathum RM	Ilam	Koshi	0.0	1.4	0.0	93.0	5.6	19706
81	Mangsebung RM	Ilam	Koshi	0.2	6.7	0.0	87.3	5.7	16810
82	Chulachuli RM	Ilam	Koshi	0.5	5.3	0.0	60.1	34.1	23157
83	Mai UM	Ilam	Koshi	1.1	15.7	0.0	53.7	29.4	30732
84	Suryodaya UM	Ilam	Koshi	0.4	3.2	0.0	68.1	28.3	54727
85	Rong RM	Ilam	Koshi	4.4	2.2	0.0	83.5	9.9	17367
86	Mechinagar UM	Jhapa	Koshi	0.1	4.0	0.0	51.2	44.8	133073
87	Buddhashanti RM	Jhapa	Koshi	0.1	2.4	0.0	84.2	13.3	53010
88	Arjundhara UM	Jhapa	Koshi	0.1	2.7	0.0	42.9	54.4	84018
89	Kankai UM	Jhapa	Koshi	0.0	0.5	0.0	49.5	50.0	53148
90	Shivasatakshi UM	Jhapa	Koshi	0.0	0.4	0.0	33.7	65.9	74077
91	Kamal RM	Jhapa	Koshi	0.0	0.6	0.0	67.4	32.0	53894
92	Damak UM	Jhapa	Koshi	0.0	0.5	0.0	53.2	46.2	107227
93	Gauradaha UM	Jhapa	Koshi	0.0	0.3	0.0	44.5	55.2	60451
94	Gauriganj RM	Jhapa	Koshi	0.0	0.6	0.0	50.9	48.4	35506
95	Jhapa RM	Jhapa	Koshi	0.0	0.6	0.0	49.3	50.1	39302
96	Barhadashi RM	Jhapa	Koshi	0.0	0.4	0.0	51.4	48.2	37946

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
97	Birtamod UM	Jhapa	Koshi	0.0	0.7	0.0	44.9	54.4	116192
98	Haldibari RM	Jhapa	Koshi	0.0	1.0	0.0	54.7	44.3	32722
99	Bhadrapur UM	Jhapa	Koshi	0.0	0.9	0.0	47.8	51.3	70913
100	Kachan akawal RM	Jhapa	Koshi	0.0	1.1	0.0	50.8	48.0	41317
101	Miklajung RM	Morang	Koshi	0.2	3.4	0.0	73.2	23.1	33167
102	Letang UM	Morang	Koshi	0.5	1.2	0.0	69.2	29.1	38152
103	Kerabari RM	Morang	Koshi	0.4	1.1	0.0	87.3	11.2	34504
104	Sundar-haraicha UM	Morang	Koshi	0.0	1.5	0.0	45.7	52.8	120213
105	Belbari UM	Morang	Koshi	0.0	0.5	0.0	36.7	62.8	81771
106	Kanepokhari RM	Morang	Koshi	0.0	0.8	0.0	52.6	46.6	43193
107	Pathari Shanishchare UM	Morang	Koshi	0.0	1.0	0.0	36.7	62.3	72451
108	Urlabari UM	Morang	Koshi	0.0	0.9	0.0	43.2	55.9	70908
109	Ratuwamai UM	Morang	Koshi	0.0	0.3	0.0	32.4	67.3	61139
110	Sunwarshi UM	Morang	Koshi	0.0	0.3	0.0	32.0	67.8	56034
111	Rangeli UM	Morang	Koshi	0.0	0.4	0.0	33.6	66.0	57494
112	Gramthan RM	Morang	Koshi	0.0	1.2	0.0	51.1	47.6	36024
113	Budhiganga RM	Morang	Koshi	0.0	0.6	0.0	60.1	39.3	51497
114	Biratnagar Metropolitian City	Morang	Koshi	0.0	0.5	0.0	40.8	58.7	243927

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
115	Katahari RM	Morang	Koshi	0.0	0.6	0.0	53.2	46.1	48510
116	Dhanapalthan RM	Morang	Koshi	0.0	1.0	0.0	48.9	50.1	45348
117	Jahada RM	Morang	Koshi	0.0	0.6	0.0	48.7	50.7	47639
118	Dharan Sub-Metropolitian City	Sunsari	Koshi	0.5	1.0	0.0	65.6	33.0	166531
119	Barahachhetra UM	Sunsari	Koshi	0.1	1.3	0.0	46.8	51.8	91087
120	Koshi RM	Sunsari	Koshi	0.0	0.7	0.0	50.4	48.9	48804
121	Bhokraha Narsingh RM	Sunsari	Koshi	0.0	0.4	0.0	49.8	49.8	49280
122	Ramdhuni UM	Sunsari	Koshi	0.0	0.5	0.0	37.1	62.4	63452
123	Itahari Sub-Metropolitian City	Sunsari	Koshi	0.0	0.7	0.0	50.9	48.4	197241
124	Duhabi UM	Sunsari	Koshi	0.0	1.2	0.0	40.5	58.3	66074
125	Gadhi RM	Sunsari	Koshi	0.0	0.9	0.0	51.7	47.4	38739
126	Inaruwa UM	Sunsari	Koshi	0.0	0.8	0.0	36.2	63.0	74914
127	Harinagar RM	Sunsari	Koshi	0.0	0.3	0.0	50.1	49.7	49845
128	Dewangunj RM	Sunsari	Koshi	0.0	0.3	0.0	49.4	50.3	39030
129	Barju RM	Sunsari	Koshi	0.0	0.7	0.0	50.3	49.0	36249
130	Belaka UM	Udayapur	Koshi	0.3	7.0	0.0	48.5	44.1	51043

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
131	Chaudandigadhi UM	Udayapur	Koshi	0.2	7.6	0.0	50.0	42.2	53631
132	Triyuga UM	Udayapur	Koshi	0.4	4.1	0.0	45.9	49.7	102725
133	Rautamai RM	Udayapur	Koshi	0.9	1.3	0.0	88.6	9.3	20324
134	Limchunbung RM	Udayapur	Koshi	0.7	1.8	0.0	90.8	6.7	9689
135	Tapli RM	Udayapur	Koshi	0.8	3.2	0.0	86.2	9.7	13344
136	Katari UM	Udayapur	Koshi	0.3	12.4	0.0	54.9	32.4	59507
137	Udayapurgadhi RM	Udayapur	Koshi	0.7	10.3	0.0	81.3	7.7	28926
138	Saptakoshi UM	Saptari	Madhesh	0.0	3.9	0.0	33.9	62.2	23510
139	Kanchanrup UM	Saptari	Madhesh	0.0	0.5	0.0	35.0	64.5	58466
140	Agnisair Krishnasabaran RM	Saptari	Madhesh	0.0	0.6	0.0	29.8	69.5	31634
141	Rupani RM	Saptari	Madhesh	0.0	1.2	0.0	28.6	70.2	29877
142	Shambhunath UM	Saptari	Madhesh	0.0	1.1	0.0	34.9	64.0	39634
143	Khadak UM	Saptari	Madhesh	0.0	1.1	0.0	35.1	63.8	52778
144	Surunga UM	Saptari	Madhesh	0.0	4.2	0.0	34.1	61.6	49460
145	Balan-Bihul RM	Saptari	Madhesh	0.0	1.5	0.0	28.5	70.0	23527
146	Bode Barsain UM	Saptari	Madhesh	0.0	0.6	0.0	35.1	64.2	46017
147	Dakneshwori UM	Saptari	Madhesh	0.4	1.3	0.0	34.9	63.5	47739

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
148	Rajgadh RM	Saptari	Madhesh	0.0	1.8	0.0	28.2	70.0	32462
149	Bishnupur RM	Saptari	Madhesh	0.0	0.5	0.0	28.7	70.8	27703
150	Rajbiraj UM	Saptari	Madhesh	0.0	0.8	0.0	35.0	64.2	70803
151	Mahadewa RM	Saptari	Madhesh	0.0	0.5	0.0	28.8	70.7	30315
152	Tirahut RM	Saptari	Madhesh	0.0	0.5	0.0	28.6	70.9	24034
153	Hanumannagar Kankalini UM	Saptari	Madhesh	0.0	0.3	0.0	35.2	64.5	52796
154	Tilathi Koiladi RM	Saptari	Madhesh	0.0	0.6	0.0	29.3	70.1	33658
155	Chhinnamasta RM	Saptari	Madhesh	0.0	0.4	0.0	29.0	70.5	29946
156	Lahan UM	Siraha	Madhesh	0.1	7.1	0.0	32.2	60.5	102031
157	Dhangadhimai UM	Siraha	Madhesh	1.2	11.3	0.0	32.9	54.7	53355
158	Golbazar UM	Siraha	Madhesh	0.1	9.1	0.0	35.2	55.6	63885
159	Mirchaiya UM	Siraha	Madhesh	0.4	2.0	0.0	34.4	63.2	59425
160	Karjanha UM	Siraha	Madhesh	0.2	1.2	0.0	35.2	63.4	38557
161	Kalyanpur UM	Siraha	Madhesh	0.0	0.8	0.0	34.7	64.5	58872
162	Naraha RM	Siraha	Madhesh	0.0	2.1	0.0	30.6	67.4	22760
163	Bishnupur RM	Siraha	Madhesh	0.0	2.1	0.0	28.2	69.7	22781
164	Arnama RM	Siraha	Madhesh	0.0	0.9	0.0	28.6	70.5	27899

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
165	Sukhipur UM	Siraha	Madhesh	0.0	1.4	0.0	35.1	63.4	42033
166	Laxmipur Patari RM	Siraha	Madhesh	0.0	1.1	0.0	28.9	70.0	31118
167	Sakhuwa Nankarkatti RM	Siraha	Madhesh	0.0	1.9	0.0	29.3	68.8	20844
168	Bhagawanpur RM	Siraha	Madhesh	0.0	0.3	0.0	27.8	71.9	23380
169	Nawarajpur RM	Siraha	Madhesh	0.0	1.5	0.0	28.0	70.4	20788
170	Bariyarpatti RM	Siraha	Madhesh	0.0	1.4	0.0	30.3	68.2	29712
171	Aurahi RM	Siraha	Madhesh	0.0	1.2	0.0	30.1	68.7	26478
172	Siraha UM	Siraha	Madhesh	0.0	1.2	0.0	35.0	63.8	95410
173	Ganeshman Charnath UM	Dhanusa	Madhesh	0.7	29.6	0.0	25.0	44.7	44082
174	Dhanushadham UM	Dhanusa	Madhesh	0.0	24.1	0.0	27.0	48.9	52024
175	Mithila UM	Dhanusa	Madhesh	0.0	27.9	0.0	25.1	47.0	48676
176	Bateshwor RM	Dhanusa	Madhesh	0.0	27.9	0.0	29.7	42.4	21742
177	Chhireshwornath UM	Dhanusa	Madhesh	0.0	6.3	0.0	33.1	60.6	51075
178	Laxminiya RM	Dhanusa	Madhesh	0.0	1.4	0.0	29.0	69.6	31881
179	Mithila Bihari UM	Dhanusa	Madhesh	0.0	2.7	0.0	34.5	62.8	38273
180	Hansapur UM	Dhanusa	Madhesh	0.0	2.1	0.0	34.8	63.1	44949
181	Sabaila UM	Dhanusa	Madhesh	0.0	0.7	0.0	34.9	64.4	62282

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
182	Shahidnagar UM	Dhanusa	Madhesh	0.0	1.0	0.0	34.9	64.1	53812
183	Kamala UM	Dhanusa	Madhesh	0.0	0.7	0.0	35.3	64.0	44597
184	Janak Nandini RM	Dhanusa	Madhesh	0.0	0.5	0.0	31.5	68.0	27146
185	Bideha UM	Dhanusa	Madhesh	0.0	0.7	0.0	34.9	64.4	37697
186	Aurahi RM	Dhanusa	Madhesh	0.0	0.7	0.0	28.3	71.0	24053
187	Janakpurdham Sub-Metropolitan City	Dhanusa	Madhesh	0.0	1.2	0.0	34.6	64.1	194556
188	Dhanauji RM	Dhanusa	Madhesh	0.0	1.0	0.0	29.3	69.7	21942
189	Nagarain UM	Dhanusa	Madhesh	0.0	1.1	0.0	35.0	63.8	38037
190	Mukhiyapatti Musaharmiya RM	Dhanusa	Madhesh	0.0	1.0	0.0	30.1	68.9	28208
191	Bardibas UM	Mahottari	Madhesh	0.1	6.8	0.0	34.1	59.1	74361
192	Gaushala UM	Mahottari	Madhesh	0.0	4.2	0.0	34.4	61.3	72481
193	Sonama RM	Mahottari	Madhesh	0.0	5.0	0.0	33.0	62.0	43082
194	Aurahi UM	Mahottari	Madhesh	0.1	6.9	0.0	33.9	59.0	37361
195	Bhangaha UM	Mahottari	Madhesh	0.0	6.6	0.0	34.3	59.1	55354
196	Loharpatti UM	Mahottari	Madhesh	0.0	4.7	0.0	34.0	61.3	45773
197	Balawa UM	Mahottari	Madhesh	0.0	2.7	0.0	34.7	62.6	49473

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
198	Ram Gopalpur UM	Mahottari	Madhesh	0.0	3.4	0.0	35.7	60.8	36201
199	Samsi RM	Mahottari	Madhesh	0.0	2.1	0.0	29.3	68.7	38585
200	Manara Shisawa UM	Mahottari	Madhesh	0.0	3.1	0.0	34.3	62.6	52191
201	Ekadara RM	Mahottari	Madhesh	0.0	1.9	0.0	26.1	72.0	31770
202	Mahottari RM	Mahottari	Madhesh	0.1	1.2	0.0	28.7	70.0	28807
203	Pipara RM	Mahottari	Madhesh	0.0	0.6	0.0	27.8	71.6	40535
204	Matihani UM	Mahottari	Madhesh	0.0	1.2	0.0	35.4	63.4	36136
205	Jaleshwor UM	Mahottari	Madhesh	0.0	1.9	0.0	34.7	63.4	63802
206	Lalbandi UM	Sarlahi	Madhesh	0.1	7.6	0.0	32.8	59.4	66419
207	Hariwan UM	Sarlahi	Madhesh	0.1	17.5	0.0	30.5	51.9	49988
208	Bagmati UM	Sarlahi	Madhesh	0.0	15.3	0.0	34.0	50.6	47106
209	Barahathawa UM	Sarlahi	Madhesh	0.0	0.8	0.0	35.1	64.1	81120
210	Haripur UM	Sarlahi	Madhesh	0.0	0.7	0.0	35.4	63.9	43233
211	Ishworpur UM	Sarlahi	Madhesh	0.1	9.0	0.0	33.4	57.5	68377
212	Haripurwa UM	Sarlahi	Madhesh	0.0	3.8	0.0	33.0	63.2	38714
213	Parsa RM	Sarlahi	Madhesh	0.0	1.8	0.0	28.3	70.0	24005
214	Brahmapuri RM	Sarlahi	Madhesh	0.0	2.9	0.0	27.2	69.9	31378

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
215	Chandranagar RM	Sarlahi	Madhesh	0.0	2.1	0.0	29.2	68.7	36908
216	Kabilashi UM	Sarlahi	Madhesh	0.0	2.1	0.0	34.9	63.0	44204
217	Chakraghatta RM	Sarlahi	Madhesh	0.1	2.8	0.0	26.3	70.9	29550
218	Basbariya RM	Sarlahi	Madhesh	0.0	0.2	0.0	27.8	71.9	25905
219	Dhanakaul RM	Sarlahi	Madhesh	0.0	0.8	0.0	29.0	70.2	27974
220	Ramnagar RM	Sarlahi	Madhesh	0.0	0.4	0.0	28.2	71.4	31366
221	Balara UM	Sarlahi	Madhesh	0.0	0.5	0.0	35.3	64.1	47912
222	Godaita UM	Sarlahi	Madhesh	0.1	0.8	0.0	34.9	64.2	54270
223	Bishnu RM	Sarlahi	Madhesh	0.0	1.8	0.0	27.0	71.2	28570
224	Kaudena RM	Sarlahi	Madhesh	0.1	0.4	0.0	27.4	72.0	28702
225	Malangawa UM	Sarlahi	Madhesh	0.0	1.1	0.0	34.5	64.4	54550
226	Chandrapur UM	Rautahat	Madhesh	0.3	2.1	0.0	34.3	63.3	81807
227	Gujara UM	Rautahat	Madhesh	0.0	1.6	0.0	38.3	60.1	54033
228	Phatuwa Bijayapur UM	Rautahat	Madhesh	0.0	2.1	0.0	35.9	61.9	42218
229	Katahariya UM	Rautahat	Madhesh	0.1	1.8	0.0	32.9	65.2	45821
230	Brindaban UM	Rautahat	Madhesh	0.0	1.3	0.0	35.1	63.5	49742
231	Gadhimai UM	Rautahat	Madhesh	0.0	1.1	0.0	34.9	63.9	49135

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
232	Madhav Narayan UM	Rautahat	Madhesh	0.0	1.0	0.0	35.0	64.0	40894
233	Garuda UM	Rautahat	Madhesh	0.0	1.8	0.0	34.9	63.2	60857
234	Dewahi Gonahi UM	Rautahat	Madhesh	0.1	1.0	0.0	35.3	63.5	38690
235	Maulapur UM	Rautahat	Madhesh	0.1	2.9	0.0	34.6	62.4	32325
236	Boudhimai UM	Rautahat	Madhesh	0.0	2.7	0.0	34.9	62.4	39325
237	Paroha UM	Rautahat	Madhesh	0.0	2.4	0.0	35.3	62.2	45702
238	Rajpur UM	Rautahat	Madhesh	0.0	0.8	0.0	35.2	63.9	54083
239	Yamunamai RM	Rautahat	Madhesh	0.0	0.7	0.0	28.7	70.7	28414
240	Durga Bhagawati RM	Rautahat	Madhesh	0.0	1.3	0.0	29.2	69.5	22864
241	Rajdevi UM	Rautahat	Madhesh	0.0	2.1	0.0	34.6	63.3	35658
242	Gaur UM	Rautahat	Madhesh	0.0	1.7	0.0	33.9	64.4	39846
243	Ishanath UM	Rautahat	Madhesh	0.0	1.4	0.0	33.5	65.2	51855
244	Nijagadh UM	Bara	Madhesh	0.0	3.1	0.0	41.1	55.7	37687
245	Kolhabi UM	Bara	Madhesh	0.0	1.6	0.0	37.4	60.9	51182
246	Jitpur Simara Sub-Metropolitan City	Bara	Madhesh	0.0	1.6	0.0	35.0	63.3	127307
247	Parawanipur RM	Bara	Madhesh	0.0	1.1	0.0	31.4	67.6	24745
248	Prasauni RM	Bara	Madhesh	0.0	0.9	0.0	27.6	71.6	25414

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
249	Bishrampur RM	Bara	Madhesh	0.0	3.2	0.0	29.3	67.5	24892
250	Pheta RM	Bara	Madhesh	0.0	2.3	0.0	31.2	66.5	28395
251	Kalaiya Sub-Metropolitian City	Bara	Madhesh	0.0	1.9	0.0	34.1	64.0	136222
252	Karaiyamai RM	Bara	Madhesh	0.0	0.8	0.0	36.3	62.9	29165
253	Baragadhi RM	Bara	Madhesh	0.0	2.9	0.0	30.3	66.8	29555
254	Aadarsha Kotwal RM	Bara	Madhesh	0.0	1.7	0.0	31.3	67.0	31364
255	Simroungadh UM	Bara	Madhesh	0.0	1.6	0.0	34.9	63.5	54878
256	Pacharauta UM	Bara	Madhesh	0.0	0.6	0.0	35.2	64.1	40524
257	Mahagadhimai UM	Bara	Madhesh	0.0	1.0	0.0	35.2	63.8	59424
258	Devtal RM	Bara	Madhesh	0.0	1.0	0.0	29.4	69.6	25361
259	Subarna RM	Bara	Madhesh	0.0	1.4	0.0	28.5	70.0	35141
260	Thori RM	Parsa	Madhesh	0.2	6.6	0.0	56.3	36.9	17219
261	Jirabhawani RM	Parsa	Madhesh	0.0	0.4	0.0	37.3	62.3	22677
262	Jagarnathpur RM	Parsa	Madhesh	0.0	1.1	0.0	32.5	66.4	32649
263	Paterwa Sugauli RM	Parsa	Madhesh	0.1	0.5	0.0	36.3	63.1	25498
264	Sakhuwa Prasauni RM	Parsa	Madhesh	0.0	1.0	0.0	42.3	56.6	35399
265	Parsagadhi UM	Parsa	Madhesh	0.0	1.5	0.0	34.6	63.9	41569

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
266	Birgunj Metropolitian City	Parsa	Madhesh	0.0	1.1	0.0	34.3	64.6	272382
267	Bahudarmai UM	Parsa	Madhesh	0.0	1.0	0.0	33.8	65.2	43478
268	Pokhariya UM	Parsa	Madhesh	0.0	4.2	0.0	34.4	61.4	37675
269	Kalikamai RM	Parsa	Madhesh	0.0	1.6	0.0	26.8	71.6	23480
270	Dhobini RM	Parsa	Madhesh	0.0	1.1	0.0	30.5	68.4	22606
271	Chhipaharmai RM	Parsa	Madhesh	0.0	1.6	0.0	33.4	65.0	29082
272	Pakaha Mainpur RM	Parsa	Madhesh	0.0	0.6	0.0	28.8	70.5	22585
273	Bindabasini RM	Parsa	Madhesh	0.0	1.3	0.0	28.3	70.4	24991
274	Gaurishankar RM	Dolakha	Bagmati	0.1	1.6	0.0	70.5	27.8	15995
275	Bigu RM	Dolakha	Bagmati	0.1	1.1	0.0	72.8	26.0	16490
276	Kalinchowk RM	Dolakha	Bagmati	0.2	1.2	0.0	71.7	27.0	21097
277	Baiteshwor RM	Dolakha	Bagmati	0.1	1.1	0.0	74.9	23.9	17896
278	Jiri UM	Dolakha	Bagmati	0.5	4.1	0.1	67.0	28.4	16109
279	Tamakoshi RM	Dolakha	Bagmati	0.1	1.9	0.0	74.8	23.3	15163
280	Melung RM	Dolakha	Bagmati	1.0	3.1	0.0	71.7	24.2	15893
281	Shailung RM	Dolakha	Bagmati	0.2	0.9	0.0	72.5	26.3	17923
282	Bhimeshwor UM	Dolakha	Bagmati	0.1	1.1	0.4	75.1	23.3	34712

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
283	Bhotekoshi RM	Sindhupalchok	Bagmati	0.4	1.7	0.0	76.0	21.8	14318
284	Jugal RM	Sindhupalchok	Bagmati	0.1	1.0	0.0	77.8	21.1	18303
285	Panchpokhari Thangpal RM	Sindhupalchok	Bagmati	0.2	1.6	0.0	71.7	26.6	20997
286	Helambu RM	Sindhupalchok	Bagmati	0.3	2.5	0.0	68.2	29.0	17497
287	Melanchi UM	Sindhupalchok	Bagmati	0.6	2.9	0.7	78.2	17.6	41063
288	Indrawoti RM	Sindhupalchok	Bagmati	0.3	3.3	0.0	73.9	22.4	25365
289	Choutara Sangachowkgadhi UM	Sindhupalchok	Bagmati	0.1	2.2	0.8	78.3	18.6	42668
290	Balephi RM	Sindhupalchok	Bagmati	0.0	0.7	0.0	75.8	23.5	17085
291	Bahrabise UM	Sindhupalchok	Bagmati	0.7	0.7	0.9	78.5	19.2	24109
292	Tripurasundari RM	Sindhupalchok	Bagmati	0.1	0.7	0.0	73.7	25.4	12014
293	Lisankhu Pakhar RM	Sindhupalchok	Bagmati	0.0	0.8	0.0	73.3	25.9	11750
294	Sunkoshi RM	Sindhupalchok	Bagmati	0.4	2.2	0.0	73.9	23.5	15176
295	Gosaikunda RM	Rasuwa	Bagmati	2.0	1.5	0.0	69.3	27.2	7788
296	Aamachhodingmo RM	Rasuwa	Bagmati	1.1	0.1	0.0	76.8	22.0	6673
297	Uttargaya RM	Rasuwa	Bagmati	0.2	1.3	0.0	73.1	25.5	8555
298	Naukunda RM	Rasuwa	Bagmati	0.0	0.3	0.0	77.4	22.3	12344
299	Kalika RM	Rasuwa	Bagmati	0.0	1.2	0.0	67.8	31.0	10115

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
300	Rubi Valley RM	Dhading	Bagmati	0.0	0.6	0.0	74.7	24.7	10781
301	Khaniyabas RM	Dhading	Bagmati	0.1	0.3	0.0	71.0	28.6	10287
302	Ganga Jamuna RM	Dhading	Bagmati	0.2	0.9	0.0	78.6	20.2	19265
303	Tripurasundari RM	Dhading	Bagmati	0.4	2.6	0.0	69.8	27.2	21937
304	Netrawati Dabjong RM	Dhading	Bagmati	0.0	0.8	0.0	71.9	27.3	11310
305	Nilkhantha UM	Dhading	Bagmati	0.4	2.4	1.0	70.9	25.3	58828
306	Jwalamukhi RM	Dhading	Bagmati	0.5	2.7	0.0	76.2	20.6	21338
307	Siddhalek RM	Dhading	Bagmati	0.7	1.4	0.0	76.1	21.8	22214
308	Benighat Rorang RM	Dhading	Bagmati	1.0	3.5	0.0	74.0	21.5	33854
309	Gajuri RM	Dhading	Bagmati	0.6	1.8	0.0	72.0	25.6	28634
310	Galchhi RM	Dhading	Bagmati	0.3	4.0	0.0	71.6	24.1	23733
311	Thakre RM	Dhading	Bagmati	0.4	1.2	0.0	69.6	28.8	32374
312	Dhunibenshi UM	Dhading	Bagmati	2.1	2.8	1.3	63.6	30.2	29149
313	Dupcheshwor RM	Nuwakot	Bagmati	0.0	1.8	0.0	74.8	23.4	21005
314	Tadi RM	Nuwakot	Bagmati	0.3	0.7	0.0	76.8	22.2	15933
315	Suryagadhi RM	Nuwakot	Bagmati	0.1	0.8	0.0	79.8	19.3	14919
316	Bidur UM	Nuwakot	Bagmati	0.2	1.3	0.9	71.1	26.5	59227

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
317	Kispang RM	Nuwakot	Bagmati	0.1	1.2	0.0	74.7	24.0	14235
318	Myagang RM	Nuwakot	Bagmati	0.6	1.3	0.0	70.6	27.5	12668
319	Tarakeshwor RM	Nuwakot	Bagmati	1.9	1.6	0.0	72.8	23.7	14184
320	Belkotgadhi UM	Nuwakot	Bagmati	0.3	4.2	0.4	79.2	15.9	35224
321	Likhu RM	Nuwakot	Bagmati	0.1	8.3	0.0	71.9	19.8	17728
322	Panchakanya RM	Nuwakot	Bagmati	0.7	3.2	0.0	71.9	24.2	13818
323	Shivapuri RM	Nuwakot	Bagmati	0.2	1.1	0.0	69.4	29.2	17203
324	Kakani RM	Nuwakot	Bagmati	0.5	2.4	0.0	71.6	25.5	24504
325	Shankharapur UM	Kathmandu	Bagmati	0.0	2.7	0.0	67.6	29.8	29318
326	Kageshwori Manahara UM	Kathmandu	Bagmati	0.0	3.8	0.0	45.0	51.2	130433
327	Gokarneshwor UM	Kathmandu	Bagmati	0.0	2.0	0.0	44.1	53.9	149366
328	Budhanilkhantha UM	Kathmandu	Bagmati	0.0	3.7	0.0	46.2	50.1	177557
329	Tokha UM	Kathmandu	Bagmati	0.0	2.5	0.0	41.7	55.8	133755
330	Tarakeshwor UM	Kathmandu	Bagmati	0.0	1.7	0.0	46.3	52.0	151479
331	Nagarjun UM	Kathmandu	Bagmati	0.0	4.4	0.0	50.1	45.5	115437
332	Kathmandu Metropolitan City	Kathmandu	Bagmati	0.0	3.2	0.0	41.7	55.1	862400
333	Kirtipur UM	Kathmandu	Bagmati	0.0	2.0	0.0	49.8	48.2	81578

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
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334	Chandragiri UM	Kathmandu	Bagmati	0.0	2.3	0.0	54.9	42.7	136860
335	Dakshinkali UM	Kathmandu	Bagmati	0.0	1.0	0.0	71.7	27.3	26372
336	Changunarayan UM	Bhaktapur	Bagmati	0.0	5.1	0.0	52.5	42.4	88083
337	Bhaktapur UM	Bhaktapur	Bagmati	0.0	4.0	0.0	45.6	50.4	79136
338	Madhyapur Thimi UM	Bhaktapur	Bagmati	0.0	4.8	0.0	45.9	49.4	119756
339	Suryabinayak UM	Bhaktapur	Bagmati	0.0	3.7	0.0	49.1	47.2	140085
340	Mahalaxmi UM	Lalitpur	Bagmati	0.1	2.7	0.0	69.9	27.3	123116
341	Lalitpur Metropolitan City	Lalitpur	Bagmati	0.0	7.6	0.0	42.6	49.8	294098
342	Godawari UM	Lalitpur	Bagmati	0.0	2.4	0.0	60.0	37.6	97633
343	Konjyosom RM	Lalitpur	Bagmati	0.0	0.2	0.0	64.0	35.8	8989
344	Mahankal RM	Lalitpur	Bagmati	0.0	0.7	0.0	68.0	31.4	8122
345	Bagmati RM	Lalitpur	Bagmati	0.0	1.9	0.0	68.3	29.8	11353
346	Chauri Deurali RM	Kavrepalanchok	Bagmati	0.3	2.1	0.0	68.5	29.1	14076
347	Bhumlu RM	Kavrepalanchok	Bagmati	0.7	1.2	0.0	77.2	20.9	15678
348	Mandan Deupur UM	Kavrepalanchok	Bagmati	0.2	5.5	1.0	67.5	25.7	30381
349	Banepa UM	Kavrepalanchok	Bagmati	0.9	5.2	1.9	59.5	32.5	67690

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
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350	Dhulikhel UM	Kavrepalanchok	Bagmati	0.2	3.3	0.7	60.6	35.2	33726
351	Panchkhal UM	Kavrepalanchok	Bagmati	0.6	7.0	0.7	61.4	30.4	35521
352	Temal RM	Kavrepalanchok	Bagmati	0.9	6.2	0.0	67.4	25.5	16957
353	Namobuddha UM	Kavrepalanchok	Bagmati	1.6	8.0	0.7	62.8	26.9	26160
354	Panauti UM	Kavrepalanchok	Bagmati	0.4	7.4	0.5	63.7	28.0	51504
355	Bethanchowk RM	Kavrepalanchok	Bagmati	0.1	0.8	0.0	71.3	27.7	14959
356	Roshi RM	Kavrepalanchok	Bagmati	0.7	0.8	0.0	71.5	26.9	23790
357	Mahabharat RM	Kavrepalanchok	Bagmati	0.4	1.0	0.0	73.8	24.8	16079
358	Khanikhola RM	Kavrepalanchok	Bagmati	0.2	4.5	0.0	63.9	31.4	12201
359	Umakunda RM	Ramechhap	Bagmati	0.3	1.3	0.0	70.4	28.0	16590
360	Gokulganga RM	Ramechhap	Bagmati	0.2	1.3	0.0	72.7	25.8	17798
361	Likhu Tamakoshi RM	Ramechhap	Bagmati	5.2	3.2	0.0	69.0	22.5	18325
362	Ramechhap UM	Ramechhap	Bagmati	1.3	3.6	0.4	64.9	29.8	24971
363	Manthali UM	Ramechhap	Bagmati	1.7	5.2	0.3	73.7	19.1	39695

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
364	Khandadevi RM	Ramechhap	Bagmati	0.4	2.9	0.0	68.1	28.6	19312
365	Doramba Shailung RM	Ramechhap	Bagmati	0.1	1.7	0.0	74.0	24.2	17686
366	Sunapati RM	Ramechhap	Bagmati	0.6	1.0	0.0	69.3	29.1	14658
367	Dudhouli UM	Sindhuli	Bagmati	0.4	28.8	0.5	45.2	25.0	70207
368	Phikkal RM	Sindhuli	Bagmati	0.4	1.8	0.0	66.6	31.2	15910
369	Tinpatan RM	Sindhuli	Bagmati	0.6	4.5	0.0	72.6	22.3	34889
370	Golanjor RM	Sindhuli	Bagmati	0.9	1.9	0.0	71.6	25.5	18737
371	Kamalamai UM	Sindhuli	Bagmati	0.5	10.4	0.7	57.8	30.7	71016
372	Sunkoshi RM	Sindhuli	Bagmati	1.0	1.8	0.0	71.3	25.9	18375
373	Ghyanglekha RM	Sindhuli	Bagmati	0.1	3.6	0.0	67.8	28.5	12652
374	Marin RM	Sindhuli	Bagmati	2.3	27.8	0.0	54.9	15.0	28808
375	Hariharpurgaghi RM	Sindhuli	Bagmati	0.9	24.5	0.0	57.7	16.9	26505
376	Indrasarowar RM	Makwanpur	Bagmati	1.6	3.1	0.0	69.4	26.0	13534
377	Thaha UM	Makwanpur	Bagmati	0.5	1.5	1.0	76.0	21.0	38870
378	Kailash RM	Makwanpur	Bagmati	0.2	1.3	0.0	73.8	24.7	21856
379	Raksirang RM	Makwanpur	Bagmati	0.1	4.6	0.0	72.6	22.8	25996
380	Manahari RM	Makwanpur	Bagmati	0.3	5.8	0.0	73.3	20.6	47353
381	Hetauda Sub-Metropolitan City	Makwanpur	Bagmati	0.2	4.1	0.1	62.7	32.8	193576

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
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382	Bhimphedi RM	Makwanpur	Bagmati	0.3	2.0	0.0	70.3	27.4	21516
383	Makawanpurgadhi RM	Makwanpur	Bagmati	1.1	9.4	0.0	63.6	25.9	24461
384	Bakaiya RM	Makwanpur	Bagmati	2.2	16.9	0.0	61.8	19.1	40907
385	Bagmati RM	Makwanpur	Bagmati	0.9	21.9	0.0	60.0	17.1	30425
386	Rapti UM	Chitawan	Bagmati	0.1	2.1	0.1	60.8	36.9	66617
387	Kalika UM	Chitawan	Bagmati	0.6	2.8	0.4	62.4	33.8	52164
388	Ichchha Kamana RM	Chitawan	Bagmati	2.7	2.8	0.0	69.6	24.9	27643
389	Bharatpur Metropolitan City	Chitawan	Bagmati	0.0	1.5	0.1	50.7	47.7	369268
390	Ratnanagar UM	Chitawan	Bagmati	0.0	1.1	0.2	55.2	43.5	89905
391	Khairahani UM	Chitawan	Bagmati	0.0	1.5	0.0	49.9	48.6	67385
392	Madi UM	Chitawan	Bagmati	0.1	0.7	0.0	70.9	28.3	38295
393	Chumanubri RM	Gorkha	Gandaki	1.2	2.2	0.0	87.3	9.2	5932
394	Ajirkot RM	Gorkha	Gandaki	0.1	1.2	0.0	91.5	7.3	12832
395	Barpak Sulikot RM	Gorkha	Gandaki	0.1	1.0	0.0	90.5	8.3	22636
396	Dharche RM	Gorkha	Gandaki	0.0	0.5	0.0	91.9	7.6	14263
397	Aarughat RM	Gorkha	Gandaki	0.2	2.1	0.0	89.9	7.8	21572
398	Bhimsenthapa RM	Gorkha	Gandaki	0.6	1.8	0.0	89.4	8.2	16986

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
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399	Siranchowk RM	Gorkha	Gandaki	0.9	1.4	0.0	89.5	8.1	19719
400	Palungtar UM	Gorkha	Gandaki	0.8	5.1	0.0	61.1	33.0	37409
401	Gorkha UM	Gorkha	Gandaki	0.2	1.8	0.0	52.7	45.3	52468
402	Shahid Lakhan RM	Gorkha	Gandaki	0.2	1.4	0.0	91.5	7.0	23076
403	Gandaki RM	Gorkha	Gandaki	0.1	2.1	0.0	90.9	6.9	21394
404	Narpa Bhumi RM	Manang	Gandaki	0.0	0.0	0.0	93.3	6.7	396
405	Manang Ngisyang RM	Manang	Gandaki	0.1	0.3	0.0	90.5	9.2	1595
406	Chame RM	Manang	Gandaki	0.0	0.0	0.0	90.7	9.3	1276
407	Nason RM	Manang	Gandaki	0.0	0.4	0.0	90.0	9.7	1671
408	Lo Ghekar Damodarkunda RM	Mustang	Gandaki	1.9	1.2	0.0	86.6	10.3	1292
409	Gharpajhong RM	Mustang	Gandaki	0.2	0.5	0.0	89.4	9.9	3712
410	Varagung Muktichhetra RM	Mustang	Gandaki	0.8	0.0	0.0	90.9	8.3	2036
411	Lomanthang RM	Mustang	Gandaki	19.4	0.1	0.0	75.3	5.1	1430
412	Thasang RM	Mustang	Gandaki	0.0	0.7	0.0	90.4	8.9	2856
413	Annapurna RM	Myagdi	Gandaki	0.2	0.6	0.0	92.0	7.3	12323
414	Raghuganga RM	Myagdi	Gandaki	1.0	0.6	0.0	92.4	6.0	14114
415	Dhawalagiri RM	Myagdi	Gandaki	0.6	0.6	0.0	91.2	7.6	12616

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				Surface water	Unimproved	Limited	Basic	Safely managed	
416	Malika RM	Myagdi	Gandaki	0.4	0.6	0.0	91.6	7.4	18332
417	Mangala RM	Myagdi	Gandaki	0.3	0.2	0.0	91.8	7.6	14688
418	Beni UM	Myagdi	Gandaki	0.1	0.5	0.0	67.8	31.5	32697
419	Madi RM	Kaski	Gandaki	0.4	2.0	0.0	89.5	8.1	16142
420	Machhapuchchhre RM	Kaski	Gandaki	0.5	2.0	0.0	87.8	9.6	22898
421	Annapurna RM	Kaski	Gandaki	0.3	1.2	0.0	89.0	9.5	22099
422	Pokhara Metropolitan City	Kaski	Gandaki	0.2	1.0	0.0	61.7	37.0	513504
423	Rupa RM	Kaski	Gandaki	0.7	1.9	0.0	86.7	10.6	14891
424	Dordi RM	Lamjung	Gandaki	0.1	1.4	0.0	90.7	7.8	16050
425	Marshyangdi RM	Lamjung	Gandaki	0.2	0.6	0.0	89.9	9.3	17080
426	Kwhola Sothar RM	Lamjung	Gandaki	0.2	0.1	0.0	90.4	9.3	7960
427	Madhya Nepal UM	Lamjung	Gandaki	0.1	1.8	0.0	66.8	31.2	21971
428	Bensishahar UM	Lamjung	Gandaki	1.7	1.4	0.0	64.4	32.5	38232
429	Sundarbazar UM	Lamjung	Gandaki	0.9	0.8	0.0	64.7	33.6	27043
430	Rainas UM	Lamjung	Gandaki	1.0	1.1	0.0	66.4	31.6	17402
431	Dudhapokhari RM	Lamjung	Gandaki	0.3	0.7	0.0	89.6	9.3	8592
432	Bhanu UM	Tanahu	Gandaki	0.5	8.3	0.0	59.1	32.1	42794
433	Byas UM	Tanahu	Gandaki	0.6	2.9	0.0	64.7	31.8	78939
434	Myagde RM	Tanahu	Gandaki	0.3	4.3	0.0	84.1	11.2	23578
435	Shuklagandaki UM	Tanahu	Gandaki	0.2	2.7	0.0	63.8	33.3	55620

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
436	Bhimad UM	Tanahu	Gandaki	0.0	4.1	0.0	64.1	31.8	29248
437	Ghiring RM	Tanahu	Gandaki	0.2	4.6	0.0	87.5	7.7	14334
438	Rhishing RM	Tanahu	Gandaki	0.3	6.5	0.0	82.8	10.3	17918
439	Devghat RM	Tanahu	Gandaki	0.3	1.4	0.0	90.4	7.9	14584
440	Bandipur RM	Tanahu	Gandaki	1.5	3.3	0.0	86.7	8.5	18532
441	Aanbu Khaireni RM	Tanahu	Gandaki	0.7	0.2	0.0	90.6	8.5	22252
442	Gaidakot UM	Nawalparasi East	Gandaki	0.1	1.1	0.0	67.2	31.7	79349
443	Bulingtar RM	Nawalparasi East	Gandaki	0.7	2.1	0.0	89.4	7.8	14637
444	Baudikali RM	Nawalparasi East	Gandaki	0.1	0.5	0.0	91.4	8.0	11338
445	Hupsekot RM	Nawalparasi East	Gandaki	0.5	2.7	0.0	87.8	9.0	26583
446	Devchuli UM	Nawalparasi East	Gandaki	0.1	1.4	0.0	66.0	32.4	58003
447	Kawasoti UM	Nawalparasi East	Gandaki	0.0	2.4	0.0	63.3	34.3	86821
448	Madhya Bindu UM	Nawalparasi East	Gandaki	0.8	5.6	0.0	60.1	33.6	61091
449	Binayi Tribeni RM	Nawalparasi East	Gandaki	0.6	4.6	0.0	62.0	32.9	38370
450	Putalibazar UM	Syangja	Gandaki	0.5	1.0	0.0	66.5	32.0	41743
451	Phedikhola RM	Syangja	Gandaki	0.1	2.0	0.0	89.6	8.4	10899
452	Aandhikhola RM	Syangja	Gandaki	0.4	1.7	0.0	90.7	7.2	13094
453	Arjun Choupari RM	Syangja	Gandaki	0.6	0.5	0.0	90.3	8.5	14045
454	Bhirkot UM	Syangja	Gandaki	0.1	1.8	0.0	66.0	32.0	22645

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
455	Biruwa RM	Syangja	Gandaki	0.0	0.9	0.0	91.9	7.2	14001
456	Harinas RM	Syangja	Gandaki	0.4	3.3	0.0	87.3	8.9	13191
457	Chapakot UM	Syangja	Gandaki	0.1	4.6	0.0	63.0	32.3	22969
458	Walling UM	Syangja	Gandaki	0.4	1.0	0.0	66.2	32.4	50488
459	Galyang UM	Syangja	Gandaki	0.2	0.8	0.0	68.4	30.7	31034
460	Kaligandaki RM	Syangja	Gandaki	0.3	2.2	0.0	89.4	8.1	17955
461	Modi RM	Parbat	Gandaki	0.3	0.7	0.0	90.2	8.8	18794
462	Jaljala RM	Parbat	Gandaki	0.1	0.5	0.0	91.2	8.3	21119
463	Kushma UM	Parbat	Gandaki	0.0	0.5	0.0	68.4	31.1	38101
464	Phalebas UM	Parbat	Gandaki	0.0	3.6	0.0	66.2	30.1	20468
465	Mahashila RM	Parbat	Gandaki	0.0	0.3	0.0	90.5	9.2	8116
466	Bihadi RM	Parbat	Gandaki	0.0	1.0	0.0	90.3	8.7	10828
467	Paiyu RM	Parbat	Gandaki	0.2	1.0	0.0	90.0	8.8	12725
468	Baglung UM	Baglung	Gandaki	0.4	0.5	0.0	66.3	32.9	56102
469	Kathekhola RM	Baglung	Gandaki	0.4	0.5	0.0	91.5	7.7	22526
470	Tarakhola RM	Baglung	Gandaki	0.0	0.1	0.0	92.3	7.5	10120
471	Tamankhola RM	Baglung	Gandaki	0.1	0.8	0.0	91.4	7.7	9982
472	Dhorpatan UM	Baglung	Gandaki	0.3	0.7	0.0	68.1	31.0	30068
473	Nisikhola RM	Baglung	Gandaki	0.7	2.1	0.0	90.5	6.8	23119

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
474	Badigad RM	Baglung	Gandaki	0.3	1.9	0.0	90.6	7.2	28839
475	Galkot UM	Baglung	Gandaki	0.0	1.3	0.0	68.0	30.7	30588
476	Bareng RM	Baglung	Gandaki	0.3	0.5	0.0	91.4	7.8	11158
477	Jaimini UM	Baglung	Gandaki	2.3	1.2	0.0	67.2	29.3	24628
478	Putha Uttanganga RM	Rukum East	Lumbini	0.9	0.9	0.0	92.4	5.8	18308
479	Sisne RM	Rukum East	Lumbini	0.2	1.0	0.0	84.9	14.0	18534
480	Bhoome RM	Rukum East	Lumbini	0.4	0.2	0.0	87.3	12.1	19829
481	Sunchhahari RM	Rolpa	Lumbini	0.2	5.2	0.0	80.2	14.5	17241
482	Thawang RM	Rolpa	Lumbini	0.5	0.7	0.0	86.8	12.0	10851
483	Pariwartan RM	Rolpa	Lumbini	0.7	1.5	0.0	92.7	5.1	21671
484	Gangadev RM	Rolpa	Lumbini	0.2	3.6	0.0	85.1	11.0	21503
485	Madi RM	Rolpa	Lumbini	1.1	1.4	0.0	85.3	12.2	18056
486	Tribeni RM	Rolpa	Lumbini	0.4	1.9	0.0	85.1	12.7	23412
487	Rolpa UM	Rolpa	Lumbini	0.2	2.3	0.0	41.5	56.1	35376
488	Runtigadhi RM	Rolpa	Lumbini	0.9	6.8	0.0	80.7	11.6	28291
489	Sunil Smriti RM	Rolpa	Lumbini	1.0	1.1	0.0	86.7	11.1	30617
490	Lungri RM	Rolpa	Lumbini	0.1	2.5	0.0	84.9	12.5	26325
491	Gaumukhi RM	Pyuthan	Lumbini	0.1	1.6	0.0	92.9	5.4	25980
492	Naubahini RM	Pyuthan	Lumbini	0.5	1.1	0.0	87.2	11.2	32682

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
493	Jhimaruk RM	Pyuthan	Lumbini	0.1	1.1	0.0	87.3	11.5	26130
494	Pyuthan UM	Pyuthan	Lumbini	0.6	1.1	0.0	41.0	57.4	42130
495	Sworgadwari UM	Pyuthan	Lumbini	0.5	2.1	0.0	40.2	57.1	32037
496	Mandavi RM	Pyuthan	Lumbini	0.4	1.5	0.0	90.7	7.4	15863
497	Mallarani RM	Pyuthan	Lumbini	0.6	1.6	0.0	84.9	12.9	15646
498	Aairawati RM	Pyuthan	Lumbini	0.3	1.1	0.0	85.8	12.7	20428
499	Sarumarani RM	Pyuthan	Lumbini	1.0	10.6	0.0	74.2	14.3	19783
500	Kali Gandaki RM	Gulmi	Lumbini	0.2	2.2	0.0	89.9	7.8	15044
501	Satyawoti RM	Gulmi	Lumbini	0.1	0.5	0.0	88.0	11.3	19473
502	Chandrakot RM	Gulmi	Lumbini	0.1	0.6	0.0	87.1	12.2	18662
503	Musikot UM	Gulmi	Lumbini	0.9	0.8	0.0	42.1	56.1	28454
504	Isma RM	Gulmi	Lumbini	0.6	3.3	0.0	78.0	18.1	18529
505	Malika RM	Gulmi	Lumbini	0.6	2.1	0.0	82.2	15.1	20075
506	Madane RM	Gulmi	Lumbini	0.5	0.9	0.0	91.0	7.5	20022
507	Dhurkot RM	Gulmi	Lumbini	0.0	2.2	0.0	81.2	16.6	18814
508	Resunga UM	Gulmi	Lumbini	0.0	1.0	0.0	41.7	57.3	31551
509	Gulmi Durbar RM	Gulmi	Lumbini	0.1	0.4	0.0	86.5	13.0	19296
510	Chhatrakot RM	Gulmi	Lumbini	0.4	0.6	0.0	88.1	11.0	19357
511	Ruruchhetra RM	Gulmi	Lumbini	2.6	0.3	0.0	80.2	16.9	16597

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
512	Chhatradev RM	Arghakhanchi	Lumbini	0.7	3.8	0.0	84.5	11.0	21611
513	Malarani RM	Arghakhanchi	Lumbini	1.1	0.4	0.0	89.1	9.5	24150
514	Bhumikasthan UM	Arghakhanchi	Lumbini	0.6	0.6	0.0	41.6	57.2	28192
515	Sandhikharka UM	Arghakhanchi	Lumbini	0.4	1.6	0.0	40.2	57.8	42492
516	Panini RM	Arghakhanchi	Lumbini	0.2	0.9	0.0	84.0	15.0	22291
517	Shitaganga UM	Arghakhanchi	Lumbini	3.8	5.9	0.0	37.6	52.8	37691
518	Rampur UM	Palpa	Lumbini	0.3	4.5	0.0	39.3	55.9	40883
519	Purbakhola RM	Palpa	Lumbini	0.1	1.3	0.0	81.9	16.7	16052
520	Rambha RM	Palpa	Lumbini	0.0	2.4	0.0	83.5	14.1	17155
521	Baganaskali RM	Palpa	Lumbini	0.3	1.4	0.0	87.3	11.0	18497
522	Tansen UM	Palpa	Lumbini	0.3	2.0	0.0	40.1	57.7	50792
523	Ribdikot RM	Palpa	Lumbini	0.2	1.0	0.0	85.8	13.1	15473
524	Rainadevi Chhahara RM	Palpa	Lumbini	0.1	4.3	0.0	82.3	13.4	23149
525	Tinau RM	Palpa	Lumbini	0.5	2.4	0.0	86.3	10.8	17777
526	Mathagadhi RM	Palpa	Lumbini	0.1	2.6	0.0	84.4	12.9	24053
527	Nisdi RM	Palpa	Lumbini	0.2	2.1	0.0	85.3	12.5	18120

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
528	Bardaghat UM	Nawalparasi West	Lumbini	0.8	1.9	0.0	36.3	60.9	76703
529	Sunawal UM	Nawalparasi West	Lumbini	0.0	0.6	0.0	36.8	62.6	72085
530	Ramgram UM	Nawalparasi West	Lumbini	0.0	2.1	0.0	33.8	64.1	64017
531	Palhinandan RM	Nawalparasi West	Lumbini	0.0	1.1	0.0	48.7	50.3	38186
532	Sarawal RM	Nawalparasi West	Lumbini	0.0	0.8	0.0	45.9	53.3	42207
533	Pratapapur RM	Nawalparasi West	Lumbini	0.1	0.6	0.0	63.1	36.3	49897
534	Susta RM	Nawalparasi West	Lumbini	0.0	0.5	0.0	49.6	49.9	40655
535	Devdaha UM	Rupandehi	Lumbini	0.0	0.7	0.0	38.4	60.9	72457
536	Butwal Sub-Metropolitan City	Rupandehi	Lumbini	0.0	0.5	0.0	40.9	58.5	194335
537	Sainamaina UM	Rupandehi	Lumbini	0.0	0.5	0.0	40.5	59.0	78393
538	Kanchan RM	Rupandehi	Lumbini	0.0	0.8	0.0	55.8	43.4	42528
539	Gaidahawa RM	Rupandehi	Lumbini	0.0	1.3	0.0	51.3	47.5	56149
540	Suddhodhan RM	Rupandehi	Lumbini	0.0	0.6	0.0	54.7	44.8	41907
541	Siyari RM	Rupandehi	Lumbini	0.0	0.7	0.0	46.3	53.0	44985
542	Tilottama UM	Rupandehi	Lumbini	0.0	0.3	0.0	37.5	62.3	149479

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
543	Om Satiya RM	Rupandehi	Lumbini	0.0	0.7	0.0	57.7	41.6	41141
544	Rohini RM	Rupandehi	Lumbini	0.0	0.3	0.0	57.8	41.9	43327
545	Siddharthanagar UM	Rupandehi	Lumbini	0.0	0.4	0.0	35.8	63.8	74436
546	Mayadevi RM	Rupandehi	Lumbini	0.0	0.7	0.0	46.6	52.7	56170
547	Lumbini Sanskritik UM	Rupandehi	Lumbini	0.0	1.5	0.0	35.1	63.4	87383
548	Kotahimai RM	Rupandehi	Lumbini	0.0	0.5	0.0	51.3	48.2	45975
549	Sammarimai RM	Rupandehi	Lumbini	0.0	0.6	0.0	47.1	52.3	43044
550	Marchawari RM	Rupandehi	Lumbini	0.0	0.9	0.0	42.6	56.4	40880
551	Banganga UM	Kapilbastu	Lumbini	0.0	0.6	0.0	36.8	62.6	96714
552	Buddhabhumi UM	Kapilbastu	Lumbini	0.0	1.8	0.0	33.6	64.5	76507
553	Shivaraj UM	Kapilbastu	Lumbini	0.3	0.8	0.0	33.3	65.5	84810
554	Bijayanagar RM	Kapilbastu	Lumbini	0.0	1.0	0.0	40.1	58.9	43291
555	Krishnanagar UM	Kapilbastu	Lumbini	0.0	2.2	0.0	34.3	63.5	70111
556	Maharajganj UM	Kapilbastu	Lumbini	0.0	1.3	0.0	34.8	63.9	64645
557	Kapilbastu UM	Kapilbastu	Lumbini	0.0	2.5	0.0	32.1	65.4	88874
558	Yasodhara RM	Kapilbastu	Lumbini	0.0	1.8	0.0	49.6	48.6	44900
559	Mayadevi RM	Kapilbastu	Lumbini	0.0	1.6	0.0	43.2	55.2	55972
560	Shuddhodhan RM	Kapilbastu	Lumbini	0.1	3.3	0.0	42.3	54.2	52861

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
561	Bangalachuli RM	Dang	Lumbini	2.0	6.4	0.0	84.0	7.6	22373
562	Ghorahi Sub-Metropolitan City	Dang	Lumbini	1.7	13.2	0.0	32.7	52.3	200530
563	Tulsipur Sub-Metropolitan City	Dang	Lumbini	0.7	11.7	0.0	33.9	53.8	179755
564	Shantinagar RM	Dang	Lumbini	0.5	6.8	0.0	71.5	21.2	27641
565	Babai RM	Dang	Lumbini	4.0	3.6	0.0	74.4	18.1	30968
566	Dangisharan RM	Dang	Lumbini	2.4	24.0	0.0	45.8	27.8	23668
567	Lamahi UM	Dang	Lumbini	0.1	11.0	0.0	33.0	55.8	59050
568	Rapti RM	Dang	Lumbini	0.1	3.2	0.0	56.0	40.7	52123
569	Gadhawa RM	Dang	Lumbini	0.6	10.1	0.0	46.9	42.4	45898
570	Rajpur RM	Dang	Lumbini	11.8	15.7	0.0	36.5	36.0	28346
571	Rapti Sonari RM	Banke	Lumbini	0.1	4.9	0.0	48.0	47.0	66445
572	Kohalpur UM	Banke	Lumbini	0.0	1.4	0.0	35.0	63.7	101667
573	Baijanath RM	Banke	Lumbini	0.0	1.3	0.0	40.3	58.4	69472
574	Khajura RM	Banke	Lumbini	0.0	0.8	0.0	59.7	39.5	62789
575	Janaki RM	Banke	Lumbini	0.0	1.7	0.0	55.2	43.2	46141
576	Nepalganj Sub-Metropolitan City	Banke	Lumbini	0.0	2.3	0.0	35.5	62.2	164444
577	Duduwa RM	Banke	Lumbini	0.1	0.9	0.0	56.6	42.4	43135

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
578	Narainapur RM	Banke	Lumbini	0.0	0.9	0.0	65.3	33.7	43206
579	Bansgadhi UM	Bardiya	Lumbini	0.2	1.0	0.0	34.2	64.6	63252
580	Barbardiya UM	Bardiya	Lumbini	0.0	1.3	0.0	33.5	65.2	72533
581	Thakurbaba UM	Bardiya	Lumbini	0.0	0.5	0.0	32.4	67.1	49420
582	Geruwa RM	Bardiya	Lumbini	0.0	0.5	0.0	39.3	60.1	33514
583	Rajapur UM	Bardiya	Lumbini	0.0	0.7	0.0	33.7	65.6	60831
584	Madhuwan UM	Bardiya	Lumbini	0.0	1.3	0.0	36.6	62.1	50739
585	Gulariya UM	Bardiya	Lumbini	0.0	0.8	0.0	33.4	65.8	74505
586	Badhaiyatal RM	Bardiya	Lumbini	0.0	0.4	0.0	48.2	51.3	52818
587	Dolpo Buddha RM	Dolpa	Karnali	6.7	0.2	0.0	79.6	13.5	2420
588	Shey Phoksundo RM	Dolpa	Karnali	25.4	17.6	0.0	48.2	8.8	3635
589	Jagadulla RM	Dolpa	Karnali	0.1	0.3	0.0	86.8	12.8	2575
590	Mudkechula RM	Dolpa	Karnali	3.5	0.5	0.0	76.6	19.4	5803
591	Tripurasundari UM	Dolpa	Karnali	0.2	0.4	3.4	84.3	11.8	12233
592	Thulibheri UM	Dolpa	Karnali	0.2	0.1	2.6	81.2	16.0	9861
593	Kaike RM	Dolpa	Karnali	0.0	0.3	0.0	80.7	18.9	3965
594	Chharka Tangsong RM	Dolpa	Karnali	21.7	0.0	0.0	64.6	13.7	1672

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
595	Mugum Karmarong RM	Mugu	Karnali	22.4	0.1	0.0	66.8	10.7	6222
596	Chhayanath Rara UM	Mugu	Karnali	0.6	0.4	2.0	84.5	12.5	24527
597	Soru RM	Mugu	Karnali	0.3	0.1	0.0	90.3	9.4	14277
598	Khatyad RM	Mugu	Karnali	0.9	0.9	0.0	85.3	12.9	18832
599	Chankheli RM	Humla	Karnali	0.1	0.1	0.0	91.5	8.2	6579
600	Kharpunath RM	Humla	Karnali	0.6	0.3	0.0	92.7	6.4	6736
601	Simkot RM	Humla	Karnali	0.1	5.5	0.0	78.8	15.6	11935
602	Namkha RM	Humla	Karnali	2.0	0.1	0.0	86.7	11.2	3589
603	Sarkegad RM	Humla	Karnali	1.9	0.2	0.0	84.2	13.7	10688
604	Adanchuli RM	Humla	Karnali	0.5	0.0	0.0	91.2	8.3	8265
605	Tanjakot RM	Humla	Karnali	0.1	0.1	0.0	91.2	8.6	6092
606	Patarasi RM	Jumla	Karnali	0.0	0.6	0.0	77.0	22.3	16824
607	Kanaka Sundari RM	Jumla	Karnali	0.4	0.2	0.0	84.2	15.2	13625
608	Sinja RM	Jumla	Karnali	0.2	0.3	0.0	80.0	19.5	12556
609	Chandannath UM	Jumla	Karnali	0.2	0.8	2.6	82.2	14.3	21036
610	Guthichaur RM	Jumla	Karnali	0.7	0.4	0.0	72.6	26.4	10922
611	Tatopani RM	Jumla	Karnali	4.8	0.1	0.0	80.4	14.7	15575
612	Tila RM	Jumla	Karnali	0.4	0.0	0.0	87.0	12.6	14539
613	Hima RM	Jumla	Karnali	0.6	0.3	0.0	81.3	17.8	12191
614	Palata RM	Kalikot	Karnali	0.2	0.2	0.0	87.6	12.0	17346

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615	Pachal Jharana RM	Kalikot	Karnali	0.2	1.0	0.0	85.4	13.4	13687
616	Raskot UM	Kalikot	Karnali	1.4	0.4	1.8	85.0	11.3	17425
617	Sanni Tribeni RM	Kalikot	Karnali	0.3	0.2	0.0	85.4	14.1	13491
618	Naraharinath RM	Kalikot	Karnali	0.6	0.1	0.0	82.3	17.0	22458
619	Khandachakra UM	Kalikot	Karnali	0.6	0.1	2.6	84.0	12.8	22274
620	Tilagupha UM	Kalikot	Karnali	0.4	5.4	3.9	80.8	9.5	16197
621	Mahawai RM	Kalikot	Karnali	3.3	0.2	0.0	83.8	12.8	8177
622	Shuva Kalika RM	Kalikot	Karnali	1.4	1.1	0.0	85.2	12.3	13773
623	Naumule RM	Dailekh	Karnali	0.0	0.7	0.0	88.9	10.4	19687
624	Mahabu RM	Dailekh	Karnali	0.2	2.6	0.0	82.5	14.7	18059
625	Bhairabi RM	Dailekh	Karnali	0.4	9.1	0.0	78.8	11.7	18767
626	Thantikandh RM	Dailekh	Karnali	1.5	1.8	0.0	85.8	10.9	18301
627	Aathbis UM	Dailekh	Karnali	1.1	2.9	3.8	80.6	11.6	31092
628	Chamunda Bindrasaini UM	Dailekh	Karnali	0.3	2.8	2.4	81.4	13.1	26559
629	Dullu UM	Dailekh	Karnali	0.2	1.9	2.3	84.5	11.0	39143
630	Narayan UM	Dailekh	Karnali	1.1	1.1	2.2	80.1	15.5	26111
631	Bhagawatimai RM	Dailekh	Karnali	0.1	1.1	0.0	80.0	18.9	18206
632	Dungeshwor RM	Dailekh	Karnali	0.3	2.3	0.0	73.7	23.7	14533

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
633	Gurans RM	Dailekh	Karnali	0.5	0.7	0.0	71.3	27.5	21189
634	Barekot RM	Jajarkot	Karnali	0.1	0.5	0.0	85.1	14.3	22005
635	Kuse RM	Jajarkot	Karnali	0.1	0.4	0.0	82.6	16.9	23058
636	Junichande RM	Jajarkot	Karnali	2.8	3.3	0.0	81.9	11.9	23771
637	Chhedagad UM	Jajarkot	Karnali	0.4	1.3	3.5	81.7	13.2	37877
638	Shivalaya RM	Jajarkot	Karnali	0.2	0.5	0.0	83.1	16.2	14776
639	Bheri UM	Jajarkot	Karnali	1.4	1.6	2.0	77.6	17.4	37892
640	Nalgad UM	Jajarkot	Karnali	1.1	1.2	2.7	84.8	10.2	28922
641	Aathabisakot UM	Rukum West	Karnali	2.0	0.4	3.7	82.7	11.2	35917
642	Sanibheri RM	Rukum West	Karnali	0.3	1.5	0.0	80.7	17.6	24759
643	Banphikot RM	Rukum West	Karnali	0.2	0.1	0.0	84.1	15.7	21033
644	Musikot UM	Rukum West	Karnali	0.2	0.4	2.9	81.0	15.5	34270
645	Tribeni RM	Rukum West	Karnali	0.1	1.3	0.0	83.9	14.6	20525
646	Chaurjahari UM	Rukum West	Karnali	0.1	1.7	1.9	78.9	17.4	28956
647	Darma RM	Salyan	Karnali	0.0	1.8	0.0	78.7	19.5	20139
648	Kumakh RM	Salyan	Karnali	0.6	8.9	0.0	75.3	15.1	24859
649	Banagad Kupinde UM	Salyan	Karnali	1.3	2.6	3.6	82.2	10.3	32940
650	Siddha Kumakh RM	Salyan	Karnali	0.2	5.0	0.0	79.9	15.0	13127
651	Bagachour UM	Salyan	Karnali	1.3	2.2	2.8	79.1	14.5	34021
652	Chhatreshwori RM	Salyan	Karnali	0.5	1.4	0.0	83.7	14.4	21242

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
653	Sharada UM	Salyan	Karnali	0.4	3.5	2.2	78.7	15.3	34663
654	Kalimati RM	Salyan	Karnali	6.4	3.3	0.0	76.3	14.1	22206
655	Tribeni RM	Salyan	Karnali	0.7	2.2	0.0	81.5	15.5	16664
656	Kapurkot RM	Salyan	Karnali	1.3	1.4	0.0	78.9	18.4	17526
657	Simta RM	Surkhet	Karnali	1.7	0.2	0.0	79.9	18.2	24083
658	Chingad RM	Surkhet	Karnali	0.1	0.6	0.0	85.7	13.6	15600
659	Lekabeshi UM	Surkhet	Karnali	0.3	2.0	2.4	79.5	15.9	31710
660	Gurbhakot UM	Surkhet	Karnali	1.9	2.9	2.6	79.5	13.1	48216
661	Bheriganga UM	Surkhet	Karnali	3.0	10.2	1.7	74.1	11.1	48203
662	Birendranagar UM	Surkhet	Karnali	0.2	7.6	1.2	76.3	14.8	153863
663	Barahatal RM	Surkhet	Karnali	5.4	4.3	0.0	78.3	12.0	25943
664	Panchapuri UM	Surkhet	Karnali	2.1	2.3	3.2	80.7	11.7	35839
665	Chaukune RM	Surkhet	Karnali	3.5	12.4	0.0	72.6	11.5	26950
666	Himali RM	Bajura	Sudurpashchim	0.5	0.3	0.0	89.2	9.9	10309
667	Gaumul RM	Bajura	Sudurpashchim	0.2	0.4	0.0	87.5	11.8	8913
668	Budhinanda UM	Bajura	Sudurpashchim	0.3	0.5	5.5	75.8	18.0	20072
669	Swamikartik Khapar RM	Bajura	Sudurpashchim	1.5	0.0	0.0	84.6	14.0	12576

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
670	Jagannath RM	Bajura	Sudurpashchim	3.3	0.3	0.0	83.6	12.7	10158
671	Badimalika UM	Bajura	Sudurpashchim	1.0	0.6	3.9	75.3	19.2	18414
672	Khaptad Chhededaha RM	Bajura	Sudurpashchim	0.0	0.8	0.0	88.3	10.8	19307
673	Budhiganga UM	Bajura	Sudurpashchim	0.1	0.7	5.8	73.7	19.7	20185
674	Tribeni UM	Bajura	Sudurpashchim	0.0	0.4	2.8	83.3	13.5	17798
675	Saipal RM	Bajhang	Sudurpashchim	0.5	0.0	0.0	89.3	10.3	2625
676	Bungal UM	Bajhang	Sudurpashchim	1.0	1.0	4.6	77.0	16.5	33812
677	Surma RM	Bajhang	Sudurpashchim	1.5	5.1	0.0	74.5	18.9	11082
678	Talkot RM	Bajhang	Sudurpashchim	0.1	0.2	0.0	80.2	19.6	11719
679	Masta RM	Bajhang	Sudurpashchim	1.8	4.1	0.0	80.5	13.6	13265
680	Jayaprithbi UM	Bajhang	Sudurpashchim	2.4	1.2	4.3	72.7	19.4	21933
681	Chhabis Pathibhara RM	Bajhang	Sudurpashchim	0.2	1.0	0.0	82.9	15.9	14474
682	Durgathali RM	Bajhang	Sudurpashchim	0.3	0.2	0.0	88.5	11.0	11318

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
683	Kedarsyun RM	Bajhang	Sudurpashchim	0.6	1.4	0.0	85.0	13.0	21312
684	Bitthadchir RM	Bajhang	Sudurpashchim	0.2	3.4	0.0	78.6	17.8	17812
685	Thalara RM	Bajhang	Sudurpashchim	0.5	1.0	0.0	87.2	11.3	15958
686	Khaptad Chhanna RM	Bajhang	Sudurpashchim	0.1	0.4	0.0	89.6	9.9	13419
687	Byas RM	Darchula	Sudurpashchim	0.1	0.7	0.0	87.0	12.1	9668
688	Duhun RM	Darchula	Sudurpashchim	0.4	1.6	0.0	86.3	11.7	9842
689	Mahakali UM	Darchula	Sudurpashchim	0.2	0.5	1.0	61.2	37.1	24081
690	Naugad RM	Darchula	Sudurpashchim	0.4	1.4	0.0	84.1	14.2	15528
691	Apihimal RM	Darchula	Sudurpashchim	0.0	0.0	0.0	74.7	25.3	6798
692	Marma RM	Darchula	Sudurpashchim	0.2	0.1	0.0	79.1	20.7	15124
693	Shailyashikhar UM	Darchula	Sudurpashchim	2.6	0.8	2.9	65.5	28.2	21807
694	Malikarjun RM	Darchula	Sudurpashchim	1.0	3.1	0.0	81.3	14.6	15635
695	Lekam RM	Darchula	Sudurpashchim	0.2	2.1	0.0	75.6	22.1	13743

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
696	Dilasaini RM	Baitadi	Sudurpashchim	2.8	4.0	0.0	79.9	13.2	22966
697	Dogada Kedar RM	Baitadi	Sudurpashchim	1.1	8.3	0.0	77.9	12.7	23104
698	Puchaundi UM	Baitadi	Sudurpashchim	0.7	2.4	4.1	78.3	14.5	38281
699	Surnaya RM	Baitadi	Sudurpashchim	1.6	2.0	0.0	86.5	9.9	17945
700	Dasharathchand UM	Baitadi	Sudurpashchim	1.0	5.6	4.8	65.9	22.6	31567
701	Pancheshwor RM	Baitadi	Sudurpashchim	1.5	0.8	0.0	85.7	12.0	17796
702	Shivanath RM	Baitadi	Sudurpashchim	2.7	3.8	0.0	82.9	10.6	18064
703	Melauli UM	Baitadi	Sudurpashchim	3.3	7.3	3.7	65.9	19.8	20658
704	Patan UM	Baitadi	Sudurpashchim	1.1	2.0	3.9	68.6	24.4	29230
705	Sigas RM	Baitadi	Sudurpashchim	2.8	1.9	0.0	85.3	10.0	21814
706	Nawadurga RM	Dadeldhura	Sudurpashchim	1.1	2.5	0.0	74.5	21.9	18672
707	Amargadhi UM	Dadeldhura	Sudurpashchim	0.3	1.6	3.7	65.2	29.2	24149
708	Ajayameru RM	Dadeldhura	Sudurpashchim	0.4	4.8	0.0	76.6	18.2	15161

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
709	Bhageshwor RM	Dadeldhura	Sudurpashchim	1.9	1.4	0.0	75.0	21.8	13132
710	Parashuram UM	Dadeldhura	Sudurpashchim	3.6	2.1	3.3	63.4	27.5	35590
711	Aalital RM	Dadeldhura	Sudurpashchim	1.9	4.5	0.0	72.1	21.6	18112
712	Ganyapdhura RM	Dadeldhura	Sudurpashchim	2.6	1.0	0.0	80.7	15.6	13722
713	Purbichouki RM	Doti	Sudurpashchim	3.5	1.0	0.0	84.4	11.1	21494
714	Sayal RM	Doti	Sudurpashchim	4.7	5.2	0.0	80.9	9.2	20456
715	Aadarsha RM	Doti	Sudurpashchim	0.4	3.8	0.0	86.6	9.2	24495
716	Shikhar UM	Doti	Sudurpashchim	4.8	2.3	4.0	73.1	15.8	30399
717	Dipayal Silgadhi UM	Doti	Sudurpashchim	11.2	6.8	3.4	54.0	24.5	33968
718	K.I. Singh RM	Doti	Sudurpashchim	0.8	4.8	0.0	84.9	9.5	20736
719	Bogatan Phudsil RM	Doti	Sudurpashchim	1.2	2.0	0.0	83.3	13.5	15540
720	Badi Kedar RM	Doti	Sudurpashchim	2.6	6.9	0.0	79.1	11.5	14902
721	Jorayal RM	Doti	Sudurpashchim	2.1	3.4	0.0	72.5	22.0	19788

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
722	Panchdebal Binayak UM	Achham	Sudurpashchim	2.2	2.4	7.7	69.7	18.0	26088
723	Ramaroshan RM	Achham	Sudurpashchim	0.4	2.0	0.0	88.4	9.3	23600
724	Mellekh RM	Achham	Sudurpashchim	0.0	0.8	0.0	87.8	11.3	22785
725	Sanphebagar UM	Achham	Sudurpashchim	1.2	3.6	6.0	68.8	20.3	25891
726	Chaurpati RM	Achham	Sudurpashchim	1.1	4.0	0.0	80.4	14.5	21681
727	Mangalsen UM	Achham	Sudurpashchim	1.9	2.3	7.7	70.8	17.4	26557
728	Bannigadhi Jayagadh RM	Achham	Sudurpashchim	0.1	3.1	0.0	86.1	10.7	13519
729	Kamal bazar UM	Achham	Sudurpashchim	1.9	1.4	7.2	71.1	18.4	21032
730	Dhakari RM	Achham	Sudurpashchim	1.8	1.4	0.0	87.7	9.0	21998
731	Turmakhand RM	Achham	Sudurpashchim	1.1	0.2	0.0	87.8	10.9	24574
732	Mohanyal RM	Kailali	Sudurpashchim	5.7	2.9	0.0	81.0	10.4	21082
733	Chure RM	Kailali	Sudurpashchim	4.9	7.7	0.0	72.1	15.2	21400
734	Godawari UM	Kailali	Sudurpashchim	0.8	1.9	1.9	44.8	50.6	98746

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
735	Gauriganga UM	Kailali	Sudurpashchim	0.0	0.6	1.6	46.5	51.2	64558
736	Ghodaghodi UM	Kailali	Sudurpashchim	0.0	1.0	1.3	42.2	55.4	86034
737	Bardagoriya RM	Kailali	Sudurpashchim	0.0	0.8	0.0	28.3	70.9	37682
738	Lamki Chuha UM	Kailali	Sudurpashchim	0.7	1.1	0.8	45.4	52.1	90971
739	Janaki RM	Kailali	Sudurpashchim	0.0	0.6	0.0	25.6	73.8	49860
740	Joshipur RM	Kailali	Sudurpashchim	0.0	1.5	0.0	26.6	71.9	37187
741	Tikapur UM	Kailali	Sudurpashchim	0.1	1.1	0.6	42.6	55.7	89835
742	Bhajani UM	Kailali	Sudurpashchim	0.0	0.8	0.2	36.5	62.5	53494
743	Kailari RM	Kailali	Sudurpashchim	0.0	1.1	0.0	26.5	72.4	49917
744	Dhangadhi Sub-Metropolitan City	Kailali	Sudurpashchim	0.0	0.6	0.8	46.5	52.0	198792
745	Dodhara Chandani UM	Kanchanpur	Sudurpashchim	0.0	0.4	0.1	36.4	63.1	42974
746	Shuklaphanta UM	Kanchanpur	Sudurpashchim	0.0	0.3	0.9	38.1	60.6	53969
747	Bedkot UM	Kanchanpur	Sudurpashchim	0.0	0.6	0.4	44.0	54.9	57680

SN	Local Level	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
				Surface water	Unimproved	Limited	Basic	Safely managed	
748	Bhimdatta UM	Kanchanpur	Sudurpashchim	0.0	1.1	0.5	44.0	54.4	122320
749	Laljhadi RM	Kanchanpur	Sudurpashchim	0.0	3.0	0.0	23.5	73.5	25037
750	Krishnapur UM	Kanchanpur	Sudurpashchim	0.3	0.3	0.4	37.3	61.7	71500
751	Punarbas UM	Kanchanpur	Sudurpashchim	0.0	0.5	0.1	35.1	64.3	61748
752	Belouri UM	Kanchanpur	Sudurpashchim	0.0	0.2	0.8	38.4	60.6	53910
753	Beldandi RM	Kanchanpur	Sudurpashchim	0.0	0.2	0.0	23.4	76.4	21888

Annex Table 6b Estimated distribution of the household population across JMP Sanitation service ladders by local level

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-ited	Basic	Safely man-aged in Situ	
1	Phaktan-lung RM	Taple-jung	Koshi	3.3	0.3	3.8	22.9	69.8	11791
2	Mikwakho-la RM	Taple-jung	Koshi	2.4	0.2	2.9	21.7	72.8	7964
3	Meringden RM	Taple-jung	Koshi	1.8	0.4	5.3	26.5	66.1	11838
4	Maiwakho-la RM	Taple-jung	Koshi	1.5	0.2	2.4	20.6	75.4	10213
5	Aatharai Tribeni RM	Taple-jung	Koshi	1.1	0.1	1.7	19.2	77.9	12296
6	Phungling UM	Taple-jung	Koshi	0.8	0.5	3.9	27.7	67.2	28449
7	Pathivara Yangwarak RM	Taple-jung	Koshi	1.5	0.3	4.0	25.1	69.1	11806
8	Sirijanga RM	Taple-jung	Koshi	1.5	0.8	10.6	37.0	50.2	14114
9	Sidingba RM	Taple-jung	Koshi	0.6	0.1	1.5	18.8	78.9	10979
10	Bhotkhola RM	Sankhu-wasabha	Koshi	3.8	0.9	12.6	38.8	44.1	6438
11	Makalu RM	Sankhu-wasabha	Koshi	3.5	0.4	7.2	27.0	61.9	13424
12	Silichong RM	Sankhu-wasabha	Koshi	0.7	0.3	4.0	24.1	70.9	10296
13	Chichila RM	Sankhu-wasabha	Koshi	0.9	0.2	3.0	21.6	74.3	6577
14	Sabha pokhari RM	Sankhu-wasabha	Koshi	1.4	0.1	1.0	19.3	78.3	9970
15	Khandabari UM	Sankhu-wasabha	Koshi	0.8	0.9	7.0	28.9	62.3	35565

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
16	Panchakhapan UM	Sankhuwasabha	Koshi	1.4	0.8	6.4	28.5	62.9	16348
17	Chainapur UM	Sankhuwasabha	Koshi	1.0	1.1	8.7	29.6	59.7	26799
18	Madi UM	Sankhuwasabha	Koshi	5.6	0.7	8.9	19.8	65.0	13273
19	Dharmadevi UM	Sankhuwasabha	Koshi	0.4	0.4	3.4	27.4	68.3	16053
20	Khumbu Pasanglhamu RM	Solukhumbu	Koshi	0.9	0.5	6.7	31.9	60.0	8720
21	Mahakulung RM	Solukhumbu	Koshi	1.6	0.0	0.6	20.2	77.6	11847
22	Sotang RM	Solukhumbu	Koshi	2.5	0.1	1.9	19.0	76.5	9025
23	Mapya Dudhkoshi RM	Solukhumbu	Koshi	0.8	0.0	0.6	16.4	82.3	12648
24	Thulung Dudhkoshi RM	Solukhumbu	Koshi	1.2	0.2	2.4	20.4	75.7	18354
25	Necha Salyan RM	Solukhumbu	Koshi	0.4	0.1	1.4	18.3	79.8	11381
26	Solu Dhudhakunda UM	Solukhumbu	Koshi	1.6	0.4	3.5	27.6	66.9	25678
27	Likhu Pike RM	Solukhumbu	Koshi	0.7	0.0	0.3	18.7	80.3	5334
28	Chishankhu Gadhi RM	Okhaldhunga	Koshi	1.4	0.2	2.5	25.0	70.9	13844
29	Siddhicharan UM	Okhaldhunga	Koshi	0.6	0.5	3.9	30.6	64.4	27351
30	Molung RM	Okhaldhunga	Koshi	1.0	0.1	1.6	20.0	77.3	16440

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
31	Khiji Dem-ba RM	Okhaldhun-ga	Koshi	0.9	0.1	1.1	24.4	73.5	15559
32	Likhu RM	Okhaldhun-ga	Koshi	0.7	0.0	0.3	19.1	79.9	12104
33	Cham-padevi RM	Okhaldhun-ga	Koshi	1.3	0.6	11.7	32.3	54.1	16311
34	Sunkoshi RM	Okhaldhun-ga	Koshi	1.3	0.3	4.0	26.6	67.9	17783
35	Manebhan-jyang RM	Okhaldhun-ga	Koshi	1.3	0.2	3.5	23.5	71.4	19597
36	Kepil-asgadhi RM	Khotang	Koshi	1.1	0.3	4.4	26.5	67.7	13231
37	Aiselukhar-ka RM	Khotang	Koshi	1.3	0.4	4.8	27.4	66.1	13217
38	Rawa Besi RM	Khotang	Koshi	1.5	0.7	8.8	35.6	53.4	11199
39	Halesi Tuwachung UM	Khotang	Koshi	3.0	1.0	8.3	31.5	56.2	27078
40	Diktel Rupakot Majhu-wagadhi UM	Khotang	Koshi	1.1	0.6	4.8	30.1	63.4	43008
41	Sakela RM	Khotang	Koshi	1.8	0.2	2.9	21.7	73.5	9623
42	Diprung Chuichum-ma RM	Khotang	Koshi	3.7	0.7	9.9	36.7	48.9	16305
43	Khotehang RM	Khotang	Koshi	0.9	0.2	3.2	24.8	71.0	16846
44	Jante Dhunga RM	Khotang	Koshi	3.7	0.2	2.4	21.1	72.7	12016
45	Baraha Pokhari RM	Khotang	Koshi	2.2	1.0	13.3	43.3	40.3	11397

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
46	Shadanan-da UM	Bhojpur	Koshi	1.5	1.0	8.1	30.6	58.8	29342
47	Salpa Sili-chho RM	Bhojpur	Koshi	2.1	0.2	2.6	21.3	73.8	12284
48	Temkemai-yum RM	Bhojpur	Koshi	0.6	0.4	4.9	26.9	67.2	15464
49	Bhojpur UM	Bhojpur	Koshi	0.8	1.0	8.4	32.7	57.1	26007
50	Arun RM	Bhojpur	Koshi	1.6	0.5	6.8	29.2	61.9	14591
51	Pauwa Dunma RM	Bhojpur	Koshi	2.0	0.4	4.8	26.4	66.5	12107
52	Ramprasad Rai RM	Bhojpur	Koshi	1.6	0.4	5.4	28.7	64.0	15673
53	Hatu-wagadhi RM	Bhojpur	Koshi	1.8	1.0	13.3	43.3	40.6	16175
54	Aamchowk RM	Bhojpur	Koshi	2.2	0.2	2.6	23.8	71.2	14968
55	Mahalaxmi UM	Dhankuta	Koshi	0.2	0.0	6.4	66.4	27.1	22182
56	Pakhribas UM	Dhankuta	Koshi	1.2	0.4	3.5	29.2	65.7	19104
57	Chhathar Jorpati RM	Dhankuta	Koshi	0.6	0.4	5.0	28.7	65.3	16456
58	Dhankuta UM	Dhankuta	Koshi	0.8	0.5	4.1	28.5	66.0	35983
59	Shahidbhu-mi RM	Dhankuta	Koshi	2.1	0.1	1.9	20.1	75.6	17767
60	San-gurigadhi RM	Dhankuta	Koshi	1.3	0.4	5.5	28.7	64.1	19561
61	Chaubise RM	Dhankuta	Koshi	0.8	0.3	3.8	24.3	70.7	17677

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
62	Aatharai RM	Terhathum	Koshi	1.7	0.2	3.1	22.7	72.4	18156
63	Phedap RM	Terhathum	Koshi	1.3	0.2	3.2	23.9	71.3	15169
64	Menchha-yayem RM	Terhathum	Koshi	0.5	0.1	2.0	21.4	75.9	6678
65	Myanglung UM	Terhathum	Koshi	1.6	0.6	4.9	28.7	64.2	18750
66	Laligurans UM	Terhathum	Koshi	1.3	0.4	2.9	29.5	65.9	15329
67	Chhathar RM	Terhathum	Koshi	1.0	0.3	3.4	25.1	70.2	14197
68	Yangbarak RM	Panchthar	Koshi	1.3	0.1	2.1	20.2	76.2	16821
69	Hilihan RM	Panchthar	Koshi	1.4	0.4	5.5	26.8	65.9	19085
70	Falelung RM	Panchthar	Koshi	0.5	0.1	0.8	23.1	75.5	20361
71	Phidim UM	Panchthar	Koshi	0.5	0.8	6.8	31.5	60.3	48495
72	Falgunanda RM	Panchthar	Koshi	0.6	0.1	1.8	21.5	76.0	21289
73	Kummayak RM	Panchthar	Koshi	0.8	0.3	5.1	26.1	67.6	12746
74	Tumbewa RM	Panchthar	Koshi	2.8	0.2	2.5	20.9	73.6	11189
75	Miklajung RM	Panchthar	Koshi	0.8	0.2	2.4	24.2	72.5	21061
76	Mai Jogmai RM	Ilam	Koshi	0.5	0.1	0.9	18.8	79.8	19131
77	Sandakpur RM	Ilam	Koshi	0.6	0.1	0.8	18.8	79.7	15444
78	Illam UM	Ilam	Koshi	0.6	0.7	5.4	30.8	62.5	50085

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
79	Deumai UM	Ilam	Koshi	0.8	1.0	7.8	31.9	58.5	30969
80	Fak-fokathum RM	Ilam	Koshi	0.6	0.0	0.6	20.1	78.6	19706
81	Mangse-bung RM	Ilam	Koshi	1.3	0.8	11.0	42.0	45.0	16810
82	Chulachuli RM	Ilam	Koshi	4.2	0.5	6.5	28.1	60.8	23157
83	Mai UM	Ilam	Koshi	2.8	1.0	7.9	29.5	58.8	30732
84	Suryodaya UM	Ilam	Koshi	0.6	0.4	3.3	28.3	67.4	54727
85	Rong RM	Ilam	Koshi	2.4	0.2	3.0	21.3	73.1	17367
86	Mechi-nagar UM	Jhapa	Koshi	1.7	1.2	9.5	30.0	57.7	133073
87	Buddha-shanti RM	Jhapa	Koshi	1.4	0.2	3.4	22.1	72.9	53010
88	Arjundhara UM	Jhapa	Koshi	1.2	0.8	6.5	28.8	62.8	84018
89	Kankai UM	Jhapa	Koshi	1.0	1.5	11.9	31.1	54.5	53148
90	Shivasatak-shi UM	Jhapa	Koshi	1.2	1.6	12.7	31.2	53.4	74077
91	Kamal RM	Jhapa	Koshi	1.0	0.4	5.9	27.8	64.9	53894
92	Damak UM	Jhapa	Koshi	0.7	0.9	7.7	29.8	60.8	107227
93	Gauradaha UM	Jhapa	Koshi	2.5	1.7	13.8	31.3	50.7	60451
94	Gauriganj RM	Jhapa	Koshi	9.4	0.8	10.8	36.3	42.7	35506
95	Jhapa RM	Jhapa	Koshi	5.9	0.7	9.2	35.4	48.9	39302

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
96	Barhadashi RM	Jhapa	Koshi	1.9	0.4	6.4	27.2	64.1	37946
97	Birtamod UM	Jhapa	Koshi	0.8	0.7	5.9	28.9	63.7	116192
98	Haldibari RM	Jhapa	Koshi	2.0	0.4	6.0	26.4	65.2	32722
99	Bhadrapur UM	Jhapa	Koshi	1.9	1.1	9.0	29.5	58.5	70913
100	Kachana kawal RM	Jhapa	Koshi	15.7	0.5	6.6	28.1	49.0	41317
101	Miklajung RM	Morang	Koshi	2.1	0.5	6.4	29.6	61.5	33167
102	Letang UM	Morang	Koshi	1.7	1.5	12.2	32.3	52.3	38152
103	Kerabari RM	Morang	Koshi	2.0	0.6	8.7	33.7	55.0	34504
104	Sundar haraicha UM	Morang	Koshi	0.7	1.2	9.5	30.6	58.1	120213
105	Belbari UM	Morang	Koshi	2.4	1.5	12.0	33.2	51.0	81771
106	Kane pokhari RM	Morang	Koshi	3.3	0.6	8.9	32.4	54.8	43193
107	Pathari Shanish-chare UM	Morang	Koshi	1.8	1.5	12.3	31.2	53.1	72451
108	Urlabari UM	Morang	Koshi	1.1	1.4	11.4	31.8	54.4	70908
109	Ratuwa-mai UM	Morang	Koshi	3.4	2.0	16.4	35.2	43.0	61139
110	Sunwarshi UM	Morang	Koshi	8.6	1.3	10.3	29.5	50.3	56034
111	Rangeli UM	Morang	Koshi	14.9	1.6	12.8	28.6	42.2	57494

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
112	Gramthan RM	Morang	Koshi	2.7	0.8	10.9	39.8	45.8	36024
113	Budhigan-ga RM	Morang	Koshi	4.8	0.4	6.2	29.1	59.5	51497
114	Biratnagar Metropoli-tian City	Morang	Koshi	3.4	0.9	7.2	30.4	58.2	243927
115	Katahari RM	Morang	Koshi	7.3	0.1	1.9	18.5	72.2	48510
116	Dhanapal-than RM	Morang	Koshi	17.1	0.2	3.1	20.9	58.6	45348
117	Jahada RM	Morang	Koshi	21.4	0.2	3.4	18.6	56.5	47639
118	Dharan Sub-Met-ropolitian City	Sunsari	Koshi	0.3	0.8	6.5	31.4	61.0	166531
119	Bara-hachhetra UM	Sunsari	Koshi	2.9	1.9	15.7	32.7	46.7	91087
120	Koshi RM	Sunsari	Koshi	10.1	0.8	12.7	39.9	36.6	48804
121	Bhokraha Narsingh RM	Sunsari	Koshi	5.3	0.6	10.4	34.1	49.7	49280
122	Ramdhuni UM	Sunsari	Koshi	3.4	1.4	11.2	30.8	53.2	63452
123	Itahari Sub-Met-ropolitian City	Sunsari	Koshi	1.1	1.0	8.0	30.5	59.4	197241
124	Duhabi UM	Sunsari	Koshi	7.1	1.1	8.8	31.0	52.0	66074
125	Gadhi RM	Sunsari	Koshi	11.4	0.6	8.9	32.8	46.2	38739
126	Inaruwa UM	Sunsari	Koshi	2.7	1.7	13.9	33.3	48.5	74914

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				Open defeca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
127	Harinagar RM	Sunsari	Koshi	5.4	0.3	4.1	24.0	66.3	49845
128	Dewan-gunj RM	Sunsari	Koshi	9.0	0.1	2.3	19.2	69.4	39030
129	Barju RM	Sunsari	Koshi	12.3	0.2	2.3	18.4	66.8	36249
130	Belaka UM	Udayapur	Koshi	5.0	2.0	16.5	33.8	42.6	51043
131	Chaudan-digadhi UM	Udayapur	Koshi	2.3	2.1	17.4	34.6	43.5	53631
132	Triyuga UM	Udayapur	Koshi	2.1	1.2	10.0	31.0	55.6	102725
133	Rautamai RM	Udayapur	Koshi	2.0	0.4	5.2	25.8	66.7	20324
134	Limchun-bung RM	Udayapur	Koshi	1.5	0.6	7.5	31.7	58.7	9689
135	Tapli RM	Udayapur	Koshi	2.6	0.4	5.4	26.1	65.6	13344
136	Katari UM	Udayapur	Koshi	2.8	1.1	9.2	29.9	57.1	59507
137	Udayapur-gadhi RM	Udayapur	Koshi	4.0	0.4	5.5	26.4	63.7	28926
138	Saptakoshi UM	Saptari	Madhesh	5.0	1.1	13.0	58.5	22.3	23510
139	Kanchan-rup UM	Saptari	Madhesh	8.7	1.4	15.0	61.1	13.9	58466
140	Agnisair Krishnasa-baran RM	Saptari	Madhesh	6.1	0.8	10.7	65.3	17.1	31634
141	Rupani RM	Saptari	Madhesh	11.2	0.5	6.4	50.5	31.5	29877
142	Shambhu-nath UM	Saptari	Madhesh	18.8	1.1	12.4	51.5	16.2	39634

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				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
143	Khadak UM	Saptari	Madhesh	5.4	1.2	12.6	60.7	20.1	52778
144	Surunga UM	Saptari	Madhesh	5.7	0.6	6.7	50.3	36.8	49460
145	Balan-Bi-hul RM	Saptari	Madhesh	8.3	0.7	8.9	59.7	22.4	23527
146	Bode Bar-sain UM	Saptari	Madhesh	10.0	1.1	11.9	56.2	20.9	46017
147	Daknesh-wori UM	Saptari	Madhesh	13.1	0.9	11.3	52.9	21.7	47739
148	Rajgadh RM	Saptari	Madhesh	26.3	0.6	8.9	50.6	13.6	32462
149	Bishnupur RM	Saptari	Madhesh	18.7	0.6	11.4	52.9	16.4	27703
150	Rajbiraj UM	Saptari	Madhesh	8.6	0.8	9.9	53.7	27.0	70803
151	Mahadewa RM	Saptari	Madhesh	11.5	0.8	13.4	64.0	10.3	30315
152	Tirahut RM	Saptari	Madhesh	9.6	0.9	11.5	66.6	11.5	24034
153	Hanu-mannagar Kankalini UM	Saptari	Madhesh	14.9	1.3	16.0	57.2	10.5	52796
154	Tilathi Koiladi RM	Saptari	Madhesh	8.1	0.7	9.9	59.0	22.2	33658
155	Chhinna-masta RM	Saptari	Madhesh	27.8	0.6	8.8	49.0	13.8	29946
156	Lahan UM	Siraha	Madhesh	8.1	0.9	10.9	54.8	25.3	102031
157	Dhan-gadhimai UM	Siraha	Madhesh	5.2	1.2	13.1	60.6	19.8	53355
158	Golbazar UM	Siraha	Madhesh	7.5	0.9	10.4	54.6	26.6	63885

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				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
159	Mirchaiya UM	Siraha	Madhesh	6.0	0.6	6.5	51.1	35.8	59425
160	Karjanha UM	Siraha	Madhesh	6.0	0.9	12.3	53.9	26.8	38557
161	Kalyanpur UM	Siraha	Madhesh	7.3	1.0	10.9	56.1	24.7	58872
162	Naraha RM	Siraha	Madhesh	11.1	0.9	13.1	64.0	10.8	22760
163	Bishnupur RM	Siraha	Madhesh	5.5	0.7	9.3	61.8	22.7	22781
164	Arnama RM	Siraha	Madhesh	9.9	0.5	7.1	52.2	30.3	27899
165	Sukhipur UM	Siraha	Madhesh	5.5	1.3	13.5	60.7	19.1	42033
166	Laxmipur Patari RM	Siraha	Madhesh	8.4	0.7	8.8	59.8	22.3	31118
167	Sakhuwa Nankarkat-ti RM	Siraha	Madhesh	9.3	0.6	7.7	55.5	26.9	20844
168	Bhagawan-pur RM	Siraha	Madhesh	6.4	0.3	3.6	45.8	43.8	23380
169	Nawara-jpur RM	Siraha	Madhesh	10.0	0.7	8.8	58.1	22.4	20788
170	Bariyarpat-ti RM	Siraha	Madhesh	12.7	0.7	9.3	58.5	18.9	29712
171	Aurahi RM	Siraha	Madhesh	15.5	0.6	8.0	54.6	21.3	26478
172	Siraha UM	Siraha	Madhesh	9.0	0.8	9.3	54.4	26.4	95410
173	Ganesh-man Char-nath UM	Dhanusa	Madhesh	14.1	1.0	10.6	53.2	21.0	44082
174	Dhanu-shadham UM	Dhanusa	Madhesh	11.5	0.8	8.5	51.7	27.5	52024

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				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
175	Mithila UM	Dhanusa	Madhesh	2.2	0.5	6.1	50.2	41.0	48676
176	Bateshwor RM	Dhanusa	Madhesh	8.7	0.7	8.4	58.6	23.6	21742
177	Chhiresh-wornath UM	Dhanusa	Madhesh	7.5	1.2	13.7	59.2	18.3	51075
178	Laxminiya RM	Dhanusa	Madhesh	7.2	0.8	10.5	65.9	15.5	31881
179	Mithila Bihari UM	Dhanusa	Madhesh	12.0	0.7	8.1	50.1	29.1	38273
180	Hansapur UM	Dhanusa	Madhesh	13.9	0.9	9.8	51.3	24.1	44949
181	Sabaila UM	Dhanusa	Madhesh	9.6	0.9	10.3	53.5	25.7	62282
182	Shahid-nagar UM	Dhanusa	Madhesh	23.3	0.8	9.1	46.8	19.9	53812
183	Kamala UM	Dhanusa	Madhesh	18.4	1.0	13.8	50.2	16.6	44597
184	Janak Nan-dini RM	Dhanusa	Madhesh	11.6	0.6	7.4	53.7	26.7	27146
185	Bideha UM	Dhanusa	Madhesh	13.8	0.8	10.2	49.3	25.9	37697
186	Aurahi RM	Dhanusa	Madhesh	13.5	0.6	7.3	52.7	25.8	24053
187	Janak-purdham Sub-Met-ropolitan City	Dhanusa	Madhesh	7.0	0.5	5.5	49.9	37.1	194556
188	Dhanauji RM	Dhanusa	Madhesh	13.3	0.4	5.2	49.0	32.1	21942
189	Nagarain UM	Dhanusa	Madhesh	15.4	0.5	5.0	43.9	35.3	38037

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				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
190	Mukhi-yapatti Musa-harmiya RM	Dhanusa	Mad-hesh	20.7	0.4	5.6	44.1	29.2	28208
191	Bardibas UM	Mahottari	Madhesh	4.0	1.0	10.4	56.8	27.7	74361
192	Gaushala UM	Mahottari	Madhesh	8.7	1.0	11.1	55.7	23.5	72481
193	Sonama RM	Mahottari	Madhesh	16.9	0.7	9.2	57.9	15.3	43082
194	Aurahi UM	Mahottari	Madhesh	22.0	0.8	10.3	46.8	20.1	37361
195	Bhangaha UM	Mahottari	Madhesh	25.5	1.0	11.8	48.1	13.5	55354
196	Loharpatti UM	Mahottari	Madhesh	13.7	0.9	10.2	53.6	21.6	45773
197	Balawa UM	Mahottari	Madhesh	15.4	0.7	8.1	49.1	26.7	49473
198	Ram Gopalpur UM	Mahottari	Madhesh	19.5	1.0	10.3	51.2	18.1	36201
199	Samsi RM	Mahottari	Madhesh	22.3	0.6	7.7	49.8	19.7	38585
200	Manara Shisawa UM	Mahottari	Madhesh	12.5	1.0	11.4	56.1	18.9	52191
201	Ekadara RM	Mahottari	Madhesh	14.4	0.7	9.8	56.8	18.4	31770
202	Mahottari RM	Mahottari	Madhesh	11.7	0.8	9.9	62.4	15.2	28807
203	Pipara RM	Mahottari	Madhesh	6.3	0.7	8.5	59.0	25.5	40535
204	Matihani UM	Mahottari	Madhesh	15.1	0.9	9.7	51.4	22.9	36136

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				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
205	Jaleshwor UM	Mahottari	Madhesh	14.8	0.7	7.4	49.5	27.6	63802
206	Lalbandi UM	Sarlahi	Madhesh	3.8	0.9	10.2	55.9	29.2	66419
207	Hariwan UM	Sarlahi	Madhesh	3.3	1.0	12.6	56.4	26.7	49988
208	Bagmati UM	Sarlahi	Madhesh	10.7	0.7	8.5	50.4	29.6	47106
209	Barahatha-wa UM	Sarlahi	Madhesh	7.1	0.9	9.8	55.2	27.0	81120
210	Haripur UM	Sarlahi	Madhesh	4.6	0.6	6.3	51.0	37.5	43233
211	Ishworpur UM	Sarlahi	Madhesh	3.4	0.7	8.1	53.9	33.9	68377
212	Haripurwa UM	Sarlahi	Madhesh	16.8	0.8	10.2	49.2	23.0	38714
213	Parsa RM	Sarlahi	Madhesh	14.6	0.7	9.5	58.5	16.7	24005
214	Brahmapu-ri RM	Sarlahi	Madhesh	15.3	0.7	9.2	57.6	17.3	31378
215	Chan-dranagar RM	Sarlahi	Madhesh	6.4	0.6	7.9	58.0	27.1	36908
216	Kabilashi UM	Sarlahi	Madhesh	12.9	1.0	11.3	56.7	18.0	44204
217	Chakra-ghatta RM	Sarlahi	Madhesh	8.1	0.8	10.2	63.7	17.2	29550
218	Basbariya RM	Sarlahi	Madhesh	5.7	0.9	11.9	68.5	13.0	25905
219	Dhanakaul RM	Sarlahi	Madhesh	16.9	0.7	10.2	56.0	16.2	27974
220	Ramnagar RM	Sarlahi	Madhesh	5.2	0.8	10.2	64.3	19.4	31366
221	Balara UM	Sarlahi	Madhesh	14.4	0.8	8.2	49.5	27.2	47912

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				Open defeca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
222	Godaita UM	Sarlahi	Madhesh	5.3	0.8	9.4	55.5	29.1	54270
223	Bishnu RM	Sarlahi	Madhesh	12.4	0.8	10.7	62.4	13.6	28570
224	Kaudena RM	Sarlahi	Madhesh	14.5	0.6	7.4	52.8	24.7	28702
225	Malanga-wa UM	Sarlahi	Madhesh	4.3	1.0	11.9	57.3	25.5	54550
226	Chandra-pur UM	Rautahat	Madhesh	7.4	0.7	7.3	51.0	33.7	81807
227	Gujara UM	Rautahat	Madhesh	16.4	0.6	6.8	46.8	29.5	54033
228	Phatuwa Bijayapur UM	Rautahat	Madhesh	20.7	0.7	7.4	47.0	24.2	42218
229	Katahariya UM	Rautahat	Madhesh	11.7	1.0	11.2	55.8	20.3	45821
230	Brindaban UM	Rautahat	Madhesh	9.1	0.7	8.1	51.4	30.7	49742
231	Gadhimai UM	Rautahat	Madhesh	5.9	1.2	13.2	59.3	20.4	49135
232	Madhav Narayan UM	Rautahat	Madhesh	12.0	0.8	9.0	50.5	27.7	40894
233	Garuda UM	Rautahat	Madhesh	9.7	1.0	11.6	58.0	19.8	60857
234	Dewahi Gonahi UM	Rautahat	Madhesh	11.3	1.2	12.5	57.3	17.8	38690
235	Maulapur UM	Rautahat	Madhesh	17.5	0.9	9.8	50.5	21.3	32325
236	Boudhimai UM	Rautahat	Madhesh	8.0	1.0	12.4	54.5	24.1	39325
237	Paroha UM	Rautahat	Madhesh	14.2	0.9	9.8	51.4	23.7	45702

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
238	Rajpur UM	Rautahat	Madhesh	15.3	1.0	11.9	53.0	18.8	54083
239	Yamuna-mai RM	Rautahat	Madhesh	16.3	0.5	7.7	51.6	23.9	28414
240	Durga Bhagawati RM	Rautahat	Madhesh	15.3	0.5	7.0	51.0	26.1	22864
241	Rajdevi UM	Rautahat	Madhesh	15.3	1.1	12.1	54.3	17.2	35658
242	Gaur UM	Rautahat	Madhesh	6.5	1.0	10.7	56.1	25.8	39846
243	Ishanath UM	Rautahat	Madhesh	16.1	0.8	11.3	49.8	22.0	51855
244	Nijagadh UM	Bara	Madhesh	7.3	0.5	6.3	48.2	37.7	37687
245	Kolhabi UM	Bara	Madhesh	3.7	1.3	14.2	63.4	17.3	51182
246	Jitpur Simara Sub-Met-ropolitan City	Bara	Madhesh	6.1	0.7	7.9	53.0	32.2	127307
247	Parawani-pur RM	Bara	Madhesh	9.2	0.6	8.6	58.6	23.0	24745
248	Prasauni RM	Bara	Madhesh	8.0	0.4	5.9	53.1	32.6	25414
249	Bishram-pur RM	Bara	Madhesh	22.9	0.7	8.8	54.0	13.6	24892
250	Pheta RM	Bara	Madhesh	14.0	0.8	9.9	61.2	14.2	28395
251	Kalaiya Sub-Met-ropolitian City	Bara	Madhesh	7.3	1.1	12.1	58.4	21.1	136222
252	Karaiyamai RM	Bara	Madhesh	7.2	0.9	10.9	65.7	15.4	29165

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
253	Bara gadhi RM	Bara	Mad-hesh	2.9	0.7	10.7	61.8	23.9	29555
254	Aadarsha Kotwal RM	Bara	Madhesh	16.2	0.6	8.8	57.9	16.4	31364
255	Simroun-gadh UM	Bara	Madhesh	11.7	1.0	10.5	54.2	22.7	54878
256	Pacharauta UM	Bara	Madhesh	11.1	1.4	14.5	59.9	13.2	40524
257	Ma-hagadhimai UM	Bara	Madhesh	7.1	0.8	9.0	55.5	27.7	59424
258	Devtal RM	Bara	Madhesh	7.6	0.5	7.3	58.2	26.3	25361
259	Subarna RM	Bara	Madhesh	10.9	0.6	7.4	55.0	26.1	35141
260	Thori RM	Parsa	Madhesh	7.9	0.2	2.1	42.2	47.7	17219
261	Jirabha-wani RM	Parsa	Madhesh	26.5	0.6	8.5	49.6	14.8	22677
262	Jagarnath-pur RM	Parsa	Madhesh	12.7	0.7	12.9	58.9	14.8	32649
263	Paterwa Sugauli RM	Parsa	Madhesh	14.3	0.3	4.0	43.8	37.6	25498
264	Sakhuwa Prasauni RM	Parsa	Madhesh	20.7	0.2	3.0	40.0	36.0	35399
265	Parsagadhi UM	Parsa	Madhesh	26.7	0.6	6.7	41.1	24.8	41569
266	Birgunj Metropoli-tian City	Parsa	Madhesh	10.2	0.5	6.0	49.8	33.5	272382
267	Bahudar-mai UM	Parsa	Madhesh	15.8	0.7	8.1	50.9	24.5	43478
268	Pokhariya UM	Parsa	Madhesh	12.6	0.9	10.4	52.8	23.3	37675

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
269	Kalikamai RM	Parsa	Madhesh	13.4	0.3	3.3	43.7	39.3	23480
270	Dhobini RM	Parsa	Madhesh	14.8	0.1	1.9	39.0	44.2	22606
271	Chhipa-harmai RM	Parsa	Madhesh	15.4	0.4	5.9	46.9	31.5	29082
272	Pakaha Mainpur RM	Parsa	Madhesh	22.9	0.6	8.2	52.3	16.0	22585
273	Bindabasi-ni RM	Parsa	Madhesh	21.3	0.3	3.6	41.2	33.6	24991
274	Gaurishan-kar RM	Dolakha	Bagmati	0.8	0.6	4.6	11.6	82.5	15995
275	Bigu RM	Dolakha	Bagmati	0.6	0.6	4.8	12.0	82.1	16490
276	Kalin-chowk RM	Dolakha	Bagmati	0.4	0.4	2.9	10.3	86.0	21097
277	Baitesh-wor RM	Dolakha	Bagmati	0.5	1.3	9.8	15.6	72.9	17896
278	Jiri UM	Dolakha	Bagmati	1.4	0.7	9.8	20.7	67.5	16109
279	Tamakoshi RM	Dolakha	Bagmati	0.6	0.7	5.3	12.0	81.4	15163
280	Melung RM	Dolakha	Bagmati	0.6	0.6	4.7	11.7	82.4	15893
281	Shailung RM	Dolakha	Bagmati	0.4	0.2	1.5	8.7	89.2	17923
282	Bhimesh-wor UM	Dolakha	Bagmati	0.5	0.1	1.8	19.9	77.7	34712
283	Bhotekoshi RM	Sindhupal-chok	Bagmati	1.7	0.7	5.9	11.7	80.1	14318
284	Jugal RM	Sindhupal-chok	Bagmati	0.2	0.4	4.1	13.8	81.5	18303

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
285	Panch-pokhari Thangpal RM	Sindhupal-chok	Bagmati	0.6	0.4	3.0	12.0	84.1	20997
286	Helambu RM	Sindhupal-chok	Bagmati	0.4	0.3	2.2	9.5	87.6	17497
287	Melanchi UM	Sindhupal-chok	Bagmati	1.0	0.3	4.2	20.7	73.9	41063
288	Indrawoti RM	Sindhupal-chok	Bagmati	1.8	0.3	2.4	9.8	85.7	25365
289	Choutara San-gachowk-gadhi UM	Sindhupal-chok	Bagmati	0.5	0.3	4.5	20.5	74.1	42668
290	Balephi RM	Sindhupal-chok	Bagmati	0.3	0.5	3.9	11.0	84.3	17085
291	Bahrabise UM	Sindhupal-chok	Bagmati	0.4	0.2	2.1	23.2	74.2	24109
292	Tripu-rasundari RM	Sindhupal-chok	Bagmati	0.6	0.2	1.2	8.5	89.6	12014
293	Lisankhu Pakhar RM	Sindhupal-chok	Bagmati	0.7	0.1	1.1	8.4	89.7	11750
294	Sunkoshi RM	Sindhupal-chok	Bagmati	0.4	0.3	2.6	10.0	86.6	15176
295	Gosaikun-da RM	Rasuwa	Bagmati	1.0	1.3	11.3	16.1	70.4	7788
296	Aamach-hodingmo RM	Rasuwa	Bagmati	4.2	0.1	1.3	9.2	85.1	6673
297	Uttargaya RM	Rasuwa	Bagmati	5.6	0.6	4.7	11.1	78.0	8555
298	Naukunda RM	Rasuwa	Bagmati	0.9	0.9	7.4	14.5	76.2	12344
299	Kalika RM	Rasuwa	Bagmati	0.2	0.1	0.6	10.0	89.1	10115

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defe-ca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
300	Rubi Valley RM	Dhading	Bagmati	10.6	0.4	3.4	12.0	73.6	10781
301	Khaniya-bas RM	Dhading	Bagmati	0.8	0.1	0.4	9.8	89.0	10287
302	Ganga Ja-muna RM	Dhading	Bagmati	2.1	1.6	12.7	19.1	64.5	19265
303	Tripu-rasundari RM	Dhading	Bagmati	0.7	0.9	6.7	15.7	76.1	21937
304	Netrawati Dabjong RM	Dhading	Bagmati	0.6	0.6	4.7	14.5	79.6	11310
305	Nilkhantha UM	Dhading	Bagmati	1.2	0.4	5.0	20.9	72.6	58828
306	Jwala-mukhi RM	Dhading	Bagmati	1.0	0.6	5.2	13.4	79.8	21338
307	Siddhalek RM	Dhading	Bagmati	1.0	0.9	7.2	14.2	76.6	22214
308	Benighat Rorang RM	Dhading	Bagmati	6.0	0.6	5.0	12.4	76.0	33854
309	Gajuri RM	Dhading	Bagmati	5.2	0.2	1.7	9.3	83.6	28634
310	Galchhi RM	Dhading	Bagmati	2.5	0.5	4.9	13.3	78.8	23733
311	Thakre RM	Dhading	Bagmati	1.2	0.8	8.2	15.5	74.3	32374
312	Dhuniben-shi UM	Dhading	Bagmati	3.6	1.3	17.3	21.5	56.4	29149
313	Dupchesh-wor RM	Nuwakot	Bagmati	1.1	0.6	5.5	15.1	77.7	21005
314	Tadi RM	Nuwakot	Bagmati	2.5	0.2	2.0	11.5	83.8	15933
315	Suryagadhi RM	Nuwakot	Bagmati	1.7	0.3	3.6	10.1	84.2	14919
316	Bidur UM	Nuwakot	Bagmati	0.7	0.3	4.5	21.0	73.5	59227

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
317	Kispang RM	Nuwakot	Bagmati	0.8	0.5	3.9	12.8	82.0	14235
318	Myagang RM	Nuwakot	Bagmati	0.6	0.2	2.0	12.7	84.5	12668
319	Tarakeshwor RM	Nuwakot	Bagmati	1.5	0.2	1.9	15.3	81.1	14184
320	Belkotgadhi UM	Nuwakot	Bagmati	1.2	0.4	5.8	21.3	71.2	35224
321	Likhu RM	Nuwakot	Bagmati	0.8	0.9	7.0	14.3	77.0	17728
322	Panchakanya RM	Nuwakot	Bagmati	3.1	0.3	2.5	10.7	83.4	13818
323	Shivapuri RM	Nuwakot	Bagmati	0.7	1.2	8.9	22.0	67.3	17203
324	Kakani RM	Nuwakot	Bagmati	3.0	0.6	4.9	17.1	74.4	24504
325	Shankharapur UM	Kathmandu	Bagmati	1.2	0.1	24.2	41.1	33.4	29318
326	Kageshwori Manahara UM	Kathmandu	Bagmati	0.1	0.0	9.1	61.0	29.7	130433
327	Gokarneshwor UM	Kathmandu	Bagmati	0.2	0.0	8.9	75.8	15.1	149366
328	Budhanilkhantha UM	Kathmandu	Bagmati	0.1	0.0	7.3	76.7	15.9	177557
329	Tokha UM	Kathmandu	Bagmati	0.2	0.0	6.4	86.8	6.6	133755
330	Tarakeshwor UM	Kathmandu	Bagmati	0.1	0.0	12.0	67.1	20.9	151479
331	Nagarjun UM	Kathmandu	Bagmati	0.0	0.0	6.4	79.5	14.1	115437
332	Kathmandu Metropolitan City	Kathmandu	Bagmati	0.0	0.0	6.2	89.0	4.8	862400

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				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
333	Kirtipur UM	Kathmandu	Bagmati	0.0	0.0	12.5	66.1	21.4	81578
334	Chandragiri UM	Kathmandu	Bagmati	0.0	0.0	10.4	43.7	45.8	136860
335	Dakshinkali UM	Kathmandu	Bagmati	0.6	0.1	22.2	40.1	37.0	26372
336	Changu-narayan UM	Bhaktapur	Bagmati	0.3	0.0	11.3	41.4	47.0	88083
337	Bhaktapur UM	Bhaktapur	Bagmati	0.1	0.0	2.6	90.1	7.2	79136
338	Madhyapur Thimi UM	Bhaktapur	Bagmati	0.1	0.0	6.3	85.7	7.9	119756
339	Suryabinay-ak UM	Bhaktapur	Bagmati	0.2	0.0	6.4	66.0	27.4	140085
340	Mahalaxmi UM	Lalitpur	Bagmati	0.8	1.4	11.4	31.6	54.8	123116
341	Lalitpur Metropoli-tan City	Lalitpur	Bagmati	0.1	0.0	6.0	75.6	18.2	294098
342	Godawari UM	Lalitpur	Bagmati	0.3	0.0	17.4	38.0	44.2	97633
343	Konjyosom RM	Lalitpur	Bagmati	0.4	0.3	2.3	15.1	81.9	8989
344	Mahankal RM	Lalitpur	Bagmati	0.5	0.5	3.9	14.7	80.4	8122
345	Bagmati RM	Lalitpur	Bagmati	1.1	1.2	9.8	19.8	68.2	11353
346	Chauri Deu-rali RM	Kavrepalan-chok	Bagmati	1.1	0.1	0.6	12.7	85.5	14076
347	Bhumlu RM	Kavrepalan-chok	Bagmati	2.2	1.1	8.6	16.0	72.1	15678
348	Mandan Deupur UM	Kavrepalan-chok	Bagmati	3.0	0.9	12.4	22.1	61.6	30381
349	Banepa UM	Kavrepalan-chok	Bagmati	0.4	0.2	2.5	58.5	38.5	67690

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
350	Dhulikhel UM	Kavrepalanchok	Bagmati	1.0	0.2	2.5	33.6	62.8	33726
351	Panchkhal UM	Kavrepalanchok	Bagmati	3.2	0.6	8.9	21.4	65.8	35521
352	Temal RM	Kavrepalanchok	Bagmati	2.3	0.2	1.4	11.2	84.9	16957
353	Namobuddha UM	Kavrepalanchok	Bagmati	1.3	0.6	8.6	21.4	68.1	26160
354	Panauti UM	Kavrepalanchok	Bagmati	0.6	0.2	2.9	32.5	63.8	51504
355	Bethanchowk RM	Kavrepalanchok	Bagmati	0.6	0.1	0.7	10.4	88.1	14959
356	Roshi RM	Kavrepalanchok	Bagmati	2.0	0.4	3.2	12.8	81.6	23790
357	Mahabharat RM	Kavrepalanchok	Bagmati	2.0	0.0	0.5	14.4	83.1	16079
358	Khanikhola RM	Kavrepalanchok	Bagmati	15.8	0.2	3.5	8.2	72.3	12201
359	Umakunda RM	Ramechhap	Bagmati	0.8	0.3	2.1	11.5	85.2	16590
360	Gokulganga RM	Ramechhap	Bagmati	0.9	0.6	4.5	13.4	80.7	17798
361	Likhu Tamakoshi RM	Ramechhap	Bagmati	0.4	0.3	2.3	12.5	84.5	18325
362	Ramechhap UM	Ramechhap	Bagmati	1.9	0.2	2.1	21.3	74.5	24971
363	Manthali UM	Ramechhap	Bagmati	1.4	0.2	2.6	22.1	73.7	39695
364	Khandadevi RM	Ramechhap	Bagmati	1.2	0.3	2.0	14.1	82.4	19312
365	Doramba Shailung RM	Ramechhap	Bagmati	2.1	0.7	5.9	14.4	76.9	17686

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
366	Sunapati RM	Ramechhap	Bagmati	2.6	0.5	4.2	14.9	77.8	14658
367	Dudhouli UM	Sindhuli	Bagmati	4.0	0.8	11.4	20.9	62.9	70207
368	Phikkal RM	Sindhuli	Bagmati	1.1	0.2	1.8	10.7	86.1	15910
369	Tinpatan RM	Sindhuli	Bagmati	1.1	0.5	3.8	11.3	83.3	34889
370	Golanjor RM	Sindhuli	Bagmati	1.3	0.2	2.1	11.2	85.2	18737
371	Kamalamai UM	Sindhuli	Bagmati	1.1	0.3	4.1	20.9	73.6	71016
372	Sunkoshi RM	Sindhuli	Bagmati	0.9	0.0	0.3	9.4	89.4	18375
373	Ghyanglekha RM	Sindhuli	Bagmati	1.0	0.6	4.7	12.2	81.5	12652
374	Marin RM	Sindhuli	Bagmati	7.8	0.5	4.5	10.7	76.5	28808
375	Hariharpurgaghi RM	Sindhuli	Bagmati	9.5	0.7	5.8	11.6	72.4	26505
376	Indrasarowar RM	Makwanpur	Bagmati	2.4	0.4	3.2	12.5	81.4	13534
377	Thaha UM	Makwanpur	Bagmati	1.4	0.4	5.1	21.8	71.3	38870
378	Kailash RM	Makwanpur	Bagmati	14.1	1.1	9.1	15.5	60.2	21856
379	Raksirang RM	Makwanpur	Bagmati	21.2	0.8	6.3	14.8	56.9	25996
380	Manahari RM	Makwanpur	Bagmati	5.5	0.6	5.9	13.3	74.7	47353
381	Hetauda Sub-Metropolitan City	Makwanpur	Bagmati	1.4	0.4	5.7	22.5	69.9	193576
382	Bhimphedi RM	Makwanpur	Bagmati	4.5	0.2	2.1	11.4	81.8	21516

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
383	Makawanpurgadhi RM	Makwanpur	Bagmati	5.2	0.3	3.1	12.6	78.8	24461
384	Bakaiya RM	Makwanpur	Bagmati	15.0	1.1	9.8	18.9	55.2	40907
385	Bagmati RM	Makwanpur	Bagmati	17.4	0.7	6.3	11.1	64.6	30425
386	Rapti UM	Chitawan	Bagmati	4.5	1.0	13.3	21.3	59.9	66617
387	Kalika UM	Chitawan	Bagmati	3.9	1.1	15.0	21.5	58.5	52164
388	Ichchha Kamana RM	Chitawan	Bagmati	5.8	0.7	6.3	13.4	73.8	27643
389	Bharatpur Metropolitan City	Chitawan	Bagmati	0.3	0.4	5.5	22.0	71.7	369268
390	Ratnanagar UM	Chitawan	Bagmati	0.6	0.6	8.8	22.3	67.6	89905
391	Khairahani UM	Chitawan	Bagmati	0.6	0.7	9.8	23.1	65.7	67385
392	Madi UM	Chitawan	Bagmati	0.3	0.4	2.9	27.5	68.9	38295
393	Chumanubri RM	Gorkha	Gandaki	11.1	0.8	11.1	27.4	49.6	5932
394	Ajirkot RM	Gorkha	Gandaki	0.5	0.6	5.7	17.3	75.9	12832
395	Barpak Sulikot RM	Gorkha	Gandaki	1.0	0.4	5.4	25.1	68.1	22636
396	Dharche RM	Gorkha	Gandaki	2.1	0.4	5.1	21.2	71.1	14263
397	Aarughat RM	Gorkha	Gandaki	1.0	0.9	6.9	22.9	68.3	21572
398	Bhimsenthapa RM	Gorkha	Gandaki	0.4	0.3	2.0	16.1	81.2	16986
399	Siranchowk RM	Gorkha	Gandaki	0.7	0.4	3.5	15.1	80.2	19719

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				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
400	Palungtar UM	Gorkha	Gandaki	1.2	0.1	9.5	23.8	65.4	37409
401	Gorkha UM	Gorkha	Gandaki	0.5	0.0	3.8	18.6	77.1	52468
402	Shahid Lakhan RM	Gorkha	Gandaki	0.7	0.2	1.8	16.9	80.4	23076
403	Gandaki RM	Gorkha	Gandaki	0.6	0.2	1.9	13.6	83.8	21394
404	Narpa Bhumi RM	Manang	Gandaki	5.3	0.0	0.0	7.0	87.7	396
405	Manang Ngisyang RM	Manang	Gandaki	1.4	0.0	0.3	7.8	90.5	1595
406	Chame RM	Manang	Gandaki	0.9	0.1	0.8	13.5	84.7	1276
407	Nason RM	Manang	Gandaki	1.1	0.0	2.4	8.2	88.3	1671
408	Lo Ghekar Damodarkunda RM	Mustang	Gandaki	26.7	0.7	5.7	14.2	52.7	1292
409	Gharpajhong RM	Mustang	Gandaki	0.4	0.1	2.2	9.3	88.1	3712
410	Varagung Muktichhetra RM	Mustang	Gandaki	5.2	0.1	2.4	9.3	83.0	2036
411	Lomanthang RM	Mustang	Gandaki	2.7	1.7	12.7	30.6	52.4	1430
412	Thasang RM	Mustang	Gandaki	2.7	0.2	3.0	11.4	82.7	2856
413	Annapurna RM	Myagdi	Gandaki	0.9	0.2	1.4	12.0	85.5	12323
414	Raghuganga RM	Myagdi	Gandaki	1.6	0.2	1.6	11.7	84.9	14114
415	Dhawalagiri RM	Myagdi	Gandaki	2.1	0.6	5.0	18.2	74.0	12616
416	Malika RM	Myagdi	Gandaki	2.7	0.7	5.9	18.6	72.0	18332

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
417	Mangala RM	Myagdi	Gandaki	0.3	0.2	1.5	11.5	86.5	14688
418	Beni UM	Myagdi	Gandaki	0.6	0.1	6.0	21.5	71.9	32697
419	Madi RM	Kaski	Gandaki	0.8	0.3	2.3	14.3	82.4	16142
420	Machhapuchchhre RM	Kaski	Gandaki	0.5	0.2	1.3	15.3	82.7	22898
421	Annapurna RM	Kaski	Gandaki	1.0	0.2	1.4	12.9	84.5	22099
422	Pokhara Metropolitan City	Kaski	Gandaki	0.2	0.0	2.4	15.6	81.8	513504
423	Rupa RM	Kaski	Gandaki	0.3	0.5	3.9	16.9	78.3	14891
424	Dordi RM	Lamjung	Gandaki	0.4	0.1	0.7	12.2	86.6	16050
425	Marshyangdi RM	Lamjung	Gandaki	0.6	0.0	0.7	13.0	85.7	17080
426	Kwhola Sothar RM	Lamjung	Gandaki	0.8	1.2	10.0	27.5	60.5	7960
427	Madhya Nepal UM	Lamjung	Gandaki	0.5	0.1	10.2	27.0	62.2	21971
428	Bensishahar UM	Lamjung	Gandaki	0.4	0.1	5.3	20.0	74.2	38232
429	Sundarbazar UM	Lamjung	Gandaki	0.5	0.0	3.4	17.8	78.3	27043
430	Rainas UM	Lamjung	Gandaki	1.0	0.1	9.7	23.3	65.9	17402
431	Dudhapokhari RM	Lamjung	Gandaki	0.7	0.4	3.0	14.7	81.2	8592
432	Bhanu UM	Tanahu	Gandaki	0.9	0.1	8.9	22.8	67.3	42794
433	Byas UM	Tanahu	Gandaki	0.7	0.1	6.1	20.3	72.8	78939
434	Myagde RM	Tanahu	Gandaki	0.8	0.6	4.5	17.9	76.2	23578

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
435	Shuklagandaki UM	Tanahu	Gandaki	0.4	0.0	4.0	18.0	77.6	55620
436	Bhimad UM	Tanahu	Gandaki	0.4	0.1	7.9	22.5	69.1	29248
437	Ghiring RM	Tanahu	Gandaki	1.9	0.6	5.1	18.5	73.8	14334
438	Rhishing RM	Tanahu	Gandaki	0.5	1.4	10.6	31.7	55.8	17918
439	Devghat RM	Tanahu	Gandaki	1.7	0.9	7.1	20.7	69.6	14584
440	Bandipur RM	Tanahu	Gandaki	1.8	0.4	3.2	13.7	81.0	18532
441	Aanbu Khaireni RM	Tanahu	Gandaki	2.0	0.3	2.0	11.5	84.2	22252
442	Gaidakot UM	Nawalparasi East	Gandaki	0.5	0.1	7.4	20.6	71.4	79349
443	Bulingtar RM	Nawalparasi East	Gandaki	1.0	1.0	7.8	27.5	62.6	14637
444	Baudikali RM	Nawalparasi East	Gandaki	1.6	0.3	2.8	17.6	77.7	11338
445	Hupsekot RM	Nawalparasi East	Gandaki	2.5	0.3	2.8	12.9	81.4	26583
446	Devchuli UM	Nawalparasi East	Gandaki	0.4	0.1	6.1	22.5	71.0	58003
447	Kawasoti UM	Nawalparasi East	Gandaki	0.8	0.0	3.6	18.2	77.3	86821
448	Madhya Bindu UM	Nawalparasi East	Gandaki	1.2	0.1	9.9	23.8	64.9	61091
449	Binayi Tribeni RM	Nawalparasi East	Gandaki	2.1	0.9	7.4	23.3	66.3	38370
450	Putalibazar UM	Syangja	Gandaki	0.8	0.0	5.0	19.8	74.4	41743
451	Phedikhola RM	Syangja	Gandaki	0.7	0.2	1.5	11.2	86.4	10899
452	Aandhikhola RM	Syangja	Gandaki	1.1	0.7	5.7	19.9	72.5	13094

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453	Arjun Choupari RM	Syangja	Gandaki	0.8	0.5	3.5	20.3	75.0	14045
454	Bhirkot UM	Syangja	Gandaki	0.5	0.0	2.2	17.7	79.6	22645
455	Biruwa RM	Syangja	Gandaki	1.2	0.7	6.0	19.2	72.8	14001
456	Harinas RM	Syangja	Gandaki	0.7	0.8	6.4	23.0	69.1	13191
457	Chapakot UM	Syangja	Gandaki	0.8	0.0	4.6	21.7	72.9	22969
458	Walling UM	Syangja	Gandaki	0.6	0.0	3.7	18.9	76.8	50488
459	Galyang UM	Syangja	Gandaki	1.3	0.2	15.3	30.1	53.1	31034
460	Kaligandaki RM	Syangja	Gandaki	0.9	0.3	2.6	17.2	79.1	17955
461	Modi RM	Parbat	Gandaki	0.5	1.0	7.5	25.1	65.9	18794
462	Jaljala RM	Parbat	Gandaki	0.8	0.8	5.9	19.6	73.0	21119
463	Kushma UM	Parbat	Gandaki	0.7	0.1	8.5	23.4	67.3	38101
464	Phalebas UM	Parbat	Gandaki	1.0	0.1	11.1	25.7	62.1	20468
465	Mahashila RM	Parbat	Gandaki	1.0	2.0	15.0	37.0	44.9	8116
466	Bihadi RM	Parbat	Gandaki	0.6	1.3	10.7	31.9	55.5	10828
467	Paiyu RM	Parbat	Gandaki	1.0	1.7	13.4	32.6	51.3	12725
468	Baglung UM	Baglung	Gandaki	0.2	0.1	7.4	22.2	70.1	56102
469	Kathekhola RM	Baglung	Gandaki	0.5	0.1	1.4	12.2	85.8	22526
470	Tarakhola RM	Baglung	Gandaki	0.4	0.7	5.4	18.7	74.8	10120
471	Tamankhola RM	Baglung	Gandaki	1.1	0.4	3.6	15.1	79.7	9982
472	Dhorpatan UM	Baglung	Gandaki	3.7	0.0	4.3	19.5	72.4	30068

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473	Nisikhola RM	Baglung	Gandaki	3.1	0.3	2.8	13.6	80.2	23119
474	Badigad RM	Baglung	Gandaki	0.7	0.4	3.4	15.8	79.7	28839
475	Galkot UM	Baglung	Gandaki	0.5	0.1	14.7	30.1	54.5	30588
476	Bareng RM	Baglung	Gandaki	0.3	0.2	1.6	13.8	84.1	11158
477	Jaimini UM	Baglung	Gandaki	1.3	0.0	3.2	18.4	77.1	24628
478	Putha Uttanganga RM	Rukum East	Lumbini	12.2	0.7	2.8	24.0	60.3	18308
479	Sisne RM	Rukum East	Lumbini	2.5	1.8	7.0	36.3	52.4	18534
480	Bhoome RM	Rukum East	Lumbini	1.2	2.2	8.8	38.9	48.9	19829
481	Sunchhahari RM	Rolpa	Lumbini	3.0	0.2	1.0	26.0	69.7	17241
482	Thawang RM	Rolpa	Lumbini	1.4	1.5	5.9	32.4	58.8	10851
483	Pariwartan RM	Rolpa	Lumbini	0.3	0.6	2.4	26.0	70.8	21671
484	Gangadev RM	Rolpa	Lumbini	0.5	1.3	5.6	31.0	61.7	21503
485	Madi RM	Rolpa	Lumbini	0.5	0.5	2.3	29.2	67.5	18056
486	Tribeni RM	Rolpa	Lumbini	0.9	0.2	1.0	25.5	72.4	23412
487	Rolpa UM	Rolpa	Lumbini	1.2	0.4	8.2	41.2	49.0	35376
488	Runtigadhi RM	Rolpa	Lumbini	1.8	1.3	5.2	33.2	58.4	28291
489	Sunil Smriti RM	Rolpa	Lumbini	3.3	0.2	0.9	20.8	74.8	30617
490	Lungri RM	Rolpa	Lumbini	3.0	0.1	0.7	25.6	70.6	26325
491	Gaumukhi RM	Pyuthan	Lumbini	0.5	0.5	2.0	26.3	70.7	25980
492	Naubahini RM	Pyuthan	Lumbini	2.4	0.2	1.3	24.1	71.9	32682

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493	Jhimaruk RM	Pyuthan	Lumbini	0.8	0.1	0.6	20.5	78.0	26130
494	Pyuthan UM	Pyuthan	Lumbini	1.2	0.1	3.0	34.9	60.8	42130
495	Sworgadwari UM	Pyuthan	Lumbini	1.6	0.6	12.1	43.5	42.3	32037
496	Mandavi RM	Pyuthan	Lumbini	0.5	0.2	1.2	22.5	75.5	15863
497	Mallarani RM	Pyuthan	Lumbini	2.7	0.8	3.4	28.4	64.7	15646
498	Aairawati RM	Pyuthan	Lumbini	1.1	0.7	2.9	26.9	68.4	20428
499	Sarumarani RM	Pyuthan	Lumbini	1.1	1.0	4.0	27.7	66.3	19783
500	Kali Gandaki RM	Gulmi	Lumbini	1.0	0.4	1.4	22.1	75.1	15044
501	Satyawoti RM	Gulmi	Lumbini	0.7	0.2	1.3	19.7	78.1	19473
502	Chandrakot RM	Gulmi	Lumbini	0.9	0.4	1.5	22.8	74.3	18662
503	Musikot UM	Gulmi	Lumbini	0.9	0.1	2.9	33.5	62.5	28454
504	Isma RM	Gulmi	Lumbini	1.2	0.5	2.1	26.7	69.4	18529
505	Malika RM	Gulmi	Lumbini	1.3	0.2	0.9	21.6	75.9	20075
506	Madane RM	Gulmi	Lumbini	1.2	0.3	1.1	21.0	76.5	20022
507	Dhurkot RM	Gulmi	Lumbini	1.2	0.2	1.1	21.2	76.3	18814
508	Resunga UM	Gulmi	Lumbini	0.4	0.1	2.6	34.1	62.8	31551
509	Gulmi Durbar RM	Gulmi	Lumbini	0.4	0.4	1.8	23.3	74.2	19296
510	Chhatrakot RM	Gulmi	Lumbini	1.0	0.7	2.8	25.2	70.4	19357
511	Ruruchhetra RM	Gulmi	Lumbini	0.6	0.3	1.4	22.4	75.3	16597
512	Chhatradev RM	Arghakhanchi	Lumbini	0.7	0.1	0.4	21.1	77.7	21611

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513	Malarani RM	Arghakhanchi	Lumbini	0.2	0.2	0.7	23.1	75.9	24150
514	Bhumikasthan UM	Arghakhanchi	Lumbini	0.5	0.1	2.5	33.3	63.6	28192
515	Sandhikharka UM	Arghakhanchi	Lumbini	0.4	0.1	2.0	35.3	62.2	42492
516	Panini RM	Arghakhanchi	Lumbini	0.6	0.3	1.1	22.9	75.2	22291
517	Shitaganga UM	Arghakhanchi	Lumbini	3.1	0.3	6.5	37.6	52.5	37691
518	Rampur UM	Palpa	Lumbini	0.8	0.2	4.8	38.3	55.9	40883
519	Purbakhola RM	Palpa	Lumbini	0.3	0.2	1.2	22.1	76.2	16052
520	Rambha RM	Palpa	Lumbini	0.2	0.2	0.9	22.3	76.5	17155
521	Baganaskali RM	Palpa	Lumbini	0.6	0.3	1.4	21.8	75.9	18497
522	Tansen UM	Palpa	Lumbini	0.4	0.1	2.1	51.7	45.7	50792
523	Ribdikot RM	Palpa	Lumbini	0.8	0.2	1.0	21.6	76.4	15473
524	Rainadevi Chhahara RM	Palpa	Lumbini	1.1	0.4	1.7	24.3	72.5	23149
525	Tinau RM	Palpa	Lumbini	0.6	0.5	2.1	26.4	70.4	17777
526	Mathagadhi RM	Palpa	Lumbini	0.6	0.1	0.6	22.1	76.6	24053
527	Nisdi RM	Palpa	Lumbini	0.6	0.9	3.8	30.2	64.4	18120
528	Bardaghat UM	Nawalparasi West	Lumbini	1.4	0.6	12.5	42.5	43.1	76703
529	Sunawal UM	Nawalparasi West	Lumbini	0.9	0.6	12.9	44.4	41.1	72085
530	Ramgram UM	Nawalparasi West	Lumbini	2.3	0.7	14.6	48.0	34.4	64017
531	Palhinandan RM	Nawalparasi West	Lumbini	6.0	1.9	9.9	35.4	46.7	38186
532	Sarawal RM	Nawalparasi West	Lumbini	3.4	2.5	10.2	40.1	43.7	42207

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533	Pratapapur RM	Nawalparasi West	Lumbini	11.6	2.1	8.7	37.5	40.1	49897
534	Susta RM	Nawalparasi West	Lumbini	7.7	2.3	9.4	38.5	42.1	40655
535	Devdaha UM	Rupandehi	Lumbini	1.1	0.5	11.3	42.3	44.9	72457
536	Butwal Sub-Metropolitan City	Rupandehi	Lumbini	0.2	0.2	3.9	34.8	60.8	194335
537	Sainamaina UM	Rupandehi	Lumbini	0.6	0.3	6.6	39.1	53.3	78393
538	Kanchan RM	Rupandehi	Lumbini	1.6	0.8	3.3	24.1	70.2	42528
539	Gaidahawa RM	Rupandehi	Lumbini	5.0	2.8	11.3	40.6	40.2	56149
540	Suddhodhan RM	Rupandehi	Lumbini	1.6	1.8	7.3	34.0	55.3	41907
541	Siyari RM	Rupandehi	Lumbini	1.5	0.8	3.4	30.5	63.8	44985
542	Tilottama UM	Rupandehi	Lumbini	0.3	0.3	5.4	35.6	58.4	149479
543	Om Satiya RM	Rupandehi	Lumbini	2.1	1.7	7.0	32.8	56.4	41141
544	Rohini RM	Rupandehi	Lumbini	4.0	1.8	7.7	34.4	52.0	43327
545	Siddharthanagar UM	Rupandehi	Lumbini	1.0	0.2	3.8	34.7	60.3	74436
546	Mayadevi RM	Rupandehi	Lumbini	8.8	1.0	4.1	28.3	57.8	56170
547	Lumbini Sanskritik UM	Rupandehi	Lumbini	8.9	0.6	12.3	42.4	35.9	87383
548	Kotahimai RM	Rupandehi	Lumbini	11.8	1.7	7.2	30.7	48.6	45975
549	Sammarimai RM	Rupandehi	Lumbini	12.9	2.4	10.0	37.5	37.3	43044
550	Marchawari RM	Rupandehi	Lumbini	20.6	1.4	5.9	25.9	46.3	40880

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551	Banganga UM	Kapilbastu	Lumbini	1.7	0.5	10.7	44.0	43.1	96714
552	Buddhabhumi UM	Kapilbastu	Lumbini	12.8	0.4	8.7	36.1	42.1	76507
553	Shivaraj UM	Kapilbastu	Lumbini	15.6	0.4	9.8	36.0	38.1	84810
554	Bijayanagar RM	Kapilbastu	Lumbini	45.4	1.1	5.3	19.0	29.2	43291
555	Krishnanagar UM	Kapilbastu	Lumbini	44.7	0.2	4.0	21.3	29.9	70111
556	Maharajganj UM	Kapilbastu	Lumbini	41.4	0.3	7.2	27.1	24.0	64645
557	Kapilbastu UM	Kapilbastu	Lumbini	13.8	0.4	8.3	37.5	40.0	88874
558	Yasodhara RM	Kapilbastu	Lumbini	30.6	1.4	6.5	24.7	36.8	44900
559	Mayadevi RM	Kapilbastu	Lumbini	17.1	1.7	7.1	31.6	42.5	55972
560	Shuddhodhan RM	Kapilbastu	Lumbini	30.7	1.3	5.6	23.4	39.1	52861
561	Bangalachuli RM	Dang	Lumbini	4.1	0.6	2.4	23.4	69.6	22373
562	Ghorahi Sub-Metropolitan City	Dang	Lumbini	1.2	0.2	4.6	34.9	59.1	200530
563	Tulsipur Sub-Metropolitan City	Dang	Lumbini	1.0	0.3	5.5	37.3	56.0	179755
564	Shantinagar RM	Dang	Lumbini	0.6	1.7	6.9	34.0	56.8	27641
565	Babai RM	Dang	Lumbini	6.3	1.6	7.4	31.1	53.4	30968
566	Dangisharan RM	Dang	Lumbini	0.9	1.8	7.4	34.9	54.9	23668
567	Lamahi UM	Dang	Lumbini	2.7	0.4	8.1	39.7	49.2	59050
568	Rapti RM	Dang	Lumbini	6.1	0.9	4.0	24.4	64.6	52123

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569	Gadhawa RM	Dang	Lumbini	3.7	1.6	6.8	30.8	57.1	45898
570	Rajpur RM	Dang	Lumbini	9.5	2.1	9.5	36.5	42.3	28346
571	Rapti Sonari RM	Banke	Lumbini	6.6	2.1	8.6	34.6	48.1	66445
572	Kohalpur UM	Banke	Lumbini	2.1	0.5	11.3	41.6	44.5	101667
573	Baijanath RM	Banke	Lumbini	2.7	2.2	9.1	36.5	49.5	69472
574	Khajura RM	Banke	Lumbini	6.6	2.2	9.1	39.1	43.0	62789
575	Janaki RM	Banke	Lumbini	16.1	2.2	9.4	34.9	37.5	46141
576	Nepalganj Sub-Metropolitan City	Banke	Lumbini	9.5	0.3	6.1	34.5	49.6	164444
577	Duduwa RM	Banke	Lumbini	36.3	1.2	6.3	24.2	32.1	43135
578	Narainapur RM	Banke	Lumbini	17.6	2.5	10.3	36.5	33.1	43206
579	Bansgadhi UM	Bardiya	Lumbini	2.6	0.5	10.9	42.8	43.2	63252
580	Barbardiya UM	Bardiya	Lumbini	4.1	0.6	14.2	44.0	37.0	72533
581	Thakurbaba UM	Bardiya	Lumbini	1.9	0.3	6.4	35.9	55.5	49420
582	Geruwa RM	Bardiya	Lumbini	2.6	1.6	6.6	36.7	52.5	33514
583	Rajapur UM	Bardiya	Lumbini	2.1	0.7	15.8	48.4	32.9	60831
584	Madhuwan UM	Bardiya	Lumbini	2.5	0.5	11.2	43.6	42.2	50739
585	Gulariya UM	Bardiya	Lumbini	4.9	0.6	13.7	43.8	36.9	74505
586	Badhaiyatal RM	Bardiya	Lumbini	2.1	2.0	8.0	36.2	51.6	52818
587	Dolpo Buddha RM	Dolpa	Karnali	21.5	1.5	23.5	35.1	18.5	2420
588	Shey Phoksundo RM	Dolpa	Karnali	37.3	0.9	10.3	23.7	27.8	3635

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589	Jagadulla RM	Dolpa	Karnali	2.6	1.0	10.0	29.1	57.3	2575
590	Mudkechula RM	Dolpa	Karnali	1.5	1.0	10.9	41.3	45.2	5803
591	Tripurasundari UM	Dolpa	Karnali	2.8	1.4	6.8	28.5	60.6	12233
592	Thulibheri UM	Dolpa	Karnali	1.6	1.1	5.2	25.5	66.7	9861
593	Kaike RM	Dolpa	Karnali	1.1	2.1	22.0	48.9	25.9	3965
594	Chharka Tangsong RM	Dolpa	Karnali	35.8	1.1	11.7	29.0	22.3	1672
595	Mugum Karmarong RM	Mugu	Karnali	14.5	1.7	17.9	40.1	25.8	6222
596	Chhayanath Rara UM	Mugu	Karnali	3.6	3.1	15.0	45.0	33.2	24527
597	Soru RM	Mugu	Karnali	1.9	2.1	21.6	48.3	26.0	14277
598	Khatyad RM	Mugu	Karnali	5.2	0.9	10.1	28.6	55.1	18832
599	Chankheli RM	Humla	Karnali	3.3	2.1	21.4	48.2	25.1	6579
600	Kharpunath RM	Humla	Karnali	2.0	1.8	18.3	43.2	34.8	6736
601	Simkot RM	Humla	Karnali	5.5	1.2	13.5	34.3	45.4	11935
602	Namkha RM	Humla	Karnali	9.9	1.5	15.5	37.0	36.1	3589
603	Sarkegad RM	Humla	Karnali	1.9	2.1	21.8	48.3	26.0	10688
604	Adanchuli RM	Humla	Karnali	11.8	1.9	19.7	43.9	22.7	8265
605	Tanjakot RM	Humla	Karnali	1.4	1.9	20.6	46.1	29.9	6092
606	Patarasi RM	Jumla	Karnali	2.1	1.6	16.4	41.7	38.1	16824
607	Kanaka Sundari RM	Jumla	Karnali	1.3	0.4	3.8	19.8	74.8	13625
608	Sinja RM	Jumla	Karnali	2.3	0.5	5.3	21.4	70.6	12556

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
609	Chandannath UM	Jumla	Karnali	1.8	2.2	10.5	35.1	50.4	21036
610	Guthichaur RM	Jumla	Karnali	3.4	2.0	20.4	46.9	27.3	10922
611	Tatopani RM	Jumla	Karnali	3.7	0.9	9.3	31.7	54.5	15575
612	Tila RM	Jumla	Karnali	1.6	0.6	6.0	22.3	69.7	14539
613	Hima RM	Jumla	Karnali	3.4	0.6	6.0	22.5	67.5	12191
614	Palata RM	Kalikot	Karnali	2.5	0.2	2.4	16.4	78.5	17346
615	Pachal Jharana RM	Kalikot	Karnali	0.3	0.1	1.4	16.5	81.6	13687
616	Raskot UM	Kalikot	Karnali	2.9	1.2	5.6	24.7	65.5	17425
617	Sanni Tribeni RM	Kalikot	Karnali	3.4	0.3	3.1	19.7	73.5	13491
618	Naraharinath RM	Kalikot	Karnali	2.3	0.1	1.5	14.3	81.8	22458
619	Khandachakra UM	Kalikot	Karnali	1.9	1.4	6.8	27.9	62.0	22274
620	Tilagupha UM	Kalikot	Karnali	5.2	0.9	4.3	21.5	68.2	16197
621	Mahawai RM	Kalikot	Karnali	5.0	0.0	0.3	12.6	82.1	8177
622	Shuva Kalika RM	Kalikot	Karnali	6.2	0.2	2.0	15.6	76.0	13773
623	Naumule RM	Dailekh	Karnali	1.5	0.8	8.6	28.3	60.7	19687
624	Mahabu RM	Dailekh	Karnali	2.3	0.6	6.0	26.4	64.7	18059
625	Bhairabi RM	Dailekh	Karnali	1.6	0.6	6.6	24.3	66.9	18767
626	Thantikandh RM	Dailekh	Karnali	2.7	1.9	20.5	46.1	28.8	18301
627	Aathbis UM	Dailekh	Karnali	3.1	3.5	17.4	55.2	20.7	31092
628	Chamunda Bindrasaini UM	Dailekh	Karnali	2.4	2.7	13.3	44.8	36.8	26559

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
629	Dullu UM	Dailekh	Karnali	1.8	2.1	10.4	41.3	44.4	39143
630	Narayan UM	Dailekh	Karnali	1.5	0.9	4.6	26.3	66.7	26111
631	Bhagawatimai RM	Dailekh	Karnali	0.9	1.7	18.6	43.4	35.3	18206
632	Dungeshwor RM	Dailekh	Karnali	0.4	0.8	8.4	31.6	58.8	14533
633	Gurans RM	Dailekh	Karnali	0.9	0.6	6.7	26.4	65.4	21189
634	Barekot RM	Jajarkot	Karnali	3.2	1.4	14.8	37.9	42.8	22005
635	Kuse RM	Jajarkot	Karnali	2.1	0.9	9.8	32.9	54.3	23058
636	Junichande RM	Jajarkot	Karnali	7.5	0.2	2.0	16.1	74.3	23771
637	Chhedagad UM	Jajarkot	Karnali	1.1	1.9	9.6	37.2	50.1	37877
638	Shivalaya RM	Jajarkot	Karnali	0.8	0.2	2.7	21.3	75.0	14776
639	Bheri UM	Jajarkot	Karnali	1.2	1.2	5.8	29.7	62.1	37892
640	Nalgad UM	Jajarkot	Karnali	3.5	2.3	11.4	42.0	40.6	28922
641	Aathabisakot UM	Rukum West	Karnali	2.3	2.8	14.1	47.4	33.4	35917
642	Sanibheri RM	Rukum West	Karnali	1.4	0.9	8.8	30.1	58.8	24759
643	Banphikot RM	Rukum West	Karnali	0.8	1.0	10.5	32.7	55.0	21033
644	Musikot UM	Rukum West	Karnali	0.8	0.7	3.5	23.3	71.7	34270
645	Tribeni RM	Rukum West	Karnali	0.8	0.4	3.8	20.9	74.1	20525
646	Chaurjahari UM	Rukum West	Karnali	1.1	1.7	7.7	30.2	59.3	28956
647	Darma RM	Salyan	Karnali	1.4	1.1	11.9	33.0	52.6	20139
648	Kumakh RM	Salyan	Karnali	1.3	0.1	1.3	16.5	80.7	24859
649	Banagad Kupinde UM	Salyan	Karnali	2.5	0.2	1.1	16.7	79.5	32940

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
650	Siddha Kumakh RM	Salyan	Karnali	2.4	0.2	2.5	17.6	77.3	13127
651	Bagachour UM	Salyan	Karnali	0.3	1.9	9.5	38.2	50.1	34021
652	Chhatreshwori RM	Salyan	Karnali	1.2	0.4	3.7	20.9	73.8	21242
653	Sharada UM	Salyan	Karnali	1.2	0.8	3.7	24.9	69.5	34663
654	Kalimati RM	Salyan	Karnali	4.0	0.8	8.2	26.6	60.4	22206
655	Tribeni RM	Salyan	Karnali	1.7	0.6	6.2	23.7	67.8	16664
656	Kapurkot RM	Salyan	Karnali	1.2	0.6	5.9	26.0	66.4	17526
657	Simta RM	Surkhet	Karnali	0.6	0.4	4.2	20.8	74.0	24083
658	Chingad RM	Surkhet	Karnali	1.9	0.8	8.9	28.6	59.8	15600
659	Lekabeshi UM	Surkhet	Karnali	1.4	1.5	7.2	30.3	59.6	31710
660	Gurbhakot UM	Surkhet	Karnali	1.8	0.9	4.7	24.8	67.7	48216
661	Bheriganga UM	Surkhet	Karnali	2.6	1.3	6.2	27.7	62.3	48203
662	Birendranagar UM	Surkhet	Karnali	0.8	0.7	3.6	22.4	72.5	153863
663	Barahatal RM	Surkhet	Karnali	4.2	0.4	5.1	19.3	71.1	25943
664	Panchapuri UM	Surkhet	Karnali	4.6	0.6	2.7	18.8	73.4	35839
665	Chaukune RM	Surkhet	Karnali	5.7	0.7	7.1	24.5	62.1	26950
666	Himali RM	Bajura	Sudurpashchim	1.6	4.1	6.9	42.0	45.5	10309
667	Gaumul RM	Bajura	Sudurpashchim	0.3	6.8	11.6	55.3	26.1	8913
668	Budhinanda UM	Bajura	Sudurpashchim	1.3	1.4	3.0	23.6	70.7	20072
669	Swamikartik Khapar RM	Bajura	Sudurpashchim	4.9	1.2	2.1	28.4	63.3	12576
670	Jagannath RM	Bajura	Sudurpashchim	2.0	2.5	5.3	36.9	53.4	10158

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unimproved	Lim-ited	Basic	Safely managed in Situ	
671	Badimalika UM	Bajura	Sudurpashchim	0.9	6.1	12.8	35.4	44.8	18414
672	Khaptad Chhededaha RM	Bajura	Sudurpashchim	1.1	0.9	1.6	26.5	69.8	19307
673	Budhiganga UM	Bajura	Sudurpashchim	1.3	3.7	7.9	27.9	59.2	20185
674	Tribeni UM	Bajura	Sudurpashchim	1.1	1.6	3.2	21.6	72.5	17798
675	Saipal RM	Bajhang	Sudurpashchim	1.5	7.4	12.0	58.6	20.5	2625
676	Bungal UM	Bajhang	Sudurpashchim	1.3	1.6	3.3	21.6	72.2	33812
677	Surma RM	Bajhang	Sudurpashchim	11.8	6.2	10.2	50.0	21.8	11082
678	Talkot RM	Bajhang	Sudurpashchim	1.1	7.4	12.2	58.1	21.2	11719
679	Masta RM	Bajhang	Sudurpashchim	0.6	0.1	0.4	22.6	76.2	13265
680	Jayaprithbi UM	Bajhang	Sudurpashchim	1.0	1.6	3.3	21.7	72.4	21933
681	Chhabis Pathibhara RM	Bajhang	Sudurpashchim	1.5	4.0	7.1	42.0	45.4	14474
682	Durgathali RM	Bajhang	Sudurpashchim	1.3	6.6	11.2	54.5	26.4	11318
683	Kedarsyun RM	Bajhang	Sudurpashchim	2.7	1.2	2.5	27.3	66.4	21312
684	Bitthadchir RM	Bajhang	Sudurpashchim	0.6	1.4	2.4	28.9	66.6	17812
685	Thalara RM	Bajhang	Sudurpashchim	1.4	0.6	1.3	25.1	71.6	15958
686	Khaptad Chhanna RM	Bajhang	Sudurpashchim	0.5	3.5	5.8	39.2	51.0	13419
687	Byas RM	Darchula	Sudurpashchim	1.0	3.1	5.4	37.5	53.0	9668
688	Duhun RM	Darchula	Sudurpashchim	1.0	1.5	2.4	29.4	65.8	9842

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
689	Mahakali UM	Darchula	Sudurpashchim	1.1	1.2	2.6	21.3	73.9	24081
690	Naugad RM	Darchula	Sudurpashchim	0.4	0.4	0.8	24.6	73.8	15528
691	Apihimal RM	Darchula	Sudurpashchim	0.1	1.7	2.8	30.3	65.2	6798
692	Marma RM	Darchula	Sudurpashchim	0.8	1.6	2.7	30.8	64.1	15124
693	Shailyashikhar UM	Darchula	Sudurpashchim	1.3	1.4	3.0	21.5	72.7	21807
694	Malikarjun RM	Darchula	Sudurpashchim	1.7	5.7	9.5	50.1	33.0	15635
695	Lekam RM	Darchula	Sudurpashchim	1.3	6.7	11.2	57.6	23.2	13743
696	Dilasaini RM	Baitadi	Sudurpashchim	2.1	5.0	8.5	50.0	34.2	22966
697	Dogada Kedar RM	Baitadi	Sudurpashchim	1.6	5.8	9.7	51.0	31.9	23104
698	Puchaundi UM	Baitadi	Sudurpashchim	0.5	1.2	2.5	21.4	74.5	38281
699	Surnaya RM	Baitadi	Sudurpashchim	1.0	4.5	7.6	44.8	42.2	17945
700	Dasharathchand UM	Baitadi	Sudurpashchim	1.1	3.4	7.2	28.3	59.8	31567
701	Pancheshwor RM	Baitadi	Sudurpashchim	1.1	0.8	1.7	26.3	70.1	17796
702	Shivanath RM	Baitadi	Sudurpashchim	0.4	0.7	1.2	25.3	72.4	18064
703	Melauli UM	Baitadi	Sudurpashchim	1.3	2.2	6.5	22.5	67.5	20658
704	Patan UM	Baitadi	Sudurpashchim	0.6	4.4	9.3	33.1	52.6	29230
705	Sigas RM	Baitadi	Sudurpashchim	1.2	7.5	12.5	58.8	20.1	21814
706	Nawadurga RM	Dadeldhura	Sudurpashchim	0.5	2.1	3.7	34.8	58.9	18672
707	Amargadhi UM	Dadeldhura	Sudurpashchim	0.7	1.1	2.3	26.3	69.6	24149

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
708	Ajayameru RM	Dadeldhura	Sudurpashchim	0.7	1.7	2.8	32.1	62.7	15161
709	Bhageshwor RM	Dadeldhura	Sudurpashchim	1.9	0.1	0.4	23.9	73.6	13132
710	Parashuram UM	Dadeldhura	Sudurpashchim	2.4	1.4	3.2	24.2	68.8	35590
711	Aalital RM	Dadeldhura	Sudurpashchim	2.5	1.9	3.5	32.9	59.3	18112
712	Ganyapdhura RM	Dadeldhura	Sudurpashchim	1.0	0.7	1.3	26.6	70.4	13722
713	Purbichouki RM	Doti	Sudurpashchim	3.0	3.0	5.5	40.1	48.3	21494
714	Sayal RM	Doti	Sudurpashchim	4.7	5.1	9.1	51.5	29.7	20456
715	Aadarsha RM	Doti	Sudurpashchim	1.1	3.7	6.5	42.4	46.4	24495
716	Shikhar UM	Doti	Sudurpashchim	1.2	2.2	4.8	26.5	65.3	30399
717	Dipayal Silgadhi UM	Doti	Sudurpashchim	5.5	3.0	6.3	25.7	59.5	33968
718	K.I. Singh RM	Doti	Sudurpashchim	1.4	1.1	2.1	28.9	66.5	20736
719	Bogatan Phudsil RM	Doti	Sudurpashchim	1.6	4.8	7.8	46.2	39.6	15540
720	Badi Kedar RM	Doti	Sudurpashchim	6.6	0.9	1.6	25.5	65.5	14902
721	Jorayal RM	Doti	Sudurpashchim	2.3	2.7	5.2	42.1	47.7	19788
722	Panchdebal Binayak UM	Achham	Sudurpashchim	3.0	1.5	3.1	21.9	70.4	26088
723	Ramaroshan RM	Achham	Sudurpashchim	3.1	2.9	5.2	36.6	52.2	23600
724	Mellekh RM	Achham	Sudurpashchim	3.0	2.3	4.0	35.7	55.0	22785
725	Sanphebagar UM	Achham	Sudurpashchim	1.9	2.9	6.2	26.1	62.9	25891
726	Chaurpati RM	Achham	Sudurpashchim	2.9	2.1	3.5	32.3	59.2	21681

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unim-proved	Lim-it-ed	Basic	Safely managed in Situ	
727	Mangalsen UM	Achham	Sudur-pashchim	4.7	0.3	0.6	18.3	76.1	26557
728	Bannigadhi Jayagadh RM	Achham	Sudur-pashchim	2.0	2.4	5.2	37.0	53.5	13519
729	Kamal bazar UM	Achham	Sudur-pashchim	2.1	1.2	2.7	22.5	71.6	21032
730	Dhakari RM	Achham	Sudur-pashchim	8.7	1.3	2.2	27.3	60.5	21998
731	Turmakhand RM	Achham	Sudur-pashchim	3.5	1.9	3.6	30.9	60.1	24574
732	Mohanyal RM	Kailali	Sudur-pashchim	18.0	2.4	4.2	32.2	43.2	21082
733	Chure RM	Kailali	Sudur-pashchim	6.7	3.3	5.8	38.3	45.9	21400
734	Godawari UM	Kailali	Sudur-pashchim	2.5	4.3	9.3	30.0	53.9	98746
735	Gauriganga UM	Kailali	Sudur-pashchim	5.5	6.5	13.9	36.3	37.8	64558
736	Ghodaghodi UM	Kailali	Sudur-pashchim	5.7	7.1	15.2	39.0	32.9	86034
737	Bardagoriya RM	Kailali	Sudur-pashchim	10.0	1.3	3.4	27.1	58.2	37682
738	Lamki Chuha UM	Kailali	Sudur-pashchim	5.9	4.0	8.9	28.4	52.9	90971
739	Janaki RM	Kailali	Sudur-pashchim	7.9	4.4	9.1	45.6	32.9	49860
740	Joshipur RM	Kailali	Sudur-pashchim	11.2	3.8	6.8	41.4	36.8	37187
741	Tikapur UM	Kailali	Sudur-pashchim	5.1	5.2	11.0	32.7	46.0	89835
742	Bhajani UM	Kailali	Sudur-pashchim	11.5	6.5	16.1	34.5	31.4	53494
743	Kailari RM	Kailali	Sudur-pashchim	15.1	2.4	4.8	31.0	46.6	49917
744	Dhangadhi Sub-Metro-politan City	Kailali	Sudur-pashchim	2.5	3.9	8.4	28.9	56.2	198792

SN	Local level	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
				Open defeca-tion	Unim-proved	Lim-it-ed	Basic	Safely man-aged in Situ	
745	Dodhara Chandani UM	Kanchanpur	Sudur-pashchim	6.2	3.3	7.0	28.4	55.1	42974
746	Shuklaphanta UM	Kanchanpur	Sudur-pashchim	3.6	1.4	3.3	21.9	69.8	53969
747	Bedkot UM	Kanchanpur	Sudur-pashchim	3.9	1.4	3.2	22.2	69.4	57680
748	Bhimdatta UM	Kanchanpur	Sudur-pashchim	2.4	1.2	3.0	21.4	71.9	122320
749	Laljhadi RM	Kanchanpur	Sudur-pashchim	11.7	2.3	4.2	30.9	50.9	25037
750	Krishnapur UM	Kanchanpur	Sudur-pashchim	4.1	4.6	9.8	29.9	51.6	71500
751	Punarbas UM	Kanchanpur	Sudur-pashchim	3.3	1.1	2.6	20.4	72.6	61748
752	Belouri UM	Kanchanpur	Sudur-pashchim	2.3	1.5	3.5	21.5	71.1	53910
753	Beldandi RM	Kanchanpur	Sudur-pashchim	5.9	1.3	2.5	27.5	62.7	21888

Annex Table 6c Drinking water, sanitation, and WASH equity index by local level

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
1	Phaktanlung RM	Taplejung	Koshi	0.52163	0.82471	0.65589	Priority 2A
2	Mikwakhola RM	Taplejung	Koshi	0.54233	0.84584	0.67730	Priority 2A
3	Meringden RM	Taplejung	Koshi	0.55669	0.81088	0.67187	Priority 2A
4	Maiwakhola RM	Taplejung	Koshi	0.54866	0.86486	0.68885	Priority 2A
5	Aatharai Tribeni RM	Taplejung	Koshi	0.51424	0.88052	0.67290	Priority 2A
6	Phungling UM	Taplejung	Koshi	0.63519	0.82350	0.72324	Priority 3
7	Pathivara Yangwarak RM	Taplejung	Koshi	0.52243	0.82984	0.65843	Priority 2A
8	Sirijanga RM	Taplejung	Koshi	0.52856	0.72225	0.61786	Priority 2A
9	Sidingba RM	Taplejung	Koshi	0.54746	0.88843	0.69741	Priority 2A
10	Bhotkhola RM	Sankhu-wasabha	Koshi	0.51592	0.67628	0.59068	Priority 1
11	Makalu RM	Sankhu-wasabha	Koshi	0.52271	0.77764	0.63756	Priority 2A
12	Silichong RM	Sankhu-wasabha	Koshi	0.52309	0.84262	0.66390	Priority 2A
13	Chichila RM	Sankhu-wasabha	Koshi	0.52375	0.86134	0.67166	Priority 2A
14	Sabhapokha-ri RM	Sankhu-wasabha	Koshi	0.54608	0.88263	0.69425	Priority 2A
15	Khandabari UM	Sankhu-wasabha	Koshi	0.74049	0.79157	0.76560	Priority 3
16	Panchakha-pan UM	Sankhu-wasabha	Koshi	0.61068	0.79272	0.69577	Priority 2A

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
17	Chainapur UM	Sankhu-wasabha	Koshi	0.63280	0.77390	0.69980	Priority 2A
18	Madi UM	Sankhu-wasabha	Koshi	0.68348	0.77918	0.72976	Priority 3
19	Dharmadevi UM	Sankhu-wasabha	Koshi	0.65227	0.83165	0.73652	Priority 3
20	Khumbu Pasanglhamu RM	Solukhum-bu	Koshi	0.54313	0.78167	0.65157	Priority 2A
21	Mahakulung RM	Solukhum-bu	Koshi	0.53732	0.87859	0.68708	Priority 2A
22	Sotang RM	Solukhum-bu	Koshi	0.51952	0.86628	0.67085	Priority 2A
23	Mapya Dud-hkoshi RM	Solukhum-bu	Koshi	0.53171	0.90635	0.69420	Priority 2A
24	Thulung Dudhkoshi RM	Solukhum-bu	Koshi	0.53882	0.86735	0.68363	Priority 2A
25	Necha Salyan RM	Solukhum-bu	Koshi	0.54299	0.89414	0.69679	Priority 2A
26	Solu Dhud-hakunda UM	Solukhum-bu	Koshi	0.64598	0.81847	0.72713	Priority 3
27	Likhu Pike RM	Solukhum-bu	Koshi	0.54987	0.89721	0.70239	Priority 3
28	Chishankhu Gadhi RM	Okhald-hunga	Koshi	0.50580	0.84277	0.65290	Priority 2A
29	Siddhicharan UM	Okhald-hunga	Koshi	0.64610	0.80978	0.72332	Priority 3
30	Molung RM	Okhald-hunga	Koshi	0.51196	0.87795	0.67043	Priority 2A
31	Khiji Demba RM	Okhald-hunga	Koshi	0.52106	0.86046	0.66959	Priority 2A
32	Likhu RM	Okhald-hunga	Koshi	0.51496	0.89531	0.67901	Priority 2A
33	Champadevi RM	Okhald-hunga	Koshi	0.52414	0.74183	0.62356	Priority 2A

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34	Sunkoshi RM	Okhald-hunga	Koshi	0.51824	0.82530	0.65399	Priority 2A
35	Manebhan-jyang RM	Okhald-hunga	Koshi	0.50012	0.84342	0.64947	Priority 2A
36	Kepilasgadhi RM	Khotang	Koshi	0.52473	0.82414	0.65761	Priority 2A
37	Aiselukharka RM	Khotang	Koshi	0.52686	0.81448	0.65507	Priority 2A
38	Rawa Besi RM	Khotang	Koshi	0.51242	0.74149	0.61640	Priority 2A
39	Halesi Tuwa-chung UM	Khotang	Koshi	0.57115	0.74728	0.65330	Priority 2A
40	Diktel Rupa-kot Majhu-wagadhi UM	Khotang	Koshi	0.64477	0.80074	0.71854	Priority 3
41	Sakela RM	Khotang	Koshi	0.54169	0.85256	0.67957	Priority 2A
42	Diprung Chuichumma RM	Khotang	Koshi	0.51114	0.70611	0.60077	Priority 2A
43	Khotehang RM	Khotang	Koshi	0.52182	0.84395	0.66362	Priority 2A
44	Jante Dhun-ga RM	Khotang	Koshi	0.51274	0.84008	0.65631	Priority 2A
45	Baraha Pokhari RM	Khotang	Koshi	0.51905	0.66341	0.58681	Priority 1
46	Shadananda UM	Bhojpur	Koshi	0.65918	0.76826	0.71163	Priority 3
47	Salpa Sili-chho RM	Bhojpur	Koshi	0.53906	0.85346	0.67828	Priority 2A
48	Temkemai-yum RM	Bhojpur	Koshi	0.53499	0.82265	0.66341	Priority 2A
49	Bhojpur UM	Bhojpur	Koshi	0.66147	0.76188	0.70990	Priority 3
50	Arun RM	Bhojpur	Koshi	0.52761	0.78761	0.64463	Priority 2A
51	Pauwa Dun-ma RM	Bhojpur	Koshi	0.51268	0.81289	0.64557	Priority 2A

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52	Ramprasad Rai RM	Bhojpur	Koshi	0.52939	0.80165	0.65145	Priority 2A
53	Hatuwagadhi RM	Bhojpur	Koshi	0.52182	0.66669	0.58983	Priority 1
54	Aamchowk RM	Bhojpur	Koshi	0.54315	0.83998	0.67545	Priority 2A
55	Mahalaxmi UM	Dhankuta	Koshi	0.73624	0.62401	0.67780	Priority 2B
56	Pakhribas UM	Dhankuta	Koshi	0.62093	0.81421	0.71103	Priority 3
57	Chhathar Jorpati RM	Dhankuta	Koshi	0.52600	0.81305	0.65396	Priority 2A
58	Dhankuta UM	Dhankuta	Koshi	0.62862	0.81671	0.71652	Priority 3
59	Shahidbhumi RM	Dhankuta	Koshi	0.52723	0.86360	0.67477	Priority 2A
60	Sangurigadhi RM	Dhankuta	Koshi	0.54182	0.80276	0.65951	Priority 2A
61	Chaubise RM	Dhankuta	Koshi	0.52362	0.84162	0.66384	Priority 2A
62	Aatharai RM	Terhathum	Koshi	0.55028	0.84733	0.68284	Priority 2A
63	Phedap RM	Terhathum	Koshi	0.53297	0.84363	0.67055	Priority 2A
64	Menchha-yayem RM	Terhathum	Koshi	0.55311	0.87317	0.69495	Priority 2A
65	Myanglung UM	Terhathum	Koshi	0.66736	0.80162	0.73141	Priority 3
66	Laligurans UM	Terhathum	Koshi	0.60638	0.81681	0.70378	Priority 3
67	Chhathar RM	Terhathum	Koshi	0.54743	0.83871	0.67760	Priority 2A
68	Yangbarak RM	Panchthar	Koshi	0.52037	0.87042	0.67301	Priority 2A
69	Hilihan RM	Panchthar	Koshi	0.51284	0.81119	0.64499	Priority 2A
70	Falelung RM	Panchthar	Koshi	0.55000	0.87369	0.69320	Priority 2A
71	Phidim UM	Panchthar	Koshi	0.63422	0.78361	0.70497	Priority 3

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72	Falgunanda RM	Panchthar	Koshi	0.51363	0.87331	0.66975	Priority 2A
73	Kummayak RM	Panchthar	Koshi	0.48452	0.82381	0.63179	Priority 2A
74	Tumbewa RM	Panchthar	Koshi	0.50084	0.84887	0.65203	Priority 2A
75	Miklajung RM	Panchthar	Koshi	0.52598	0.85364	0.67007	Priority 2A
76	Mai Jogmai RM	Ilam	Koshi	0.53755	0.89492	0.69359	Priority 2A
77	Sandakpur RM	Ilam	Koshi	0.51688	0.89344	0.67956	Priority 2A
78	Illam UM	Ilam	Koshi	0.64262	0.79704	0.71567	Priority 3
79	Deumai UM	Ilam	Koshi	0.63455	0.77062	0.69928	Priority 2A
80	Fakfokathum RM	Ilam	Koshi	0.52090	0.88839	0.68027	Priority 2A
81	Mangsebung RM	Ilam	Koshi	0.49409	0.69633	0.58656	Priority 1
82	Chulachuli RM	Ilam	Koshi	0.64174	0.77015	0.70302	Priority 3
83	Mai UM	Ilam	Koshi	0.56305	0.76168	0.65488	Priority 2A
84	Suryodaya UM	Ilam	Koshi	0.62359	0.82617	0.71777	Priority 3
85	Rong RM	Ilam	Koshi	0.51618	0.84772	0.66150	Priority 2A
86	Mechinagar UM	Jhapa	Koshi	0.70341	0.75865	0.73051	Priority 3
87	Buddhashan-ti RM	Jhapa	Koshi	0.55360	0.85091	0.68634	Priority 2A
88	Arjundhara UM	Jhapa	Koshi	0.75825	0.79316	0.77551	Priority 3
89	Kankai UM	Jhapa	Koshi	0.74705	0.74015	0.74359	Priority 3
90	Shivasatakshi UM	Jhapa	Koshi	0.82734	0.73185	0.77813	Priority 3
91	Kamal RM	Jhapa	Koshi	0.65668	0.80743	0.72817	Priority 3

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92	Damak UM	Jhapa	Koshi	0.72842	0.78302	0.75523	Priority 3
93	Gauradaha UM	Jhapa	Koshi	0.77448	0.70951	0.74128	Priority 3
94	Gauriganj RM	Jhapa	Koshi	0.73908	0.64440	0.69012	Priority 2B
95	Jhapa RM	Jhapa	Koshi	0.74720	0.69632	0.72131	Priority 3
96	Barhadashi RM	Jhapa	Koshi	0.73903	0.79851	0.76820	Priority 3
97	Birtamod UM	Jhapa	Koshi	0.76846	0.80115	0.78464	Priority 3
98	Haldibari RM	Jhapa	Koshi	0.71646	0.80387	0.75891	Priority 3
99	Bhadrapur UM	Jhapa	Koshi	0.75201	0.76278	0.75738	Priority 3
100	Kachanakawal RM	Jhapa	Koshi	0.73460	0.65308	0.69265	Priority 2B
101	Miklajung RM	Morang	Koshi	0.59749	0.78392	0.68438	Priority 2A
102	Letang UM	Morang	Koshi	0.63717	0.72556	0.67993	Priority 2A
103	Kerabari RM	Morang	Koshi	0.54837	0.74737	0.64018	Priority 2A
104	Sundarharaicha UM	Morang	Koshi	0.75676	0.76537	0.76105	Priority 3
105	Belbari UM	Morang	Koshi	0.81134	0.71580	0.76208	Priority 3
106	Kanepokhari RM	Morang	Koshi	0.72897	0.73942	0.73418	Priority 3
107	Pathari Shanishchare UM	Morang	Koshi	0.80652	0.72860	0.76657	Priority 3
108	Urlabari UM	Morang	Koshi	0.77481	0.74049	0.75745	Priority 3
109	Ratuwamai UM	Morang	Koshi	0.83510	0.66057	0.74273	Priority 3
110	Sunwarshi UM	Morang	Koshi	0.83742	0.68478	0.75726	Priority 3
111	Rangeli UM	Morang	Koshi	0.82773	0.60735	0.70902	Priority 3
112	Gramthan RM	Morang	Koshi	0.73199	0.69310	0.71228	Priority 3

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113	Budhiganga RM	Morang	Koshi	0.69349	0.76083	0.72638	Priority 3
114	Biratnagar Metropolitian City	Morang	Koshi	0.79117	0.75787	0.77434	Priority 3
115	Katahari RM	Morang	Koshi	0.72708	0.82093	0.77258	Priority 3
116	Dhanapalthan RM	Morang	Koshi	0.74532	0.70114	0.72289	Priority 3
117	Jahada RM	Morang	Koshi	0.75023	0.66897	0.70843	Priority 3
118	Dharan Sub-Metropolitian City	Sunsari	Koshi	0.65775	0.78829	0.72007	Priority 3
119	Barahachhetra UM	Sunsari	Koshi	0.75241	0.68328	0.71701	Priority 3
120	Koshi RM	Sunsari	Koshi	0.74107	0.60714	0.67077	Priority 2B
121	Bhokraha Narsingh RM	Sunsari	Koshi	0.74669	0.70179	0.72389	Priority 3
122	Ramdhuni UM	Sunsari	Koshi	0.80988	0.72340	0.76542	Priority 3
123	Itahari Sub-Metropolitian City	Sunsari	Koshi	0.73824	0.77281	0.75533	Priority 3
124	Duhabi UM	Sunsari	Koshi	0.78512	0.70460	0.74377	Priority 3
125	Gadhi RM	Sunsari	Koshi	0.73234	0.65564	0.69293	Priority 2B
126	Inaruwa UM	Sunsari	Koshi	0.81123	0.69758	0.75226	Priority 3
127	Harinagar RM	Sunsari	Koshi	0.74687	0.79653	0.77130	Priority 3
128	Dewangunj RM	Sunsari	Koshi	0.75023	0.79717	0.77334	Priority 3
129	Barju RM	Sunsari	Koshi	0.74169	0.76770	0.75458	Priority 3
130	Belaka UM	Udayapur	Koshi	0.68419	0.65044	0.66710	Priority 2B
131	Chaudandigadhi UM	Udayapur	Koshi	0.67211	0.66621	0.66916	Priority 2B
132	Triyuga UM	Udayapur	Koshi	0.72623	0.74430	0.73521	Priority 3
133	Rautamai RM	Udayapur	Koshi	0.53537	0.81270	0.65962	Priority 2A

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134	Limchun-bung RM	Udayapur	Koshi	0.52078	0.77053	0.63346	Priority 2A
135	Tapli RM	Udayapur	Koshi	0.52850	0.80407	0.65188	Priority 2A
136	Katari UM	Udayapur	Koshi	0.59825	0.75055	0.67009	Priority 2A
137	Udayapur-gadhi RM	Udayapur	Koshi	0.48386	0.78723	0.61718	Priority 2A
138	Saptakoshi UM	Saptari	Madhesh	0.79165	0.55934	0.66543	Priority 2B
139	Kanchanrup UM	Saptari	Madhesh	0.82015	0.49400	0.63652	Priority 2B
140	Agnisair Krishnasaba-ran RM	Saptari	Madhesh	0.84440	0.53307	0.67091	Priority 2B
141	Rupani RM	Saptari	Madhesh	0.84472	0.58869	0.70518	Priority 3
142	Shambhu-nath UM	Saptari	Madhesh	0.81478	0.46076	0.61272	Priority 2B
143	Khadak UM	Saptari	Madhesh	0.81361	0.54662	0.66688	Priority 2B
144	Surunga UM	Saptari	Madhesh	0.78717	0.64149	0.71061	Priority 3
145	Balan-Bihul RM	Saptari	Madhesh	0.84284	0.55232	0.68229	Priority 2B
146	Bode Barsain UM	Saptari	Madhesh	0.81768	0.52907	0.65773	Priority 2B
147	Dakneshwori UM	Saptari	Madhesh	0.80930	0.51951	0.64841	Priority 2B
148	Rajgadh RM	Saptari	Madhesh	0.84103	0.41837	0.59318	Priority 1
149	Bishnupur RM	Saptari	Madhesh	0.85196	0.46662	0.63051	Priority 2B
150	Rajbiraj UM	Saptari	Madhesh	0.81645	0.57163	0.68316	Priority 2B
151	Mahadewa RM	Saptari	Madhesh	0.85095	0.46773	0.63088	Priority 2B
152	Tirahut RM	Saptari	Madhesh	0.85229	0.48570	0.64340	Priority 2B
153	Hanuman-nagar Kanka-lini UM	Saptari	Madhesh	0.82127	0.44478	0.60439	Priority 2B
154	Tilathi Koiladi RM	Saptari	Madhesh	0.84724	0.55067	0.68304	Priority 2B
155	Chhinna-masta RM	Saptari	Madhesh	0.85029	0.41213	0.59197	Priority 1

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156	Lahan UM	Siraha	Madhesh	0.76615	0.56304	0.65679	Priority 2B
157	Dhangadhi-mai UM	Siraha	Madhesh	0.71085	0.54548	0.62270	Priority 2B
158	Golbazar UM	Siraha	Madhesh	0.73186	0.57333	0.64776	Priority 2B
159	Mirchaiya UM	Siraha	Madhesh	0.80380	0.63534	0.71462	Priority 3
160	Karjanha UM	Siraha	Madhesh	0.80995	0.57878	0.68468	Priority 2B
161	Kalyanpur UM	Siraha	Madhesh	0.81853	0.56372	0.67928	Priority 2B
162	Naraha RM	Siraha	Madhesh	0.82660	0.47220	0.62475	Priority 2B
163	Bishnupur RM	Siraha	Madhesh	0.83783	0.56677	0.68910	Priority 2B
164	Arnama RM	Siraha	Madhesh	0.84803	0.58809	0.70620	Priority 3
165	Sukhipur UM	Siraha	Madhesh	0.81000	0.53928	0.66092	Priority 2B
166	Laxmipur Patari RM	Siraha	Madhesh	0.84446	0.55105	0.68216	Priority 2B
167	Sakhuwa Nankarkatti RM	Siraha	Madhesh	0.83458	0.57180	0.69081	Priority 2B
168	Bhagawan-pur RM	Siraha	Madhesh	0.85794	0.67947	0.76351	Priority 3
169	Nawarajpur RM	Siraha	Madhesh	0.84447	0.54375	0.67763	Priority 2B
170	Bariyarpatti RM	Siraha	Madhesh	0.83386	0.51200	0.65340	Priority 2B
171	Aurahi RM	Siraha	Madhesh	0.83758	0.51253	0.65520	Priority 2B
172	Siraha UM	Siraha	Madhesh	0.81272	0.56733	0.67903	Priority 2B
173	Ganeshman Charnath UM	Dhanusa	Madhesh	0.571	0.512	0.541	Priority 1
174	Dhanushad-ham UM	Dhanusa	Madhesh	0.62380	0.56217	0.59218	Priority 1
175	Mithila UM	Dhanusa	Madhesh	0.59520	0.68110	0.63670	Priority 2A
176	Bateshwor RM	Dhanusa	Madhesh	0.572	0.557	0.565	Priority 1
177	Chhireshwor-nath UM	Dhanusa	Madhesh	0.77124	0.52487	0.63624	Priority 2B

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178	Laxminiya RM	Dhanusa	Madhesh	0.84084	0.51977	0.66110	Priority 2B
179	Mithila Bihari UM	Dhanusa	Madhesh	0.80090	0.56852	0.67478	Priority 2B
180	Hansapur UM	Dhanusa	Madhesh	0.80451	0.53012	0.65306	Priority 2B
181	Sabaila UM	Dhanusa	Madhesh	0.81856	0.55867	0.67624	Priority 2B
182	Shahidnagar UM	Dhanusa	Madhesh	0.81522	0.46384	0.61493	Priority 2B
183	Kamala UM	Dhanusa	Madhesh	0.81620	0.46301	0.61475	Priority 2B
184	Janak Nandini RM	Dhanusa	Madhesh	0.83709	0.56020	0.68479	Priority 2B
185	Bideha UM	Dhanusa	Madhesh	0.81838	0.53941	0.66441	Priority 2B
186	Aurahi RM	Dhanusa	Madhesh	0.85154	0.54652	0.68219	Priority 2B
187	Janakpurdham Sub-Metropolitan City	Dhanusa	Madhesh	0.81442	0.63917	0.72149	Priority 3
188	Dhanauji RM	Dhanusa	Madhesh	0.84320	0.58357	0.70147	Priority 3
189	Nagarain UM	Dhanusa	Madhesh	0.81353	0.58921	0.69234	Priority 2B
190	Mukhiyapatti Musaharmiya RM	Dhanusa	Madhesh	0.83936	0.53096	0.66759	Priority 2B
191	Bardibas UM	Mahottari	Madhesh	0.76106	0.59601	0.67350	Priority 2B
192	Gaushala UM	Mahottari	Madhesh	0.78550	0.55035	0.65749	Priority 2B
193	Sonama RM	Mahottari	Madhesh	0.78492	0.47330	0.60951	Priority 2B
194	Aurahi UM	Mahottari	Madhesh	0.75964	0.46870	0.59669	Priority 1
195	Bhangaha UM	Mahottari	Madhesh	0.763	0.415	0.563	Priority 1
196	Loharpatti UM	Mahottari	Madhesh	0.78331	0.51770	0.63680	Priority 2B
197	Balawa UM	Mahottari	Madhesh	0.79929	0.53920	0.65649	Priority 2B
198	Ram Gopalpur UM	Mahottari	Madhesh	0.78673	0.47093	0.60869	Priority 2B
199	Samsi RM	Mahottari	Madhesh	0.83303	0.47117	0.62650	Priority 2B
200	Manara Shisawa UM	Mahottari	Madhesh	0.79776	0.50782	0.63649	Priority 2B

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201	Ekadara RM	Mahottari	Madhesh	0.85073	0.50008	0.65225	Priority 2B
202	Mahottari RM	Mahottari	Madhesh	0.84342	0.49683	0.64733	Priority 2B
203	Pipara RM	Mahottari	Madhesh	0.85499	0.57868	0.70340	Priority 3
204	Matihani UM	Mahottari	Madhesh	0.81086	0.51818	0.64821	Priority 2B
205	Jaleshwor UM	Mahottari	Madhesh	0.80726	0.54797	0.66510	Priority 2B
206	Lalbandi UM	Sarlahi	Madhesh	0.75854	0.60545	0.67769	Priority 2B
207	Hariwan UM	Sarlahi	Madhesh	0.67163	0.59125	0.63016	Priority 2B
208	Bagmati UM	Sarlahi	Madhesh	0.67611	0.57678	0.62447	Priority 2B
209	Barahathawa UM	Sarlahi	Madhesh	0.81678	0.57862	0.68746	Priority 2B
210	Haripur UM	Sarlahi	Madhesh	0.81587	0.65144	0.72904	Priority 3
211	Ishworpur UM	Sarlahi	Madhesh	0.74157	0.63528	0.68637	Priority 2B
212	Haripurwa UM	Sarlahi	Madhesh	0.79696	0.50991	0.63748	Priority 2B
213	Parsa RM	Sarlahi	Madhesh	0.84109	0.49110	0.64270	Priority 2B
214	Brahmapuri RM	Sarlahi	Madhesh	0.83484	0.49137	0.64048	Priority 2B
215	Chan-dranagar RM	Sarlahi	Madhesh	0.83278	0.58708	0.69922	Priority 2B
216	Kabilashi UM	Sarlahi	Madhesh	0.80452	0.50151	0.63520	Priority 2B
217	Chakraghatta RM	Sarlahi	Madhesh	0.84002	0.52481	0.66397	Priority 2B
218	Basbariya RM	Sarlahi	Madhesh	0.85840	0.51192	0.66290	Priority 2B
219	Dhanakaul RM	Sarlahi	Madhesh	0.84688	0.47642	0.63519	Priority 2B
220	Ramnagar RM	Sarlahi	Madhesh	0.85497	0.54999	0.68573	Priority 2B
221	Balara UM	Sarlahi	Madhesh	0.81776	0.54632	0.66840	Priority 2B
222	Godaita UM	Sarlahi	Madhesh	0.81581	0.59920	0.69917	Priority 2B
223	Bishnu RM	Sarlahi	Madhesh	0.84690	0.48405	0.64027	Priority 2B
224	Kaudena RM	Sarlahi	Madhesh	0.85724	0.53596	0.67783	Priority 2B
225	Malangawa UM	Sarlahi	Madhesh	0.81638	0.58137	0.68893	Priority 2B

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226	Chandrapur UM	Rautahat	Madhesh	0.80457	0.61625	0.70414	Priority 3
227	Gujara UM	Rautahat	Madhesh	0.79275	0.55106	0.66095	Priority 2B
228	Phatuwa Bijayapur UM	Rautahat	Madhesh	0.79892	0.50169	0.63310	Priority 2B
229	Katahariya UM	Rautahat	Madhesh	0.81643	0.51923	0.65109	Priority 2B
230	Brindaban UM	Rautahat	Madhesh	0.81084	0.59113	0.69233	Priority 2B
231	Gadhimai UM	Rautahat	Madhesh	0.81381	0.54442	0.66562	Priority 2B
232	Madhav Narayan UM	Rautahat	Madhesh	0.81493	0.55988	0.67548	Priority 2B
233	Garuda UM	Rautahat	Madhesh	0.80689	0.52596	0.65146	Priority 2B
234	Dewahi Gonahi UM	Rautahat	Madhesh	0.81190	0.50561	0.64070	Priority 2B
235	Maulapur UM	Rautahat	Madhesh	0.79730	0.49824	0.63028	Priority 2B
236	Boudhimai UM	Rautahat	Madhesh	0.79821	0.55531	0.66577	Priority 2B
237	Paroha UM	Rautahat	Madhesh	0.79903	0.52694	0.64888	Priority 2B
238	Rajpur UM	Rautahat	Madhesh	0.81521	0.49221	0.63345	Priority 2B
239	Yamunamai RM	Rautahat	Madhesh	0.84981	0.52215	0.66613	Priority 2B
240	Durga Bhagawati RM	Rautahat	Madhesh	0.84083	0.53979	0.67370	Priority 2B
241	Rajdevi UM	Rautahat	Madhesh	0.80570	0.48415	0.62457	Priority 2B
242	Gaur UM	Rautahat	Madhesh	0.81331	0.57386	0.68317	Priority 2B
243	Ishanath UM	Rautahat	Madhesh	0.81894	0.50691	0.64431	Priority 2B
244	Nijagadh UM	Bara	Madhesh	0.76282	0.63928	0.69832	Priority 2B
245	Kolhabi UM	Bara	Madhesh	0.79623	0.53709	0.65395	Priority 2B
246	Jitpur Simara Sub-Metropolitan City	Bara	Madhesh	0.80850	0.61378	0.70445	Priority 3
247	Parawanipur RM	Bara	Madhesh	0.83242	0.55166	0.67765	Priority 2B
248	Prasauni RM	Bara	Madhesh	0.85360	0.61113	0.72226	Priority 3

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249	Bishrampur RM	Bara	Madhesh	0.82115	0.43538	0.59792	Priority 1
250	Pheta RM	Bara	Madhesh	0.82057	0.48067	0.62803	Priority 2B
251	Kalaiya Sub-Metro-politian City	Bara	Madhesh	0.81035	0.54324	0.66349	Priority 2B
252	Karaiyamai RM	Bara	Madhesh	0.81025	0.51832	0.64805	Priority 2B
253	Baragadhi RM	Bara	Madhesh	0.81952	0.58386	0.69172	Priority 2B
254	Aadarsha Kotwal RM	Bara	Madhesh	0.82674	0.48327	0.63209	Priority 2B
255	Simroungadh UM	Bara	Madhesh	0.80951	0.53280	0.65674	Priority 2B
256	Pacharauta UM	Bara	Madhesh	0.81751	0.47940	0.62603	Priority 2B
257	Mahagadhi-mai UM	Bara	Madhesh	0.81388	0.58414	0.68951	Priority 2B
258	Devtal RM	Bara	Madhesh	0.84313	0.57858	0.69844	Priority 2B
259	Subarna RM	Bara	Madhesh	0.84279	0.56081	0.68749	Priority 2B
260	Thori RM	Parsa	Madhesh	0.65009	0.69465	0.67200	Priority 2A
261	Jirabhawani RM	Parsa	Madhesh	0.80923	0.42397	0.58574	Priority 1
262	Jagarnathpur RM	Parsa	Madhesh	0.82671	0.48567	0.63365	Priority 2B
263	Paterwa Sugauli RM	Parsa	Madhesh	0.81236	0.60851	0.70309	Priority 3
264	Sakhuwa Prasauni RM	Parsa	Madhesh	0.77783	0.57008	0.66590	Priority 2B
265	Parsagadhi UM	Parsa	Madhesh	0.81180	0.47615	0.62172	Priority 2B
266	Birgunj Met-ropolitian City	Parsa	Madhesh	0.81761	0.60405	0.70276	Priority 3
267	Bahudarmai UM	Parsa	Madhesh	0.82053	0.52622	0.65710	Priority 2B
268	Pokhariya UM	Parsa	Madhesh	0.78586	0.53177	0.64645	Priority 2B

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269	Kalikamai RM	Parsa	Madhesh	0.85039	0.62270	0.72769	Priority 3
270	Dhobini RM	Parsa	Madhesh	0.83694	0.64335	0.73379	Priority 3
271	Chhipa-harmai RM	Parsa	Madhesh	0.81699	0.56862	0.68158	Priority 2B
272	Pakaha Mainpur RM	Parsa	Madhesh	0.84958	0.44846	0.61726	Priority 2B
273	Bindabasini RM	Parsa	Madhesh	0.84564	0.55362	0.68422	Priority 2B
274	Gaurishankar RM	Dolakha	Bagmati	0.63043	0.89776	0.75231	Priority 3
275	Bigu RM	Dolakha	Bagmati	0.62382	0.89640	0.74779	Priority 3
276	Kalinchowk RM	Dolakha	Bagmati	0.62811	0.92157	0.76082	Priority 3
277	Baiteshwor RM	Dolakha	Bagmati	0.61340	0.83938	0.71755	Priority 3
278	Jiri UM	Dolakha	Bagmati	0.61890	0.81081	0.70839	Priority 3
279	Tamakoshi RM	Dolakha	Bagmati	0.60676	0.89186	0.73562	Priority 3
280	Melung RM	Dolakha	Bagmati	0.60056	0.89817	0.73444	Priority 3
281	Shailung RM	Dolakha	Bagmati	0.62603	0.94087	0.76747	Priority 3
282	Bhimeshwor UM	Dolakha	Bagmati	0.60990	0.88232	0.73357	Priority 3
283	Bhotekoshi RM	Sindhupal-chok	Bagmati	0.59826	0.87879	0.72508	Priority 3
284	Jugal RM	Sindhupal-chok	Bagmati	0.59976	0.89756	0.73370	Priority 3
285	Panchpokha-ri Thangpal RM	Sindhupal-chok	Bagmati	0.62400	0.91093	0.75394	Priority 3
286	Helambu RM	Sindhupal-chok	Bagmati	0.63100	0.93126	0.76657	Priority 3
287	Melanchi UM	Sindhupal-chok	Bagmati	0.56920	0.85604	0.69804	Priority 2A
288	Indrawoti RM	Sindhupal-chok	Bagmati	0.59393	0.91400	0.73679	Priority 3
289	Choutara Sangachowk-gadhi UM	Sindhupal-chok	Bagmati	0.58026	0.85903	0.70602	Priority 3

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290	Balephi RM	Sindhupal-chok	Bagmati	0.61369	0.91133	0.74784	Priority 3
291	Bahrabise UM	Sindhupal-chok	Bagmati	0.58747	0.86479	0.71277	Priority 3
292	Tripurasund-ari RM	Sindhupal-chok	Bagmati	0.62295	0.94222	0.76613	Priority 3
293	Lisankhu Pakhar RM	Sindhupal-chok	Bagmati	0.62575	0.94233	0.76790	Priority 3
294	Sunkoshi RM	Sindhupal-chok	Bagmati	0.60459	0.92515	0.74789	Priority 3
295	Gosaikunda RM	Rasuwa	Bagmati	0.61854	0.82191	0.71301	Priority 3
296	Aamachhod-ingmo RM	Rasuwa	Bagmati	0.60411	0.90154	0.73799	Priority 3
297	Uttargaya RM	Rasuwa	Bagmati	0.62011	0.85117	0.72651	Priority 3
298	Naukunda RM	Rasuwa	Bagmati	0.61010	0.85987	0.72430	Priority 3
299	Kalika RM	Rasuwa	Bagmati	0.64883	0.94302	0.78221	Priority 3
300	Rubi Valley RM	Dhading	Bagmati	0.62031	0.80709	0.70756	Priority 3
301	Khaniyabas RM	Dhading	Bagmati	0.64076	0.94011	0.77614	Priority 3
302	Ganga Jamu-na RM	Dhading	Bagmati	0.59568	0.78304	0.68297	Priority 2A
303	Tripurasund-ari RM	Dhading	Bagmati	0.62126	0.86135	0.73152	Priority 3
304	Netrawati Dabjong RM	Dhading	Bagmati	0.63268	0.88431	0.74799	Priority 3
305	Nilkhantha UM	Dhading	Bagmati	0.61136	0.84712	0.71965	Priority 3
306	Jwalamukhi RM	Dhading	Bagmati	0.58715	0.88235	0.71977	Priority 3
307	Siddhalek RM	Dhading	Bagmati	0.59870	0.86112	0.71802	Priority 3
308	Benighat Rorang RM	Dhading	Bagmati	0.58543	0.83829	0.70054	Priority 3
309	Gajuri RM	Dhading	Bagmati	0.61595	0.88809	0.73961	Priority 3
310	Galchhi RM	Dhading	Bagmati	0.59893	0.87056	0.72208	Priority 3
311	Thakre RM	Dhading	Bagmati	0.63633	0.84772	0.73446	Priority 3

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312	Dhunibenshi UM	Dhading	Bagmati	0.62409	0.72882	0.67443	Priority 2A
313	Dupchesh-wor RM	Nuwakot	Bagmati	0.60790	0.87126	0.72777	Priority 3
314	Tadi RM	Nuwakot	Bagmati	0.60593	0.90204	0.73931	Priority 3
315	Suryagadhi RM	Nuwakot	Bagmati	0.59175	0.90499	0.73180	Priority 3
316	Bidur UM	Nuwakot	Bagmati	0.62375	0.85478	0.73019	Priority 3
317	Kispang RM	Nuwakot	Bagmati	0.61370	0.89692	0.74192	Priority 3
318	Myagang RM	Nuwakot	Bagmati	0.62759	0.91537	0.75794	Priority 3
319	Tarakeshwor RM	Nuwakot	Bagmati	0.60066	0.89388	0.73275	Priority 3
320	Belkotgadhi UM	Nuwakot	Bagmati	0.55690	0.83820	0.68322	Priority 2A
321	Likhu RM	Nuwakot	Bagmati	0.55718	0.86491	0.69420	Priority 2A
322	Panchakanya RM	Nuwakot	Bagmati	0.60172	0.89560	0.73410	Priority 3
323	Shivapuri RM	Nuwakot	Bagmati	0.63958	0.81242	0.72084	Priority 3
324	Kakani RM	Nuwakot	Bagmati	0.61296	0.84600	0.72012	Priority 3
325	Shankhara-pur UM	Kathman-du	Bagmati	0.63561	0.62006	0.62778	Priority 2B
326	Kageshwori Manahara UM	Kathman-du	Bagmati	0.73719	0.63240	0.68279	Priority 2B
327	Gokarnesh-wor UM	Kathman-du	Bagmati	0.75936	0.55957	0.65185	Priority 2B
328	Bud-hanilkhantha UM	Kathman-du	Bagmati	0.73170	0.56631	0.64371	Priority 2B
329	Tokha UM	Kathman-du	Bagmati	0.76632	0.52115	0.63196	Priority 2B
330	Tarakeshwor UM	Kathman-du	Bagmati	0.75124	0.58387	0.66229	Priority 2B
331	Nagarjun UM	Kathman-du	Bagmati	0.70552	0.55954	0.62830	Priority 2B
332	Kathmandu Metropolitan City	Kathman-du	Bagmati	0.75931	0.51358	0.62447	Priority 2B
333	Kirtipur UM	Kathman-du	Bagmati	0.73143	0.58606	0.65472	Priority 2B

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334	Chandragiri UM	Kathmandu	Bagmati	0.70209	0.71140	0.70673	Priority 3
335	Dakshinkali UM	Kathmandu	Bagmati	0.63175	0.64483	0.63826	Priority 2A
336	Changunarayan UM	Bhaktapur	Bagmati	0.68607	0.71486	0.70032	Priority 3
337	Bhaktapur UM	Bhaktapur	Bagmati	0.73238	0.53121	0.62374	Priority 2B
338	Madhyapur Thimi UM	Bhaktapur	Bagmati	0.72306	0.52817	0.61798	Priority 2B
339	Suryabinayak UM	Bhaktapur	Bagmati	0.71748	0.62517	0.66974	Priority 2B
340	Mahalaxmi UM	Lalitpur	Bagmati	0.62266	0.74402	0.68064	Priority 2A
341	Lalitpur Metropolitan City	Lalitpur	Bagmati	0.71071	0.58031	0.64221	Priority 2B
342	Godawari UM	Lalitpur	Bagmati	0.67578	0.69009	0.68290	Priority 2A
343	Konjyosom RM	Lalitpur	Bagmati	0.67830	0.90219	0.78228	Priority 3
344	Mahankal RM	Lalitpur	Bagmati	0.65364	0.89055	0.76295	Priority 3
345	Bagmati RM	Lalitpur	Bagmati	0.63921	0.81330	0.72102	Priority 3
346	Chauri Deurali RM	Kavrepalanchok	Bagmati	0.63376	0.92060	0.76383	Priority 3
347	Bhumlu RM	Kavrepalanchok	Bagmati	0.59502	0.82957	0.70258	Priority 3
348	Mandan Deupur UM	Kavrepalanchok	Bagmati	0.59814	0.76818	0.67785	Priority 2A
349	Banepa UM	Kavrepalanchok	Bagmati	0.62849	0.68541	0.65633	Priority 2A
350	Dhulikhel UM	Kavrepalanchok	Bagmati	0.65711	0.80401	0.72686	Priority 3
351	Panchkhal UM	Kavrepalanchok	Bagmati	0.61297	0.79460	0.69790	Priority 2A

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352	Temal RM	Ka-vrepalan-chok	Bagmati	0.59236	0.90997	0.73419	Priority 3
353	Namobud-dha UM	Ka-vrepalan-chok	Bagmati	0.58526	0.81628	0.69119	Priority 2A
354	Panauti UM	Ka-vrepalan-chok	Bagmati	0.60001	0.81014	0.69721	Priority 2A
355	Bethan-chowk RM	Ka-vrepalan-chok	Bagmati	0.63363	0.93603	0.77013	Priority 3
356	Roshi RM	Ka-vrepalan-chok	Bagmati	0.62680	0.89071	0.74719	Priority 3
357	Mahabharat RM	Ka-vrepalan-chok	Bagmati	0.61737	0.90473	0.74736	Priority 3
358	Khanikhola RM	Ka-vrepalan-chok	Bagmati	0.63365	0.77596	0.70120	Priority 3
359	Umakunda RM	Ramech-hap	Bagmati	0.63219	0.91721	0.76148	Priority 3
360	Gokulganga RM	Ramech-hap	Bagmati	0.62154	0.88865	0.74319	Priority 3
361	Likhu Tama-koshi RM	Ramech-hap	Bagmati	0.56996	0.91481	0.72208	Priority 3
362	Ramechhap UM	Ramech-hap	Bagmati	0.62376	0.85833	0.73171	Priority 3
363	Manthali UM	Ramech-hap	Bagmati	0.56044	0.85651	0.69284	Priority 2A
364	Khandadevi RM	Ramech-hap	Bagmati	0.62681	0.90101	0.75150	Priority 3
365	Doramba Shailung RM	Ramech-hap	Bagmati	0.61198	0.86110	0.72593	Priority 3
366	Sunapati RM	Ramech-hap	Bagmati	0.63735	0.86628	0.74305	Priority 3
367	Dudhouli UM	Sindhuli	Bagmati	0.47783	0.77119	0.60704	Priority 2A
368	Phikkal RM	Sindhuli	Bagmati	0.64466	0.92081	0.77046	Priority 3
369	Tinpatan RM	Sindhuli	Bagmati	0.58597	0.90195	0.72699	Priority 3
370	Golanjor RM	Sindhuli	Bagmati	0.61349	0.91456	0.74905	Priority 3

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371	Kamalamai UM	Sindhuli	Bagmati	0.59836	0.85394	0.71482	Priority 3
372	Sunkoshi RM	Sindhuli	Bagmati	0.61561	0.94143	0.76129	Priority 3
373	Ghyanglekha RM	Sindhuli	Bagmati	0.62406	0.89216	0.74616	Priority 3
374	Marin RM	Sindhuli	Bagmati	0.424	0.833	0.595	Priority 1
375	Hariharpur-gaghi RM	Sindhuli	Bagmati	0.45791	0.80179	0.60593	Priority 2A
376	Indrasarowar RM	Makwan-pur	Bagmati	0.60677	0.88746	0.73381	Priority 3
377	Thaha UM	Makwan-pur	Bagmati	0.59288	0.83869	0.70516	Priority 3
378	Kailash RM	Makwan-pur	Bagmati	0.61618	0.70984	0.66135	Priority 2A
379	Raksirang RM	Makwan-pur	Bagmati	0.59058	0.66383	0.62614	Priority 2A
380	Manahari RM	Makwan-pur	Bagmati	0.57257	0.83305	0.69064	Priority 2A
381	Hetauda Sub-Metro-politan City	Makwan-pur	Bagmati	0.64161	0.83090	0.73015	Priority 3
382	Bhimphedi RM	Makwan-pur	Bagmati	0.62546	0.88183	0.74266	Priority 3
383	Makawan-purgadhi RM	Makwan-pur	Bagmati	0.57651	0.86128	0.70465	Priority 3
384	Bakaiya RM	Makwan-pur	Bagmati	0.500	0.679	0.583	Priority 1
385	Bagmati RM	Makwan-pur	Bagmati	0.471	0.722	0.584	Priority 1
386	Rapti UM	Chitawan	Bagmati	0.67299	0.74969	0.71030	Priority 3
387	Kalika UM	Chitawan	Bagmati	0.65142	0.74268	0.69556	Priority 2A
388	Ichchha Ka-mana RM	Chitawan	Bagmati	0.59722	0.82622	0.70245	Priority 3
389	Bharatpur Metropolitan City	Chitawan	Bagmati	0.73119	0.84580	0.78641	Priority 3
390	Ratnanagar UM	Chitawan	Bagmati	0.71174	0.81712	0.76261	Priority 3

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391	Khairahani UM	Chitawan	Bagmati	0.73560	0.80540	0.76971	Priority 3
392	Madi UM	Chitawan	Bagmati	0.63739	0.83638	0.73013	Priority 3
393	Chumanubri RM	Gorkha	Gandaki	0.52904	0.66959	0.59518	Priority 1
394	Ajirkot RM	Gorkha	Gandaki	0.52998	0.86475	0.67698	Priority 2A
395	Barpak Su-likot RM	Gorkha	Gandaki	0.53572	0.82435	0.66454	Priority 2A
396	Dharche RM	Gorkha	Gandaki	0.53549	0.83465	0.66854	Priority 2A
397	Aarughat RM	Gorkha	Gandaki	0.52731	0.82050	0.65777	Priority 2A
398	Bhimsentha-pa RM	Gorkha	Gandaki	0.52902	0.89933	0.68976	Priority 2A
399	Siranchowk RM	Gorkha	Gandaki	0.52878	0.88950	0.68582	Priority 2A
400	Palungtar UM	Gorkha	Gandaki	0.63489	0.80479	0.71481	Priority 3
401	Gorkha UM	Gorkha	Gandaki	0.71640	0.87648	0.79241	Priority 3
402	Shahid Lakhan RM	Gorkha	Gandaki	0.52721	0.89444	0.68670	Priority 2A
403	Gandaki RM	Gorkha	Gandaki	0.52368	0.91165	0.69095	Priority 2A
404	Narpa Bhumi RM	Manang	Gandaki	0.53348	0.91183	0.69746	Priority 2A
405	Manang Ngisyang RM	Manang	Gandaki	0.54448	0.94503	0.71732	Priority 3
406	Chame RM	Manang	Gandaki	0.54647	0.91731	0.70801	Priority 3
407	Nason RM	Manang	Gandaki	0.54657	0.93191	0.71369	Priority 3
408	Lo Ghekar Damodark-unda RM	Mustang	Gandaki	0.53614	0.61721	0.57525	Priority 1
409	Gharpajhong RM	Mustang	Gandaki	0.54567	0.93435	0.71404	Priority 3
410	Varagung Muktichhet-ra RM	Mustang	Gandaki	0.53722	0.88405	0.68915	Priority 2A
411	Lomanthang RM	Mustang	Gandaki	0.42818	0.71905	0.55487	Priority 1
412	Thasang RM	Mustang	Gandaki	0.54115	0.89426	0.69565	Priority 2A

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413	Annapurna RM	Myagdi	Gandaki	0.53289	0.91965	0.70005	Priority 3
414	Raghuganga RM	Myagdi	Gandaki	0.52234	0.91288	0.69053	Priority 2A
415	Dhawalagiri RM	Myagdi	Gandaki	0.53196	0.84814	0.67170	Priority 2A
416	Malika RM	Myagdi	Gandaki	0.53175	0.83291	0.66550	Priority 2A
417	Mangala RM	Myagdi	Gandaki	0.53504	0.92758	0.70448	Priority 3
418	Beni UM	Myagdi	Gandaki	0.65459	0.84595	0.74414	Priority 3
419	Madi RM	Kaski	Gandaki	0.52856	0.90269	0.69074	Priority 2A
420	Machhapu-chchhre RM	Kaski	Gandaki	0.53564	0.90786	0.69734	Priority 2A
421	Annapurna RM	Kaski	Gandaki	0.53980	0.91452	0.70261	Priority 3
422	Pokhara Metropolitan City	Kaski	Gandaki	0.67839	0.90410	0.78315	Priority 3
423	Rupa RM	Kaski	Gandaki	0.53979	0.88086	0.68955	Priority 2A
424	Dordi RM	Lamjung	Gandaki	0.53182	0.92957	0.70311	Priority 3
425	Marshyangdi RM	Lamjung	Gandaki	0.54265	0.92449	0.70829	Priority 3
426	Kwhola So-thar RM	Lamjung	Gandaki	0.54534	0.77606	0.65055	Priority 2A
427	Madhya Nepal UM	Lamjung	Gandaki	0.64629	0.79062	0.71482	Priority 3
428	Bensishahar UM	Lamjung	Gandaki	0.64692	0.85974	0.74577	Priority 3
429	Sundarbazar UM	Lamjung	Gandaki	0.65952	0.88350	0.76334	Priority 3
430	Rainas UM	Lamjung	Gandaki	0.64785	0.80748	0.72328	Priority 3
431	Dud-hapokhari RM	Lamjung	Gandaki	0.54099	0.89562	0.69607	Priority 2A
432	Bhanu UM	Tanahu	Gandaki	0.61629	0.81636	0.70931	Priority 3
433	Byas UM	Tanahu	Gandaki	0.64150	0.84982	0.73835	Priority 3
434	Myagde RM	Tanahu	Gandaki	0.53316	0.86637	0.67964	Priority 2A

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435	Shuklaganda-ki UM	Tanahu	Gandaki	0.65203	0.87893	0.75702	Priority 3
436	Bhimad UM	Tanahu	Gandaki	0.63828	0.83002	0.72786	Priority 3
437	Ghiring RM	Tanahu	Gandaki	0.51412	0.84792	0.66025	Priority 2A
438	Rhishing RM	Tanahu	Gandaki	0.51729	0.75185	0.62364	Priority 2A
439	Devghat RM	Tanahu	Gandaki	0.53057	0.82316	0.66086	Priority 2A
440	Bandipur RM	Tanahu	Gandaki	0.51839	0.88883	0.67879	Priority 2A
441	Aanbu Khai-reni RM	Tanahu	Gandaki	0.53745	0.90656	0.69802	Priority 2A
442	Gaidakot UM	Nawal-parasi East	Gandaki	0.65258	0.84192	0.74123	Priority 3
443	Bulingtar RM	Nawal-parasi East	Gandaki	0.52478	0.79012	0.64393	Priority 2A
444	Baudikali RM	Nawal-parasi East	Gandaki	0.53759	0.87414	0.68552	Priority 2A
445	Hupsekot RM	Nawal-parasi East	Gandaki	0.52913	0.88786	0.68541	Priority 2A
446	Devchuli UM	Nawal-parasi East	Gandaki	0.65430	0.84216	0.74231	Priority 3
447	Kawasoti UM	Nawal-parasi East	Gandaki	0.65979	0.87615	0.76031	Priority 3
448	Madhya Bindu UM	Nawal-parasi East	Gandaki	0.63639	0.80155	0.71421	Priority 3
449	Binayi Tribeni RM	Nawal-parasi East	Gandaki	0.63847	0.80427	0.71659	Priority 3
450	Putalibazar UM	Syangja	Gandaki	0.65261	0.85967	0.74902	Priority 3
451	Phedikhola RM	Syangja	Gandaki	0.53171	0.92485	0.70125	Priority 3
452	Aandhikhola RM	Syangja	Gandaki	0.52539	0.84409	0.66594	Priority 2A
453	Arjun Choupari RM	Syangja	Gandaki	0.53691	0.86300	0.68070	Priority 2A
454	Bhirkot UM	Syangja	Gandaki	0.65062	0.89158	0.76163	Priority 3
455	Biruwa RM	Syangja	Gandaki	0.53133	0.84447	0.66984	Priority 2A
456	Harinas RM	Syangja	Gandaki	0.52599	0.82703	0.65955	Priority 2A
457	Chapakot UM	Syangja	Gandaki	0.63836	0.85235	0.73764	Priority 3

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
458	Walling UM	Syangja	Gandaki	0.65488	0.87440	0.75672	Priority 3
459	Galyang UM	Syangja	Gandaki	0.64840	0.73283	0.68933	Priority 2A
460	Kaligandaki RM	Syangja	Gandaki	0.52799	0.88525	0.68367	Priority 2A
461	Modi RM	Parbat	Gandaki	0.53897	0.80989	0.66069	Priority 2A
462	Jaljala RM	Parbat	Gandaki	0.53856	0.84742	0.67556	Priority 2A
463	Kushma UM	Parbat	Gandaki	0.65308	0.81844	0.73110	Priority 3
464	Phalebas UM	Parbat	Gandaki	0.63255	0.78672	0.70544	Priority 3
465	Mahashila RM	Parbat	Gandaki	0.54395	0.68453	0.61020	Priority 2A
466	Bihadi RM	Parbat	Gandaki	0.53853	0.74993	0.63550	Priority 2A
467	Paiyu RM	Parbat	Gandaki	0.53782	0.72103	0.62272	Priority 2A
468	Baglung UM	Baglung	Gandaki	0.66008	0.83651	0.74307	Priority 3
469	Kathekhola RM	Baglung	Gandaki	0.53395	0.92380	0.70232	Priority 3
470	Tarakhola RM	Baglung	Gandaki	0.53685	0.85956	0.67930	Priority 2A
471	Tamankhola RM	Baglung	Gandaki	0.53416	0.88478	0.68747	Priority 2A
472	Dhorpatan UM	Baglung	Gandaki	0.65001	0.83598	0.73715	Priority 3
473	Nisikhola RM	Baglung	Gandaki	0.52017	0.87889	0.67614	Priority 2A
474	Badigad RM	Baglung	Gandaki	0.52513	0.88707	0.68252	Priority 2A
475	Galkot UM	Baglung	Gandaki	0.64671	0.74434	0.69381	Priority 2A
476	Bareng RM	Baglung	Gandaki	0.53501	0.91507	0.69970	Priority 2A
477	Jaimini UM	Baglung	Gandaki	0.62930	0.87361	0.74146	Priority 3
478	Putha Uttan-ganga RM	Rukum East	Lumbini	0.51995	0.73219	0.61701	Priority 2A
479	Sisne RM	Rukum East	Lumbini	0.56425	0.72914	0.64142	Priority 2A
480	Bhoome RM	Rukum East	Lumbini	0.55758	0.71275	0.63041	Priority 2A
481	Sunchhahari RM	Rolpa	Lumbini	0.54603	0.83059	0.67345	Priority 2A
482	Thawang RM	Rolpa	Lumbini	0.55415	0.76974	0.65311	Priority 2A
483	Pariwartan RM	Rolpa	Lumbini	0.51490	0.84573	0.65990	Priority 2A

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484	Gangadev RM	Rolpa	Lumbini	0.53597	0.79012	0.65076	Priority 2A
485	Madi RM	Rolpa	Lumbini	0.54875	0.82846	0.67426	Priority 2A
486	Tribeni RM	Rolpa	Lumbini	0.55234	0.85466	0.68707	Priority 2A
487	Rolpa UM	Rolpa	Lumbini	0.76801	0.72309	0.74521	Priority 3
488	Runtigadhi RM	Rolpa	Lumbini	0.51924	0.76764	0.63134	Priority 2A
489	Sunil Smriti RM	Rolpa	Lumbini	0.54460	0.85476	0.68228	Priority 2A
490	Lungri RM	Rolpa	Lumbini	0.54946	0.83658	0.67798	Priority 2A
491	Gaumukhi RM	Pyuthan	Lumbini	0.51875	0.84484	0.66201	Priority 2A
492	Naubahini RM	Pyuthan	Lumbini	0.54848	0.84402	0.68039	Priority 2A
493	Jhimaruk RM	Pyuthan	Lumbini	0.55130	0.88437	0.69825	Priority 2A
494	Pyuthan UM	Pyuthan	Lumbini	0.77897	0.79194	0.78543	Priority 3
495	Sworgadwari UM	Pyuthan	Lumbini	0.77223	0.68079	0.72507	Priority 3
496	Mandavi RM	Pyuthan	Lumbini	0.52758	0.87182	0.67820	Priority 2A
497	Mallarani RM	Pyuthan	Lumbini	0.55372	0.80038	0.66572	Priority 2A
498	Aairawati RM	Pyuthan	Lumbini	0.55657	0.82791	0.67882	Priority 2A
499	Sarumarani RM	Pyuthan	Lumbini	0.51361	0.81450	0.64679	Priority 2A
500	Kali Gandaki RM	Gulmi	Lumbini	0.52727	0.86635	0.67587	Priority 2A
501	Satyawoti RM	Gulmi	Lumbini	0.55328	0.88365	0.69922	Priority 2A
502	Chandrakot RM	Gulmi	Lumbini	0.55746	0.86272	0.69349	Priority 2A
503	Musikot UM	Gulmi	Lumbini	0.77171	0.80271	0.78706	Priority 3
504	Isma RM	Gulmi	Lumbini	0.57138	0.83472	0.69061	Priority 2A
505	Malika RM	Gulmi	Lumbini	0.56188	0.87034	0.69930	Priority 2A
506	Madane RM	Gulmi	Lumbini	0.53052	0.87369	0.68081	Priority 2A
507	Dhurkot RM	Gulmi	Lumbini	0.57229	0.87265	0.70669	Priority 3
508	Resunga UM	Gulmi	Lumbini	0.78177	0.80707	0.79432	Priority 3

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509	Gulmi Durbar RM	Gulmi	Lumbini	0.56258	0.86404	0.69721	Priority 2A
510	Chhatrakot RM	Gulmi	Lumbini	0.55013	0.83887	0.67933	Priority 2A
511	Ruruchhetra RM	Gulmi	Lumbini	0.57040	0.86941	0.70421	Priority 3
512	Chhatradev RM	Ar-ghakhan-chi	Lumbini	0.53253	0.88391	0.68608	Priority 2A
513	Malarani RM	Ar-ghakhan-chi	Lumbini	0.54003	0.87673	0.68808	Priority 2A
514	Bhumi-kasthan UM	Ar-ghakhan-chi	Lumbini	0.78035	0.81084	0.79545	Priority 3
515	Sandhikhar-ka UM	Ar-ghakhan-chi	Lumbini	0.77874	0.80491	0.79172	Priority 3
516	Panini RM	Ar-ghakhan-chi	Lumbini	0.56958	0.86987	0.70389	Priority 3
517	Shitaganga UM	Ar-ghakhan-chi	Lumbini	0.71552	0.73461	0.72500	Priority 3
518	Rampur UM	Palpa	Lumbini	0.75581	0.76637	0.76107	Priority 3
519	Purbakhola RM	Palpa	Lumbini	0.57666	0.87602	0.71075	Priority 3
520	Rambha RM	Palpa	Lumbini	0.55829	0.87880	0.70044	Priority 3
521	Baganaskali RM	Palpa	Lumbini	0.54654	0.87284	0.69068	Priority 2A
522	Tansen UM	Palpa	Lumbini	0.77692	0.72265	0.74929	Priority 3
523	Ribdikot RM	Palpa	Lumbini	0.55975	0.87518	0.69991	Priority 2A
524	Rainadevi Chhahara RM	Palpa	Lumbini	0.54521	0.85207	0.68159	Priority 2A
525	Tinau RM	Palpa	Lumbini	0.53984	0.84330	0.67472	Priority 2A
526	Mathagadhi RM	Palpa	Lumbini	0.55080	0.87823	0.69551	Priority 2A
527	Nisdi RM	Palpa	Lumbini	0.55108	0.80817	0.66736	Priority 2A

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528	Bardaghat UM	Nawal-parasi West	Lumbini	0.79081	0.68479	0.73589	Priority 3
529	Sunawal UM	Nawal-parasi West	Lumbini	0.80976	0.67618	0.73996	Priority 3
530	Ramgram UM	Nawal-parasi West	Lumbini	0.80999	0.63315	0.71613	Priority 3
531	Palhinandan RM	Nawal-parasi West	Lumbini	0.74608	0.67774	0.71109	Priority 3
532	Sarawal RM	Nawal-parasi West	Lumbini	0.76210	0.67170	0.71547	Priority 3
533	Pratapapur RM	Nawal-parasi West	Lumbini	0.67798	0.61722	0.64689	Priority 2B
534	Susta RM	Nawal-parasi West	Lumbini	0.74689	0.64471	0.69392	Priority 2B
535	Devdaha UM	Rupandehi	Lumbini	0.80127	0.69752	0.74760	Priority 3
536	Butwal Sub-Metro-politan City	Rupandehi	Lumbini	0.78999	0.79561	0.79279	Priority 3
537	Sainamaina UM	Rupandehi	Lumbini	0.79209	0.75119	0.77137	Priority 3
538	Kanchan RM	Rupandehi	Lumbini	0.71288	0.83390	0.77102	Priority 3
539	Gaidahawa RM	Rupandehi	Lumbini	0.73102	0.64327	0.68574	Priority 2B
540	Suddhodhan RM	Rupandehi	Lumbini	0.72118	0.74787	0.73441	Priority 3
541	Siyari RM	Rupandehi	Lumbini	0.76118	0.80177	0.78121	Priority 3
542	Tilottama UM	Rupandehi	Lumbini	0.80997	0.78003	0.79486	Priority 3
543	Om Satiya RM	Rupandehi	Lumbini	0.70468	0.75109	0.72751	Priority 3
544	Rohini RM	Rupandehi	Lumbini	0.70783	0.71788	0.71284	Priority 3
545	Siddhart-hanagar UM	Rupandehi	Lumbini	0.81669	0.78941	0.80293	Priority 3

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546	Mayadevi RM	Rupandehi	Lumbini	0.75980	0.73284	0.74620	Priority 3
547	Lumbini Sanskritik UM	Rupandehi	Lumbini	0.80989	0.61181	0.70392	Priority 3
548	Kotahimai RM	Rupandehi	Lumbini	0.73860	0.66334	0.69996	Priority 2B
549	Sammarimai RM	Rupandehi	Lumbini	0.75844	0.59359	0.67097	Priority 2B
550	Marchawari RM	Rupandehi	Lumbini	0.77760	0.61225	0.68999	Priority 2B
551	Banganga UM	Kapilbastu	Lumbini	0.81023	0.68643	0.74577	Priority 3
552	Buddhabhumi UM	Kapilbastu	Lumbini	0.81332	0.62996	0.71579	Priority 3
553	Shivaraj UM	Kapilbastu	Lumbini	0.82197	0.59360	0.69851	Priority 2B
554	Bijayanagar RM	Kapilbastu	Lumbini	0.790	0.405	0.565	Priority 1
555	Krishnanagar UM	Kapilbastu	Lumbini	0.80622	0.41823	0.58068	Priority 1
556	Maharajganj UM	Kapilbastu	Lumbini	0.813	0.399	0.570	Priority 1
557	Kapilbastu UM	Kapilbastu	Lumbini	0.81442	0.61533	0.70791	Priority 3
558	Yasodhara RM	Kapilbastu	Lumbini	0.73371	0.51329	0.61368	Priority 2B
559	Mayadevi RM	Kapilbastu	Lumbini	0.76810	0.60643	0.68249	Priority 2B
560	Shuddhodhan RM	Kapilbastu	Lumbini	0.75410	0.52637	0.63003	Priority 2B
561	Bangalachuli RM	Dang	Lumbini	0.49581	0.82042	0.63779	Priority 2A
562	Ghorahi Sub-Metropolitan City	Dang	Lumbini	0.68706	0.78076	0.73241	Priority 3
563	Tulsipur Sub-Metropolitan City	Dang	Lumbini	0.70681	0.76446	0.73507	Priority 3
564	Shantinagar RM	Dang	Lumbini	0.56999	0.76061	0.65844	Priority 2A
565	Babai RM	Dang	Lumbini	0.55272	0.71494	0.62862	Priority 2A

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566	Dangisharan RM	Dang	Lumbini	0.50738	0.74839	0.61621	Priority 2A
567	Lamahi UM	Dang	Lumbini	0.72353	0.71753	0.72052	Priority 3
568	Rapti RM	Dang	Lumbini	0.68671	0.78139	0.73252	Priority 3
569	Gadhawa RM	Dang	Lumbini	0.65842	0.74757	0.70158	Priority 3
570	Rajpur RM	Dang	Lumbini	0.54257	0.63712	0.58795	Priority 1
571	Rapti Sonari RM	Banke	Lumbini	0.71004	0.68266	0.69622	Priority 2B
572	Kohalpur UM	Banke	Lumbini	0.81150	0.69060	0.74861	Priority 3
573	Baijanath RM	Banke	Lumbini	0.78549	0.70776	0.74561	Priority 3
574	Khajura RM	Banke	Lumbini	0.69335	0.65602	0.67443	Priority 2B
575	Janaki RM	Banke	Lumbini	0.70757	0.58049	0.64089	Priority 2B
576	Nepalganj Sub-Metro-politan City	Banke	Lumbini	0.79933	0.68912	0.74218	Priority 3
577	Duduwa RM	Banke	Lumbini	0.707	0.463	0.572	Priority 1
578	Narainapur RM	Banke	Lumbini	0.66404	0.54761	0.60302	Priority 2B
579	Bansgadhi UM	Bardiya	Lumbini	0.81688	0.68210	0.74646	Priority 3
580	Barbardiya UM	Bardiya	Lumbini	0.81987	0.63763	0.72303	Priority 3
581	Thakurbaba UM	Bardiya	Lumbini	0.83296	0.75592	0.79350	Priority 3
582	Geruwa RM	Bardiya	Lumbini	0.79792	0.73041	0.76342	Priority 3
583	Rajapur UM	Bardiya	Lumbini	0.82481	0.62368	0.71723	Priority 3
584	Madhuwan UM	Bardiya	Lumbini	0.80359	0.67691	0.73753	Priority 3
585	Gulariya UM	Bardiya	Lumbini	0.82490	0.63375	0.72304	Priority 3
586	Badhaiyatal RM	Bardiya	Lumbini	0.75445	0.72414	0.73914	Priority 3
587	Dolpo Bud-dha RM	Dolpa	Karnali	0.53280	0.43799	0.48307	Priority 1
588	Shey Phoksundo RM	Dolpa	Karnali	0.328	0.430	0.376	Priority 1
589	Jagadulla RM	Dolpa	Karnali	0.56197	0.75179	0.64999	Priority 2A

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590	Mudkechula RM	Dolpa	Karnali	0.57668	0.69477	0.63298	Priority 2A
591	Tripurasundari UM	Dolpa	Karnali	0.55047	0.77122	0.65156	Priority 2A
592	Thulibheri UM	Dolpa	Karnali	0.57404	0.81148	0.68251	Priority 2A
593	Kaike RM	Dolpa	Karnali	0.59307	0.57714	0.58505	Priority 1
594	Chharka Tangsong RM	Dolpa	Karnali	0.460	0.407	0.433	Priority 1
595	Mugum Karmarong RM	Mugu	Karnali	0.441	0.518	0.478	Priority 1
596	Chhayanath Rara UM	Mugu	Karnali	0.55413	0.60695	0.57994	Priority 1
597	Soru RM	Mugu	Karnali	0.54528	0.57389	0.55940	Priority 1
598	Khatyad RM	Mugu	Karnali	0.55559	0.72751	0.63576	Priority 2A
599	Chankheli RM	Humla	Karnali	0.53972	0.56339	0.55143	Priority 1
600	Kharpunath RM	Humla	Karnali	0.52779	0.62495	0.57432	Priority 1
601	Simkot RM	Humla	Karnali	0.55012	0.67046	0.60732	Priority 2A
602	Namkha RM	Humla	Karnali	0.54536	0.59809	0.57112	Priority 1
603	Sarkegad RM	Humla	Karnali	0.55781	0.57393	0.56581	Priority 1
604	Adanchuli RM	Humla	Karnali	0.53861	0.51232	0.52530	Priority 1
605	Tanjakot RM	Humla	Karnali	0.54225	0.59813	0.56951	Priority 1
606	Patarasi RM	Jumla	Karnali	0.60806	0.64481	0.62617	Priority 2A
607	Kanaka Sundari RM	Jumla	Karnali	0.57298	0.85952	0.70178	Priority 3
608	Sinja RM	Jumla	Karnali	0.59514	0.82994	0.70280	Priority 3
609	Chandannath UM	Jumla	Karnali	0.56223	0.71407	0.63362	Priority 2A
610	Guthichaur RM	Jumla	Karnali	0.62650	0.57565	0.60054	Priority 2B
611	Tatopani RM	Jumla	Karnali	0.54873	0.73418	0.63472	Priority 2A
612	Tila RM	Jumla	Karnali	0.56074	0.82763	0.68124	Priority 2A
613	Hima RM	Jumla	Karnali	0.58454	0.80789	0.68720	Priority 2A

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614	Palata RM	Kalikot	Karnali	0.55798	0.87525	0.69883	Priority 2A
615	Pachal Jharana RM	Kalikot	Karnali	0.56090	0.90332	0.71181	Priority 3
616	Raskot UM	Kalikot	Karnali	0.54446	0.79775	0.65904	Priority 2A
617	Sanni Tribeni RM	Kalikot	Karnali	0.56812	0.84413	0.69251	Priority 2A
618	Naraharinath RM	Kalikot	Karnali	0.58131	0.89432	0.72103	Priority 3
619	Khandachakra UM	Kalikot	Karnali	0.55609	0.78262	0.65970	Priority 2A
620	Tilagupha UM	Kalikot	Karnali	0.51190	0.80353	0.64135	Priority 2A
621	Mahawai RM	Kalikot	Karnali	0.54688	0.88524	0.69579	Priority 2A
622	Shuva Kalika RM	Kalikot	Karnali	0.54930	0.84432	0.68102	Priority 2A
623	Naumule RM	Dailekh	Karnali	0.54875	0.77767	0.65326	Priority 2A
624	Mahabu RM	Dailekh	Karnali	0.55987	0.79891	0.66879	Priority 2A
625	Bhairabi RM	Dailekh	Karnali	0.51046	0.81261	0.64405	Priority 2A
626	Thantikandh RM	Dailekh	Karnali	0.53789	0.58671	0.56177	Priority 1
627	Aathbis UM	Dailekh	Karnali	0.53146	0.54146	0.53643	Priority 1
628	Chamunda Bindrasaini UM	Dailekh	Karnali	0.54592	0.63631	0.58938	Priority 1
629	Dullu UM	Dailekh	Karnali	0.54078	0.68551	0.60886	Priority 2A
630	Narayan UM	Dailekh	Karnali	0.56297	0.81361	0.67679	Priority 2A
631	Bhagawatimai RM	Dailekh	Karnali	0.58859	0.63233	0.61007	Priority 2A
632	Dungeshwor RM	Dailekh	Karnali	0.60539	0.77382	0.68444	Priority 2A
633	Gurans RM	Dailekh	Karnali	0.63156	0.80785	0.71429	Priority 3
634	Barekot RM	Jajarkot	Karnali	0.56836	0.66625	0.61536	Priority 2A
635	Kuse RM	Jajarkot	Karnali	0.58171	0.74030	0.65623	Priority 2A
636	Junichande RM	Jajarkot	Karnali	0.52870	0.82979	0.66235	Priority 2A
637	Chhedagad UM	Jajarkot	Karnali	0.55163	0.71876	0.62968	Priority 2A

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638	Shivalaya RM	Jajarkot	Karnali	0.57792	0.86520	0.70712	Priority 3
639	Bheri UM	Jajarkot	Karnali	0.56844	0.78878	0.66961	Priority 2A
640	Nalgad UM	Jajarkot	Karnali	0.53485	0.65485	0.59181	Priority 1
641	Aathabisakot UM	Rukum West	Karnali	0.53749	0.61814	0.57640	Priority 1
642	Sanibheri RM	Rukum West	Karnali	0.57919	0.76785	0.66688	Priority 2A
643	Banphikot RM	Rukum West	Karnali	0.57714	0.74850	0.65726	Priority 2A
644	Musikot UM	Rukum West	Karnali	0.56976	0.84534	0.69401	Priority 2A
645	Tribeni RM	Rukum West	Karnali	0.56613	0.85822	0.69704	Priority 2A
646	Chaurjahari UM	Rukum West	Karnali	0.57516	0.77009	0.66553	Priority 2A
647	Darma RM	Salyan	Karnali	0.58826	0.73061	0.65558	Priority 2A
648	Kumakh RM	Salyan	Karnali	0.52790	0.89454	0.68719	Priority 2A
649	Banagad Kupinde UM	Salyan	Karnali	0.52579	0.88226	0.68109	Priority 2A
650	Siddha Kumakh RM	Salyan	Karnali	0.54921	0.86938	0.69099	Priority 2A
651	Bagachour UM	Salyan	Karnali	0.54988	0.72380	0.63087	Priority 2A
652	Chhatreshwori RM	Salyan	Karnali	0.56206	0.85503	0.69324	Priority 2A
653	Sharada UM	Salyan	Karnali	0.55340	0.83122	0.67823	Priority 2A
654	Kalimati RM	Salyan	Karnali	0.52194	0.76450	0.63168	Priority 2A
655	Tribeni RM	Salyan	Karnali	0.56299	0.81699	0.67820	Priority 2A
656	Kapurkot RM	Salyan	Karnali	0.57863	0.81376	0.68620	Priority 2A
657	Simta RM	Surkhet	Karnali	0.58101	0.85813	0.70610	Priority 3
658	Chingad RM	Surkhet	Karnali	0.56457	0.77071	0.65963	Priority 2A
659	Lekabeshi UM	Surkhet	Karnali	0.56409	0.77193	0.65988	Priority 2A
660	Gurbhakot UM	Surkhet	Karnali	0.53729	0.81686	0.66249	Priority 2A
661	Bheriganga UM	Surkhet	Karnali	0.48679	0.78228	0.61709	Priority 2A

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662	Biren-dranagar UM	Surkhet	Karnali	0.53284	0.84866	0.67246	Priority 2A
663	Barahatal RM	Surkhet	Karnali	0.51137	0.82452	0.64933	Priority 2A
664	Panchapuri UM	Surkhet	Karnali	0.53145	0.83673	0.66684	Priority 2A
665	Chaukune RM	Surkhet	Karnali	0.47808	0.76701	0.60555	Priority 2A
666	Himali RM	Bajura	Sudurpash-chim	0.54556	0.68807	0.61269	Priority 2A
667	Gaumul RM	Bajura	Sudurpash-chim	0.55609	0.57621	0.56606	Priority 1
668	Budhinanda UM	Bajura	Sudurpash-chim	0.57730	0.83501	0.69430	Priority 2A
669	Swamikartik Khapar RM	Bajura	Sudurpash-chim	0.56245	0.78255	0.66343	Priority 2A
670	Jagannath RM	Bajura	Sudurpash-chim	0.54531	0.73574	0.63341	Priority 2A
671	Badimalika UM	Bajura	Sudurpash-chim	0.58195	0.66740	0.62321	Priority 2A
672	Khaptad Chhededaha RM	Bajura	Sudurpash-chim	0.54981	0.83635	0.67811	Priority 2A
673	Budhiganga UM	Bajura	Sudurpash-chim	0.58542	0.75819	0.66622	Priority 2A
674	Tribeni UM	Bajura	Sudurpash-chim	0.56082	0.84374	0.68789	Priority 2A
675	Saipal RM	Bajhang	Sudurpash-chim	0.54900	0.53798	0.54346	Priority 1
676	Bungal UM	Bajhang	Sudurpash-chim	0.56519	0.84130	0.68956	Priority 2A
677	Surma RM	Bajhang	Sudurpash-chim	0.56166	0.50173	0.53085	Priority 1
678	Talkot RM	Bajhang	Sudurpash-chim	0.59655	0.54334	0.56932	Priority 1
679	Masta RM	Bajhang	Sudurpash-chim	0.53802	0.87674	0.68681	Priority 2A
680	Jayaprithbi UM	Bajhang	Sudurpash-chim	0.57180	0.84376	0.69460	Priority 2A

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
681	Chhabis Pathibhara RM	Bajhang	Sudurpash-chim	0.57366	0.68796	0.62822	Priority 2A
682	Durgathali RM	Bajhang	Sudurpash-chim	0.55228	0.57365	0.56287	Priority 1
683	Kedarsyun RM	Bajhang	Sudurpash-chim	0.55478	0.80821	0.66961	Priority 2A
684	Bitthadchir RM	Bajhang	Sudurpash-chim	0.57102	0.81866	0.68372	Priority 2A
685	Thalara RM	Bajhang	Sudurpash-chim	0.54908	0.84605	0.68158	Priority 2A
686	Khaptad Ch-hanna RM	Bajhang	Sudurpash-chim	0.54697	0.72546	0.62993	Priority 2A
687	Byas RM	Darchula	Sudurpash-chim	0.55609	0.73547	0.63952	Priority 2A
688	Duhun RM	Darchula	Sudurpash-chim	0.54802	0.81263	0.66734	Priority 2A
689	Mahakali UM	Darchula	Sudurpash-chim	0.68046	0.85370	0.76217	Priority 3
690	Naugad RM	Darchula	Sudurpash-chim	0.56205	0.86392	0.69683	Priority 2A
691	Apihimal RM	Darchula	Sudurpash-chim	0.62648	0.81246	0.71344	Priority 3
692	Marma RM	Darchula	Sudurpash-chim	0.60228	0.80437	0.69603	Priority 2A
693	Shailyashi-khar UM	Darchula	Sudurpash-chim	0.61930	0.84508	0.72344	Priority 3
694	Malikarjun RM	Darchula	Sudurpash-chim	0.55242	0.61255	0.58171	Priority 1
695	Lekam RM	Darchula	Sudurpash-chim	0.59916	0.55715	0.57777	Priority 1
696	Dilasaini RM	Baitadi	Sudurpash-chim	0.53193	0.62109	0.57478	Priority 1
697	Dogada Kedar RM	Baitadi	Sudurpash-chim	0.51628	0.60650	0.55957	Priority 1
698	Puchaundi UM	Baitadi	Sudurpash-chim	0.54982	0.86031	0.68776	Priority 2A
699	Surnaya RM	Baitadi	Sudurpash-chim	0.53181	0.67088	0.59731	Priority 1
700	Dasharath-chand UM	Baitadi	Sudurpash-chim	0.57190	0.76429	0.66114	Priority 2A

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
701	Pancheshwor RM	Baitadi	Sudurpash-chim	0.54873	0.83836	0.67826	Priority 2A
702	Shivanath RM	Baitadi	Sudurpash-chim	0.52091	0.85512	0.66741	Priority 2A
703	Melauli UM	Baitadi	Sudurpash-chim	0.53943	0.80891	0.66057	Priority 2A
704	Patan UM	Baitadi	Sudurpash-chim	0.59994	0.72186	0.65808	Priority 2A
705	Sigas RM	Baitadi	Sudurpash-chim	0.52672	0.53671	0.53169	Priority 1
706	Nawadurga RM	Dadeld-hura	Sudurpash-chim	0.59135	0.77535	0.67713	Priority 2A
707	Amargadhi UM	Dadeld-hura	Sudurpash-chim	0.63020	0.83543	0.72559	Priority 3
708	Ajayameru RM	Dadeld-hura	Sudurpash-chim	0.56500	0.79673	0.67093	Priority 2A
709	Bhageshwor RM	Dadeld-hura	Sudurpash-chim	0.59245	0.85676	0.71245	Priority 3
710	Parashuram UM	Dadeld-hura	Sudurpash-chim	0.60373	0.81994	0.70358	Priority 3
711	Aalital RM	Dadeld-hura	Sudurpash-chim	0.57645	0.76837	0.66553	Priority 2A
712	Ganyapdhura RM	Dadeld-hura	Sudurpash-chim	0.55977	0.84142	0.68630	Priority 2A
713	Purbichouki RM	Doti	Sudurpash-chim	0.53319	0.70206	0.61183	Priority 2A
714	Sayal RM	Doti	Sudurpash-chim	0.49679	0.58420	0.53872	Priority 1
715	Aadarsha RM	Doti	Sudurpash-chim	0.52471	0.69756	0.60499	Priority 2A
716	Shikhar UM	Doti	Sudurpash-chim	0.53719	0.80172	0.65626	Priority 2A
717	Dipayal Sil-gadhi UM	Doti	Sudurpash-chim	0.52675	0.74498	0.62643	Priority 2A
718	K.I. Singh RM	Doti	Sudurpash-chim	0.51944	0.81618	0.65112	Priority 2A
719	Bogatan Phudsil RM	Doti	Sudurpash-chim	0.55140	0.65287	0.59999	Priority 1
720	Badi Kedar RM	Doti	Sudurpash-chim	0.51004	0.78713	0.63362	Priority 2A

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
721	Jorayal RM	Doti	Sudurpash-chim	0.58297	0.70470	0.64095	Priority 2A
722	Panchdebal Binayak UM	Achham	Sudurpash-chim	0.55425	0.82449	0.67600	Priority 2A
723	Ramaroshan RM	Achham	Sudurpash-chim	0.53439	0.72238	0.62131	Priority 2A
724	Mellekh RM	Achham	Sudurpash-chim	0.55211	0.74208	0.64008	Priority 2A
725	Sanphebagar UM	Achham	Sudurpash-chim	0.56747	0.78007	0.66533	Priority 2A
726	Chaurpati RM	Achham	Sudurpash-chim	0.54703	0.76535	0.64704	Priority 2A
727	Mangalsen UM	Achham	Sudurpash-chim	0.55377	0.85498	0.68809	Priority 2A
728	Bannigadhi Jayagadh RM	Achham	Sudurpash-chim	0.53799	0.73690	0.62964	Priority 2A
729	Kamal bazar UM	Achham	Sudurpash-chim	0.56349	0.83746	0.68695	Priority 2A
730	Dhakari RM	Achham	Sudurpash-chim	0.52890	0.74897	0.62939	Priority 2A
731	Turmakhand RM	Achham	Sudurpash-chim	0.54827	0.76766	0.64875	Priority 2A
732	Mohanyal RM	Kailali	Sudurpash-chim	0.50916	0.60682	0.55585	Priority 1
733	Chure RM	Kailali	Sudurpash-chim	0.51268	0.66971	0.58596	Priority 1
734	Godawari UM	Kailali	Sudurpash-chim	0.73640	0.72046	0.72839	Priority 3
735	Gauriganga UM	Kailali	Sudurpash-chim	0.75053	0.60571	0.67424	Priority 2B
736	Ghodaghodi UM	Kailali	Sudurpash-chim	0.76978	0.57507	0.66534	Priority 2B
737	Bardagori-ya RM	Kailali	Sudur-pashchim	0.85027	0.72897	0.78729	Priority 3
738	Lamki Chu-ha UM	Kailali	Sudur-pashchim	0.75040	0.70028	0.72491	Priority 3
739	Janaki RM	Kailali	Sudur-pashchim	0.86634	0.58788	0.71365	Priority 3
740	Joshipur RM	Kailali	Sudur-pashchim	0.85240	0.59810	0.71402	Priority 3

SN	Local level	District	Province	DWEI	SEI	WASH EI	Strategic category
741	Tikapur UM	Kailali	Sudurpash-chim	0.77141	0.66017	0.71363	Priority 3
742	Bhajani UM	Kailali	Sudurpash-chim	0.80830	0.54020	0.66079	Priority 2B
743	Kailari RM	Kailali	Sudurpash-chim	0.85661	0.63732	0.73888	Priority 3
744	Dhangadhi Sub-Metro-politan City	Kailali	Sudurpash-chim	0.75555	0.73458	0.74499	Priority 3
745	Dodhara Chandani UM	Kanchan-pur	Sudurpash-chim	0.81320	0.71596	0.76303	Priority 3
746	Shuklaphan-ta UM	Kanchan-pur	Sudurpash-chim	0.79996	0.81838	0.80912	Priority 3
747	Bedkot UM	Kanchan-pur	Sudurpash-chim	0.77060	0.81504	0.79251	Priority 3
748	Bhimdatta UM	Kanchan-pur	Sudurpash-chim	0.76508	0.83613	0.79982	Priority 3
749	Laljhadi RM	Kanchan-pur	Sudurpash-chim	0.85250	0.67765	0.76006	Priority 3
750	Krishnapur UM	Kanchan-pur	Sudurpash-chim	0.80499	0.69842	0.74981	Priority 3
751	Punarbas UM	Kanchan-pur	Sudurpash-chim	0.81892	0.83625	0.82754	Priority 3
752	Belouri UM	Kanchan-pur	Sudurpash-chim	0.80080	0.83041	0.81547	Priority 3
753	Beldandi RM	Kanchan-pur	Sudurpash-chim	0.88132	0.77322	0.82550	Priority 3
NEPAL				0.70142	0.70381	0.70262	Priority 3

Note: Strategic Categories are defined as follows:

Priority 1: Critical integrated WASH gap and severe deprivation.
Priority 2A: Drinking water at risk or inadequate (lagging behind sanitation).
Priority 2B: Sanitation at risk or inadequate (lagging behind drinking water).
Priority 3: Progressed, sustained, and learning (moderate progress or high achievement).

AnnexTable 6.d Estimated distribution of the household population across JMP drinking water service ladders by district

SN	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
			Surface water	Unimproved	Limited	Basic	Safely managed	
1	Taplejung	Koshi	0.3	1.0	0.0	85.7	13.0	119450
2	Sankhuwasabha	Koshi	1.0	2.9	0.0	66.3	29.8	154743
3	Solukhumbu	Koshi	0.2	0.9	0.0	85.0	13.9	102987
4	Okhaldhunga	Koshi	1.0	1.8	0.0	86.6	10.7	138989
5	Khotang	Koshi	0.4	4.0	0.0	79.2	16.3	173920
6	Bhojpur	Koshi	0.3	2.4	0.0	79.5	17.8	156611
7	Dhankuta	Koshi	0.3	3.6	0.0	73.0	23.1	148730
8	Terhathum	Koshi	0.1	1.5	0.0	80.4	17.9	88279
9	Panchthar	Koshi	0.5	2.1	0.0	84.7	12.8	171047
10	Ilam	Koshi	0.7	3.8	0.0	73.0	22.4	278128
11	Jhapa	Koshi	0.0	1.3	0.0	50.6	48.0	992796
12	Morang	Koshi	0.0	0.8	0.0	45.8	53.4	1141971
13	Sunsari	Koshi	0.1	0.8	0.0	50.1	49.0	921246
14	Udayapur	Koshi	0.4	6.8	0.0	57.0	35.8	339189
15	Saptari	Madhesh	0.0	1.1	0.0	32.6	66.2	704359
16	Siraha	Madhesh	0.2	3.5	0.0	32.6	63.7	739328
17	Dhanusa	Madhesh	0.0	6.5	0.0	32.3	61.2	865032
18	Mahottari	Madhesh	0.0	3.7	0.0	33.1	63.1	705912
19	Sarlahi	Madhesh	0.0	4.2	0.0	32.1	63.7	860251
20	Rautahat	Madhesh	0.1	1.7	0.0	34.6	63.7	813269
21	Bara	Madhesh	0.0	1.7	0.0	33.9	64.5	761256
22	Parsa	Madhesh	0.0	1.4	0.0	34.5	64.0	651290
23	Dolakha	Bagmati	0.2	1.7	0.1	72.6	25.4	171278
24	Sindhupalchok	Bagmati	0.3	1.9	0.3	75.6	21.8	260345
25	Rasuwa	Bagmati	0.6	0.8	0.0	73.0	25.6	45475
26	Dhading	Bagmati	0.6	2.2	0.3	71.8	25.1	323704
27	Nuwakot	Bagmati	0.4	2.3	0.2	73.6	23.4	260648

SN	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
			Surface water	Unimproved	Limited	Basic	Safely managed	
28	Kathmandu	Bagmati	0.0	3.0	0.0	45.4	51.7	1994555
29	Bhaktapur	Bagmati	0.0	4.3	0.0	48.3	47.4	427060
30	Lalitpur	Bagmati	0.0	5.2	0.0	53.2	41.6	543311
31	Kavrepalanchok	Bagmati	0.6	4.8	0.7	64.9	29.0	358722
32	Ramechhap	Bagmati	1.3	3.0	0.1	70.5	25.1	169035
33	Sindhuli	Bagmati	0.7	15.2	0.3	58.9	24.9	297099
34	Makwanpur	Bagmati	0.6	6.4	0.1	66.4	26.5	458494
35	Chitawan	Bagmati	0.2	1.6	0.1	54.8	43.3	711277
36	Gorkha	Gandaki	0.4	2.1	0.0	78.0	19.5	248287
37	Manang	Gandaki	0.0	0.2	0.0	90.6	9.2	4938
38	Mustang	Gandaki	2.9	0.5	0.0	87.8	8.8	11326
39	Myagdi	Gandaki	0.4	0.5	0.0	84.3	14.8	104770
40	Kaski	Gandaki	0.3	1.1	0.0	65.2	33.4	589534
41	Lamjung	Gandaki	0.8	1.1	0.0	73.3	24.8	154330
42	Tanahu	Gandaki	0.5	3.9	0.0	71.5	24.2	317799
43	Nawalparasi East	Gandaki	0.3	2.7	0.0	67.5	29.6	376192
44	Syangja	Gandaki	0.3	1.6	0.0	74.0	24.0	252064
45	Parbat	Gandaki	0.1	1.1	0.0	80.2	18.6	130151
46	Baglung	Gandaki	0.5	1.0	0.0	77.4	21.1	247130
47	Rukum East	Lumbini	0.5	0.7	0.0	88.1	10.7	56671
48	Rolpa	Lumbini	0.5	2.8	0.0	78.6	18.1	233343
49	Pyuthan	Lumbini	0.4	2.2	0.0	71.7	25.7	230679
50	Gulmi	Lumbini	0.5	1.2	0.0	74.7	23.7	245874
51	Arghakhanchi	Lumbini	1.2	2.4	0.0	57.5	38.9	176427
52	Palpa	Lumbini	0.2	2.6	0.0	67.6	29.6	241951
53	Nawalparasi West	Lumbini	0.2	1.2	0.0	43.1	55.5	383750
54	Rupandehi	Lumbini	0.0	0.6	0.0	43.6	55.8	1112589
55	Kapilbastu	Lumbini	0.1	1.6	0.0	37.0	61.3	678685

SN	District	Province	Household population (%) by JMP drinking water service ladders					Total population, 2021
			Surface water	Unimproved	Limited	Basic	Safely managed	
56	Dang	Lumbini	1.6	11.1	0.0	41.7	45.5	670352
57	Banke	Lumbini	0.0	1.9	0.0	45.1	53.0	597299
58	Bardiya	Lumbini	0.0	0.8	0.0	36.0	63.2	457612
59	Dolpa	Karnali	4.1	1.8	1.6	78.2	14.5	42164
60	Mugu	Karnali	2.7	0.4	0.8	84.3	11.7	63858
61	Humla	Karnali	0.7	1.3	0.0	87.0	11.0	53884
62	Jumla	Karnali	0.9	0.4	0.5	80.8	17.4	117268
63	Kalikot	Karnali	0.8	0.9	1.1	84.3	12.9	144828
65	Jajarkot	Karnali	0.9	1.3	1.5	82.0	14.2	188301
66	Dailekh	Karnali	0.5	2.4	1.3	81.0	14.7	251647
66	Rukum West	Karnali	0.6	0.8	1.7	81.7	15.1	165460
67	Salyan	Karnali	1.3	3.2	1.2	79.4	14.8	237387
68	Surkhet	Karnali	1.5	5.8	1.4	77.5	13.7	410407
69	Bajura	Sudurpashchim	0.6	0.5	2.5	81.3	15.1	137732
70	Bajhang	Sudurpashchim	0.9	1.6	1.3	80.9	15.3	188729
71	Darchula	Sudurpashchim	0.7	1.1	0.7	75.0	22.5	132226
72	Baitadi	Sudurpashchim	1.7	3.8	2.1	76.7	15.7	241425
73	Dadeldhura	Sudurpashchim	1.8	2.5	1.5	70.6	23.5	138538
74	Doti	Sudurpashchim	4.1	4.1	1.2	75.9	14.8	201778
75	Achham	Sudurpashchim	1.2	2.1	3.1	79.3	14.3	227725
76	Kailali	Sudurpashchim	0.4	1.2	0.8	42.4	55.2	899558
77	Kanchanpur	Sudurpashchim	0.1	0.7	0.4	38.2	60.6	511026

AnnexTable 6.e Estimated distribution of the household population across JMP sanitation service ladders by District

SN	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
			Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
1	Taplejung	Koshi	1.5	0.3	4.2	25.2	68.8	119450
2	Sankhuwasabha	Koshi	1.7	0.7	6.5	27.0	64.1	154743
3	Solukhumbu	Koshi	1.3	0.2	2.4	22.2	73.9	102987
4	Okhaldhunga	Koshi	1.0	0.3	3.7	25.8	69.2	138989
5	Khotang	Koshi	2.0	0.6	6.2	30.1	61.3	173920
6	Bhojpur	Koshi	1.5	0.6	6.8	29.9	61.2	156611
7	Dhankuta	Koshi	1.0	0.3	4.4	32.8	61.5	148730
8	Terhathum	Koshi	1.3	0.3	3.4	25.7	69.2	88279
9	Panchthar	Koshi	0.9	0.4	3.9	25.6	69.2	171047
10	Ilam	Koshi	1.3	0.5	4.9	27.9	65.3	278128
11	Jhapa	Koshi	2.4	0.9	8.4	29.5	58.8	992796
12	Morang	Koshi	5.0	1.0	9.1	30.0	55.0	1141971
13	Sunsari	Koshi	4.0	1.0	9.0	30.6	55.4	921246
14	Udayapur	Koshi	2.9	1.3	11.1	30.9	53.8	339189
15	Saptari	Madhesh	11.6	0.9	11.2	56.4	19.8	704359
16	Siraha	Madhesh	8.1	0.8	9.9	55.8	25.4	739328
17	Dhanusa	Madhesh	11.4	0.7	8.3	51.4	28.1	865032
18	Mahottari	Madhesh	14.2	0.9	9.8	53.5	21.6	705912
19	Sarlahi	Madhesh	8.4	0.8	9.7	55.9	25.2	860251
20	Rautahat	Madhesh	12.3	0.9	10.0	52.7	24.2	813269
21	Bara	Madhesh	8.6	0.9	9.9	56.9	23.8	761256
22	Parsa	Madhesh	14.5	0.5	6.3	48.0	30.7	651290
23	Dolakha	Bagmati	0.6	0.5	4.6	14.2	80.1	171278
24	Sindhupalchok	Bagmati	0.7	0.3	3.3	15.0	80.6	260345
25	Rasuwa	Bagmati	2.1	0.6	5.2	12.4	79.7	45475
26	Dhading	Bagmati	2.6	0.7	6.7	15.6	74.4	323704

SN	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
			Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
27	Nuwakot	Bagmati	1.3	0.5	4.6	16.9	76.6	260648
28	Kathmandu	Bagmati	0.1	0.0	8.2	77.3	14.4	1994555
29	Bhaktapur	Bagmati	0.2	0.0	6.7	70.9	22.2	427060
30	Lalitpur	Bagmati	0.3	0.4	9.3	55.8	34.2	543311
31	Kavrepalanchok	Bagmati	1.9	0.4	4.5	28.3	64.8	358722
32	Ramechhap	Bagmati	1.4	0.3	3.1	16.7	78.5	169035
33	Sindhuli	Bagmati	3.2	0.5	5.5	15.7	75.1	297099
34	Makwanpur	Bagmati	6.2	0.6	5.9	18.3	69.0	458494
35	Chitawan	Bagmati	1.3	0.6	7.6	22.0	68.5	711277
36	Gorkha	Gandaki	1.1	0.3	4.9	19.6	74.1	248287
37	Manang	Gandaki	1.5	0.0	1.1	9.4	88.0	4938
38	Mustang	Gandaki	5.1	0.4	4.1	13.1	77.3	11326
39	Myagdi	Gandaki	1.3	0.3	4.1	16.8	77.6	104770
40	Kaski	Gandaki	0.3	0.1	2.3	15.5	81.9	589534
41	Lamjung	Gandaki	0.6	0.1	5.3	19.5	74.5	154330
42	Tanahu	Gandaki	0.9	0.3	5.9	19.8	73.0	317799
43	Nawalparasi East	Gandaki	1.0	0.2	6.3	20.8	71.7	376192
44	Syangja	Gandaki	0.8	0.2	5.5	20.5	73.0	252064
45	Parbat	Gandaki	0.8	0.7	9.4	25.9	63.3	130151
46	Baglung	Gandaki	1.2	0.2	5.6	19.2	73.8	247130
47	Rukum East	Lumbini	5.2	1.6	6.3	33.3	53.7	56671
48	Rolpa	Lumbini	1.7	0.6	3.4	29.4	64.9	233343
49	Pyuthan	Lumbini	1.4	0.4	3.6	29.3	65.3	230679
50	Gulmi	Lumbini	0.9	0.3	1.8	25.3	71.7	245874
51	Arghakhanchi	Lumbini	1.0	0.2	2.6	30.5	65.8	176427
52	Palpa	Lumbini	0.6	0.3	2.2	32.1	64.8	241951
53	Nawalparasi West	Lumbini	4.1	1.3	11.6	41.7	41.2	383750
54	Rupandehi	Lumbini	3.8	0.8	6.6	35.2	53.6	1112589

SN	District	Province	Household population (%) by JMP sanitation service ladders					Total population, 2021
			Open defecation	Unimproved	Limited	Basic	Safely managed in Situ	
55	Kapilbastu	Lumbini	22.7	0.7	7.7	31.8	37.1	678685
56	Dang	Lumbini	2.5	0.7	5.7	34.3	56.8	670352
57	Banke	Lumbini	9.8	1.3	8.5	35.9	44.5	597299
58	Bardiya	Lumbini	3.0	0.8	11.4	42.0	42.7	457612
59	Dolpa	Karnali	7.5	1.3	10.1	31.5	49.7	42164
60	Mugu	Karnali	4.8	2.1	15.3	40.4	37.3	63858
61	Humla	Karnali	4.9	1.8	18.6	42.9	31.9	53884
62	Jumla	Karnali	2.4	1.1	9.7	30.6	56.2	117268
63	Kalikot	Karnali	3.1	0.6	3.3	19.5	73.6	144828
65	Jajarkot	Karnali	2.6	1.3	8.3	32.1	55.7	188301
66	Dailekh	Karnali	1.8	1.7	11.1	37.2	48.2	251647
66	Rukum West	Karnali	1.3	1.4	8.3	31.7	57.5	165460
67	Salyan	Karnali	1.6	0.7	5.3	24.9	67.5	237387
68	Surkhet	Karnali	2.1	0.8	4.8	23.7	68.7	410407
69	Bajura	Sudurpashchim	1.5	2.9	5.8	30.8	58.9	137732
70	Bajhang	Sudurpashchim	1.9	2.7	4.8	32.5	58.1	188729
71	Darchula	Sudurpashchim	1.0	2.5	4.4	32.2	59.9	132226
72	Baitadi	Sudurpashchim	1.1	3.5	6.7	35.1	53.6	241425
73	Dadeldhura	Sudurpashchim	1.5	1.4	2.7	28.2	66.3	138538
74	Doti	Sudurpashchim	3.0	2.9	5.5	35.5	53.0	201778
75	Achham	Sudurpashchim	3.5	1.9	3.6	28.3	62.8	227725
76	Kailali	Sudurpashchim	6.3	4.5	9.7	33.0	46.5	899558
77	Kanchanpur	Sudurpashchim	4.0	2.0	4.4	23.9	65.7	511026

AnnexTable 6.f Drinking Water, Sanitation, and WASH Equity Index by District

SN	District	Province	DWEI	SEI	WASH EI	Strategic Category
1	Taplejung	Koshi	0.55835	0.82790	0.67990	Priority 2A
2	Sankhuwasabha	Koshi	0.62965	0.79795	0.70882	Priority 3
3	Solukhumbu	Koshi	0.56420	0.36566	0.45421	Priority 1
4	Okhaldhunga	Koshi	0.53959	0.83301	0.67043	Priority 2A
5	Khotang	Koshi	0.55919	0.78332	0.66184	Priority 2A
6	Bhojpur	Koshi	0.57603	0.78421	0.67211	Priority 2A
7	Dhankuta	Koshi	0.59632	0.79397	0.68809	Priority 2A
8	Terhathum	Koshi	0.58167	0.83226	0.69577	Priority 2A
9	Panchthar	Koshi	0.55124	0.83300	0.67763	Priority 2A
10	Ilam	Koshi	0.58941	0.80932	0.69066	Priority 2A
11	Jhapa	Koshi	0.73331	0.76313	0.74807	Priority 3
12	Morang	Koshi	0.76243	0.72981	0.74594	Priority 3
13	Sunsari	Koshi	0.74079	0.73696	0.73887	Priority 3
14	Udayapur	Koshi	0.64314	0.72979	0.68510	Priority 2A
15	Saptari	Madhesh	0.82501	0.51772	0.65354	Priority 2B
16	Siraha	Madhesh	0.79995	0.56584	0.67279	Priority 2B
17	Dhanusa	Madhesh	0.77332	0.56609	0.66164	Priority 2B
18	Mahottari	Madhesh	0.79668	0.51639	0.64140	Priority 2B
19	Sarlahi	Madhesh	0.79737	0.56406	0.67064	Priority 2B
20	Rautahat	Madhesh	0.80994	0.53859	0.66048	Priority 2B
21	Bara	Madhesh	0.81385	0.55524	0.67222	Priority 2B
22	Parsa	Madhesh	0.81297	0.56815	0.67963	Priority 2B
23	Dolakha	Bagmati	0.61716	0.88718	0.73995	Priority 3
24	Sindhupalchok	Bagmati	0.59745	0.89217	0.73009	Priority 3
25	Rasuwa	Bagmati	0.62116	0.87634	0.73780	Priority 3
26	Dhading	Bagmati	0.61104	0.84430	0.71826	Priority 3
27	Nuwakot	Bagmati	0.60324	0.86624	0.72287	Priority 3
28	Kathmandu	Bagmati	0.74358	0.55783	0.64405	Priority 2B
29	Bhaktapur	Bagmati	0.71533	0.59906	0.65462	Priority 2B
30	Lalitpur	Bagmati	0.68160	0.65197	0.66662	Priority 2B

SN	District	Province	DWEI	SEI	WASH EI	Strategic Category
31	Kavrepalanchok	Bagmati	0.61665	0.80496	0.70454	Priority 3
32	Ramechhap	Bagmati	0.60394	0.87885	0.72854	Priority 3
33	Sindhuli	Bagmati	0.54462	0.84779	0.67950	Priority 2A
34	Makwanpur	Bagmati	0.59707	0.80146	0.69175	Priority 2A
35	Chitawan	Bagmati	0.70759	0.82051	0.76196	Priority 3
36	Gorkha	Gandaki	0.58481	0.85541	0.70728	Priority 3
37	Manang	Gandaki	0.54482	0.93076	0.71211	Priority 3
38	Mustang	Gandaki	0.52709	0.85184	0.67007	Priority 2A
39	Myagdi	Gandaki	0.56944	0.87306	0.70509	Priority 3
40	Kaski	Gandaki	0.66004	0.90401	0.77245	Priority 3
41	Lamjung	Gandaki	0.61449	0.86028	0.72707	Priority 3
42	Tanahu	Gandaki	0.59931	0.84923	0.71341	Priority 3
43	Nawalparasi East	Gandaki	0.63328	0.84166	0.73007	Priority 3
44	Syangja	Gandaki	0.61055	0.85067	0.72068	Priority 3
45	Parbat	Gandaki	0.58719	0.79335	0.68253	Priority 2A
46	Baglung	Gandaki	0.59802	0.85300	0.71422	Priority 3
47	Rukum East	Lumbini	0.54761	0.72439	0.62983	Priority 2A
48	Rolpa	Lumbini	0.57404	0.80760	0.68088	Priority 2A
49	Pyuthan	Lumbini	0.61527	0.81150	0.70660	Priority 3
50	Gulmi	Lumbini	0.60991	0.84936	0.71974	Priority 3
51	Arghakhanchi	Lumbini	0.67623	0.81856	0.74400	Priority 3
52	Palpa	Lumbini	0.63408	0.81564	0.71915	Priority 3
53	Nawalparasi West	Lumbini	0.77064	0.65938	0.71284	Priority 3
54	Rupandehi	Lumbini	0.77555	0.73351	0.75424	Priority 3
55	Kapilbastu	Lumbini	0.79824	0.55564	0.66598	Priority 2B
56	Dang	Lumbini	0.66371	0.75883	0.70968	Priority 3
57	Banke	Lumbini	0.75517	0.65238	0.70190	Priority 3
58	Bardiya	Lumbini	0.81138	0.67520	0.74017	Priority 3
59	Dolpa	Karnali	0.54057	0.68775	0.60974	Priority 2A
60	Mugu	Karnali	0.54151	0.62644	0.58243	Priority 1
61	Humla	Karnali	0.54461	0.59530	0.56939	Priority 1
62	Jumla	Karnali	0.57991	0.74705	0.65819	Priority 2A

SN	District	Province	DWEI	SEI	WASH EI	Strategic Category
63	Kalikot	Karnali	0.55429	0.84399	0.68397	Priority 2A
65	Jajarkot	Karnali	0.55724	0.74504	0.64434	Priority 2A
66	Dailekh	Karnali	0.55683	0.70500	0.62655	Priority 2A
66	Rukum West	Karnali	0.56560	0.76054	0.65587	Priority 2A
67	Salyan	Karnali	0.54949	0.81672	0.66991	Priority 2A
68	Surkhet	Karnali	0.52933	0.82086	0.65917	Priority 2A
69	Bajura	Sudurpash-chim	0.56566	0.76280	0.65688	Priority 2A
70	Bajhang	Sudurpash-chim	0.56216	0.75990	0.65359	Priority 2A
71	Darchula	Sudurpash-chim	0.60221	0.77468	0.68302	Priority 2A
72	Baitadi	Sudurpash-chim	0.54731	0.73422	0.63391	Priority 2A
73	Dadeldhura	Sudurpash-chim	0.59345	0.81297	0.69459	Priority 2A
74	Doti	Sudurpash-chim	0.53115	0.72629	0.62110	Priority 2A
75	Achham	Sudurpash-chim	0.54953	0.78111	0.65517	Priority 2A
76	Kailali	Sudurpash-chim	0.76682	0.66212	0.71255	Priority 3
77	Kanchanpur	Sudurpash-chim	0.79855	0.79145	0.79500	Priority 3

Note: Strategic categories are defined as follows:

Priority 1: Critical integrated WASH gap and severe deprivation.
Priority 2A: Drinking water at risk or inadequate (lagging behind sanitation).
Priority 2B: Sanitation at risk or inadequate (lagging behind drinking water).
Priority 3: Progressed, sustained, and learning (moderate progress or high achievement).

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