





## **NEPAL VOLUNTARY SUB-NATIONAL REVIEW (VSR)**

## 2024 REPORT



Prepared and Submitted by the Municipal Association of Nepal (MuAN) in Association with the United Cities and Local Governments (UCLG World)

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## **Nepal's 2024 Voluntary Sub-National Review**

Ensuring Clean Water and Sanitation for All





#### Foreword from UCLG World



The World Organization of United Cities and Local Governments started promoting Voluntary Subnational Reviews (VSRs) in order to strengthen the performance and visibility of local and regional governments in ensuring global sustainability. For the past 4 years local and regional governments' associations have been developing VSRs as a companion piece to their country's Voluntary National Review (VNR), aiming to contribute and provide a territorial approach to the reporting efforts at a national level, and ensure that the targets and goals are aligned at the local and subnational level. The VSR that we have before us presented by the Municipal Association of Nepal has been built collectively, through SDG consultation workshops, building a VSR from the bottom-up and with the needs of our communities at the centre.

This VSR brings a key innovation to the table, as it has been developed with the aim of mainstreaming water and sanitation and achieving SDG 6. Water and sanitation are a crucial challenge for local and regional governments, and indeed for the future of humanity. This is of particular importance in Nepal. With a growing demand for emergency water assistance, with an urgent need to enhance emergency preparedness and reshape our systems to ensure water and sanitation for all, a VSR that brings an SDG6+ approach is essential to raise awareness on the need to protect the right to water and sanitation to all.

To address these pressing issues, the recommendations of this report fall in line with our calls to supporting and nurturing local, sustainable water management systems rooted in proximity, fostering more robust and virtuous water supply chains, and strengthening local public service provision. The VSR developed by Nepal is a critical stepping stone to enhance our achievement of SDG 6 and the rest of the SDGs when accompanied by capacity building and enhanced planning.

#### A strong institutional environment to develop subnational reports

The VSR is a testimony to the great efforts done by the national government of Nepal to foster localization aligning their national development priorities with the SDGs. With the VSR set to nurture the Nepal 2024 VNR, it is a bold step forward in integrating national and subnational reporting and becoming levers for a more comprehensive understanding of governance. We hope that this work can continue developing an institutional environment more conducive to multilevel cooperation, integrating the recommendations and catalysing SDG localization and implementation at sub-national levels.

It is important to recall and commend the important work done by local governments associations in the enhancement of multilevel governance. The achievement of the Sustainable Development Goals would not be possible if associations such as MuAN did not safeguard the common interest of municipalities and articulate learning and exchanges both nationally and internationally. The World Organization that MuAN belongs to is committed to continue supporting its members in the efforts to better serve communities everywhere.

Emilia Saiz

Secretary General, United Cities and Local Governments

#### Foreword from UCLG ASPAC



First of all, I would like to congratulate the Municipal Association in Nepal (MuAN) for their success in finalizing the Voluntary Sub-national Review (VSR) Nepal 2024 and for their ability to present the VSR at the High-Level Political Forum (HLPF) in July 2024 in New York. UCLG ASPAC appreciates MuAN for its hard work and dedication to the development of the VSR and the advancement of SDGs localization in Nepal and the region.

MuAN is recognized as one of the key local government associations in the Asia-Pacific region and has been very active in urban and sustainable development dialogues at national, regional and global levels.

Sub-national governments play a crucial role in pursuing SDG agendas at local and national levels, contributing to the achievement of SDGs within their jurisdictions. The increasing role and involvement of sub-national governments and their associations are reflected, among other things, in the growing number of Voluntary Local Reviews (VLRs) and Voluntary Sub-national Reviews (VSRs). VLRs and VSRs are not only important elements of the public debate on sustainable development and its reporting initiatives, but also critical factors in galvanizing public support at the local level for an inclusive governance process. VSRs help bring together perspectives and priorities of different stakeholders at the subnational level, including those of civil society organizations and private sector, which are instrumental in fostering a strong consensus on planning, budgeting, and prioritized investments at the sub-national level.

As highlighted in the document, the VSR Nepal 2024 focuses on the review of SDG 6, while also covering all segments of SDG targets relevant to national and local development plans. I hope that this VSR enables sub-national governments, local government associations, development partners and stakeholders in Nepal to enhance collaboration and partnership in improving water and sanitation programme, as well as linking water and sanitation issues with development priorities in Nepal.

It is our pleasure to support MuAN in implementing Municipalities Network Policy Advocacy on Sanitation in South Asia (MuNASS) project in Nepal since 2018. MuAN has developed strong and functional ties with the Department of Water Supply and Sanitation (DWSS) of the Ministry of Water Supply (MoWS), the Ministry of Federal Affairs and General Administration (MoFAGA), the Ministry of Urban Development (MoUD), and Citywide Inclusive Sanitation Alliance Nepal (CWISAN), which have been significant in developing and revitalising sanitation regulations. Through the MuNASS project, MuAN has been one of the key implementing agencies providing important feedback for the improvement of water and sanitation programme in Nepal. The MuNASS project has numerous success stories of water and sanitation best practices contributing to the achievement of SDG 6, thereby enhancing the quality of life for many Nepalis.

Dr. Bernadia Irawati Tjandradewi,

Secretary General of UCLG ASPAC

#### Foreword by the President of MuAN



It is with great pride and pleasure that I present the Voluntary Sub-National Review (VSR) Report, which marks a significant step forward in Nepal's efforts to localize the Sustainable Development Goals (SDGs). I strongly believe that this report will certainly support the VNR of Nepal Government.

The Municipal Association of Nepal (MuAN) has been committed in its mission to support local urban governments in playing a central role in Nepal's sustainable development journey. This report is evidence to the commitment of sub-national governments across the country in integrating the SDGs into their local policies and actions.

Local governments, as the closest level of governance to the people, are uniquely positioned to translate global goals into tangible outcomes for communities. Through this VSR, we aim to highlight the significant strides sub-national governments have made toward the SDGs, while also addressing the challenges that remain. The achievements outlined in this report reflect the dedication of municipal leaders, officials, and community members who have worked tirelessly to improve the lives of their citizens.

I would like to extend my gratitude to UCLG World, UCLG ASPAC, and the European Union for their generous financial and technical support in making this report possible.

I also want to thank the ministries, secretaries and the officials, as well as the mayors and deputy mayors who provided their insights during the Provincial VSR Consultations.

MuAN is committed to sustainable development at the local level. We will continue to support our member municipalities as they work to implement policies and programs that align with the SDGs. Our focus remains on empowering local governments, improving inclusive development, and ensuring that no one is left behind.

I believe this report will serve as an important tool for guiding the efforts of municipalities in the days to come. I thank everyone who contributed to this important initiative and look forward to continued collaboration with all our partners as we work together toward a sustainable and inclusive development of Nepal.

Bhim Prasad Dhungana

President, Municipal Association of Nepal (MuAN)

#### Foreword by the Executive Director of MuAN



I am glad to share with you the Voluntary Sub-National Review (VSR) Report, a comprehensive reflection of the progress made by sub-national governments in Nepal toward achieving the Sustainable Development Goals (SDGs). I feel privileged to lead this memorable task to document efforts aligned to SDGs and issues and challenges with facts and figures featuring the critical role local governments play in translating national commitments into local realities. As the Executive Director of MuAN, I have witnessed firsthand the dedication and innovation that sub-national governments have applied to address the unique challenges they face while working towards the SDGs. I believe, this VSR provides an overview of the efforts of sub-national governments, particularly municipalities, showcasing both success stories

and the ongoing challenges local governments must overcome to meet the demands of SDGs. It also highlights the importance of collaboration and partnership at all the three tiers of governance in order to achieve the goals effectively and efficiently.

I would like to take this opportunity to extend my sincere gratitude to Hon'ble Prof. Dr. Nar Bikram Thapa, Vice Chair of the Bagmati Province Policy and Planning Commission; Hon'ble Dr. Shri Kanta Sharma Khatiwada, Vice Chair of the Gandaki Province Policy and Planning Commission; Mr. Govinda Bahadur Karki, Chief Secretary at the Office of the Chief Minister and Council of Ministers, Bagmati Province Government for their support and input. I would also like to express my deep appreciation to the Federal Ministry of Water Supply, particularly Dr. Ranjit Ojha, Joint Secretary and Chief of NWASH-MIS, and Mr. Prabhat Shrestha, Senior Divisional Engineer at the Ministry of Water Supply, Department of Water Supply and Sewerage Management, Kathmandu, for their invaluable support, input and guidance throughout the VSR process. Moreover, I would like to acknowledge the active participation of the mayors, deputy mayors, and other municipal officials during the Provincial VSR Consultations, whose engagement, support and input were instrumental in shaping the process.

The development of this report was made possible through the support of UCLG World, UCLG ASPAC, and the European Union. I am deeply grateful to Ms. Emilia Saiz, Secretary General of United Cities and Local Governments (UCLG World), and Dr. Bernadia Irawati Tjandradewi, Secretary General of UCLG ASPAC, for the trust they have placed in us to accomplish this important task, which ultimately contributes to Nepal's national VNR. I am also thankful to Ms. Anna Calvetto Moreno, Ms. Claudia Ribosa, and Mr. Hendra Adi for their technical assistance and valuable inputs.

I extend my heartfelt thanks to Mr. Kumar Khadka, the principal researcher and writer of this VSR report, whose efforts were pivotal in developing and shaping this document. I would also like to express my gratitude to all those who contributed to the preparation of this report. I look forward to continuing this journey alongside our partners and stakeholders in the years ahead.

MuAN remains fully committed to empowering municipalities to drive sustainable development and achieve the SDGs at the local level. We have strong conviction that municipalities are best positioned to understand and address the needs and aspirations of their communities. Our role is to provide them with the better resources, capacity development opportunities, and advocacy necessary for what they need as an effective agent of positive change. This VSR Report serves as a roadmap for our continued efforts to support local governments in their quest to build resilient, inclusive, and economically as well as environmentally sustainable cities and communities.

Kalanidhi Devkota

Executive Director Municipal Association of Nepal (MuAN)

#### Acknowledgement

MuAN family express our sincere gratitude to UCLG World, UCLG ASPAC, and the European Union for their financial and technical support in preparing this Voluntary Sub-National Review (VSR) Report. Our special thanks go to Ms. Anna Calvetto Moreno from the UCLG World and Ms. Claudia Ribosa and Mr. Hendra Adi from UCLG ASPAC, whose guidance and contributions were invaluable throughout the process.

The research and preparation of this VSR Report was led by Mr. Kumar Khadka, Consultant, with technical support from the Sanitation Advocacy Specialist of MuAN, Mr. Muskan Shrestha. The overall effort was overseen by the Executive Director of MuAN, Mr. Kalanidhi Devkota, under the direct supervision of the President of MuAN, Mr. Bhim Prasad Dhungana.

MuAN and the VSR team would also like to extend our deepest gratitude to the Federal Ministry of Water Supply, especially to the Joint Secretary and Chief of NWASH-MIS, Dr. Ranjit Ojha, and Senior Divisional Engineer, Mr. Prabhat Shrestha, for their consistent support, encouragement and feedback.

In addition, our sincere appreciation goes to the Mayors and Deputy Mayors of all the participating municipalities for their active participation in the Provincial VSR Consultations. Their valuable input has enriched this report significantly.

MuAN would also like to acknowledge the support of the Association of District Coordination Committee Nepal (ADCCN) and the National Association of Rural Municipalities of Nepal (NARMIN).

Furthermore, we extend our heartfelt thanks to the various experts, civil society organizations (CSOs), and development partners who contributed to the consultations and provided valuable insights, including ENPHO, UNICEF, OXFAM, and many others. Their contributions were crucial to the VSR report.

Lastly, MuAN recognizes the efforts of all MuAN staff members and those who worked tirelessly behind the scenes to ensure the completion of this report. Your dedication and commitment are greatly appreciated.

Municipal Association of Nepal Lazimapt, Kathmandu Nepal

### Acronyms

| ADCCN    | Association of District Coordination Committees of Nepal |
|----------|--|
| ADPC     | Asian Disaster Preparedness Center                       |
| CNI      | Confederation of Nepalese Industries                     |
| CSO      | Civil Society Organizations                              |
| DoHS     | Department of Health Services                            |
| DWSSM    | Department of Water Supply and Sewerage Management       |
| FEDWASUN | Federation of Drinking Water and Sanitation Users Nepal  |
| FNCCI    | Federation of Nepalese Chambers of Commerce and Industry |
| FSM      | Faecal Sludge Management                                 |
| INGOs    | International Non-Governmental Organizations,            |
| KII      | Key Informant Interviews                                 |
| LDC      | Least Developed Country                                  |
| LGAs     | Local Government Associations                            |
| LGBTQI   | Lesbian, Gay, Bisexual, Transgender, Queer and Intersex  |
| LGOA     | Local Government Operation Act                           |
| LISA     | Local Government Institutional Capacity Self-Assessment  |
| LNOB     | Leave No One Behind                                      |
| M-WASH   | Municipal WASH   |
| M-WASHCC | Municipal WASH Coordination Committee                    |
| MDGs     | Millennium Development Goals                             |
| MoEST    | Ministry of Education, Science, and Technology           |
| MoFAGA   | Ministry of Federal Affairs and General Administration   |
| MoHP     | Ministry of Health and Population                        |
| MoICS    | Ministry of Industry, Commerce, and Supplies             |
| MoWS     | Ministry of Water Supply                                 |
| MTEF     | Medium-Term Expenditure Frameworks                       |
| MuAN     | Municipal Association of Nepal                           |
| N-WASH   | National WASH  |
| NARMIN   | National Association of Rural Municipalities             |
| NGOs     | Non-Governmental Organizations                           |
| NPC      | National Planning Commission                             |
| NSDS     | National Strategy for Developing the Data System         |
| OCMCM    | Office of the Chief Minister and Council of Ministers    |
| ODF      | Open Defecation Free                                     |
| P-WASHCC | Provincial WASH Coordination Committee                   |
| SDGs     | Sustainable Development Goals                            |
| UCLG     | United Cities and Local Governments                      |
| UN       | United Nations   |
| USAID    | U.S. Agency for International Development                |
| VLR      | Voluntary Local Review                                   |
| VNR      | Voluntary National Review                                |
| VSR      | Voluntary Sub-National Review                            |
| WASH     | Water, Sanitation, and Hygiene                           |
| WSSDO    | Water Supply and Sanitation Divisional Offices           |
| WSUC     | Water and Sanitation User Committee                      |

#### **Table of Contents**

| Foreword from the UCLG World               | 2  |
|--|----|
| Foreword from the UCLG ASPAC               | 3  |
| Foreword by the President of MuAN          | 4  |
| Foreword by the Executive Director of MuAN | 5  |
| Acknowledgement                            | 6  |
| Acronyms                                   | 7  |
| VSR 2024 Highlights                        | 10 |

#### Chapter 1: Introduction

| 1.1 | Background and Context                     | 14 |
|-----|--|----|
|     | Purpose and the Objectives of the VSR 2024 |    |
| 1.3 | Structure of the Report                    | 17 |

#### Chapter 2: Methodology for the Development of the Report

| 2.1 | Introduction of Methodological Approach         | 18  |
|-----|---|-----|
|     | Literature and Desk Review.                     |     |
| 2.3 | Sampling and Selection of Local Governments     | .19 |
|     | Provincial VSR Consultation Workshops           |     |
|     | Key Informant Interviews (KIIs) and Discussions |     |

#### Chapter 3: Enabling Environment for the Implementation and Localization of SDGs

| 3.1 | SDGs and the Federalization in Nepal                                    | 22 |
|-----|---|----|
|     | Nepal's Efforts in Achieving SDGs in the Federal and Sub-National Level |    |
|     | Nepal's SDG Framework.  |    |
|     | Leave No One Behind (LNOB)  |    |
|     | Gaps and Areas Requiring Improvement                                    |    |

#### Chapter 4: SDG Implementation and Localization at the Sub-National Level

| 4.1 | Rationale and Involvement of Nepal's Provincial and Local Governments        |    |
|-----|--|----|
|     | in SDG Implementation and Localization                                       | 29 |
| 4.2 | Integration and Localization of SDGs in Local Level Planning and Programming | 31 |
| 4.3 | Rights of Local Governments and SDGs   | 32 |
| 4.4 | SDG 6 Indicators and Targets   | 33 |

#### Chapter 5: Implementation and Progress of SDG 6 (Water and Sanitation) in Nepal

| 5.1 | Environment: Nepal's Institutional and Legislative Framework for Water and Sanitation | 34 |
|-----|---|----|
|     | Provincial and Local Legislations on Water and Sanitation                             |    |
| 5.3 | Key Water and Sanitation Sector Actors, Institutions and Functions                    | 41 |
| 5.4 | Nepal's Overall Progress on Achieving SDG 6 (Water and Sanitation)                    | 42 |
| 5.4 | Nepal's Overall Progress on Achieving SDG 6 (Water and Sanitation)                    | •  |

#### Chapter 6: Provincial and Local Governments' Efforts to Localize and Implement SDG 6

| 6.1 | Efforts of Provincial and Local Governments to Localize and Implement SDGs | 44 |
|-----|--|----|
| 6.2 | Situation and Province Wise Progress in SDG 6 Implementation               | 45 |
| 6.3 | Provinces Wise Budget Allocation for Water and Sanitation for FY 2023/2024 | 46 |
| 6.4 | WASH Budget Allocation for Rural and Urban Areas                           | 47 |
| 6.5 | Main Source of Drinking Water of Households by Provinces                   | 47 |
| 6.6 | Disposal of Toilet/Latrine Waste by Households in Provinces                | 48 |
| 6.7 | Province Wise Access to Toilet During Menstruation                         | 49 |
| 6.8 | WASH System Situation Assessment: Provincial Status                        | 50 |
| 6.9 | WASH System Situation and Capacity Building Needs in Municipalities        | 53 |
|     |  |    |

| 6.10 Efforts and Challenges to Leave No One Behind (LNOB)   |    |
|---|----|
| 6.11 Linkages and Interconnectedness of SDG 6 with other SDGs   | 57 |
| Chapter 7: Challenges of SDG 6 Localization and Implementation at the Sub-National Level              |    |
| 7.1 Challenges of SDG 6 Localization and Implementation   | 59 |
| 7.2 Areas of Improvement for Effective SDG 6 Localization and Implementation                          | 61 |
| Chapter 8: Recommendations and Conclusion   |    |
| 8.1 Recommendations   | 64 |
| 8.2 Conclusion  | 67 |
| List of Tables  |    |
| Table 1: List of Sampled/Selected Municipalities for VSR Consultation                                 |    |
| Table 2: Exclusive and Concurrent Rights/Mandates of Local Governments Related to SDGs                |    |
| Table 3: SDG 6 Targets and Indicators   |    |
| Table 4: Jurisdiction of the Federal, Province, and Local Governments on Water and Sanitation         | 36 |
| Table 5: Key Provisions on Water and Sanitation from Various Sectoral Legislation, Policies, and Plan |    |
| Table 6: Nepal's Major Water and Sanitation Institutions  | 41 |
| Table 7: SDG 6 Progress Chart   |    |
| Table 8: Province Wise Progress on SDG 6 (Water and Sanitation)                                       |    |
| Table 9: Disposal of Toilet/Latrine Waste by Households Across Provinces                              |    |
| Table 10: WASH System Situation Assessment Score  | 51 |
| Table 11: WASH System Sector-Wise Situation Assessment  | 52 |
| Table 12: WASH System Situation in Municipalities   |    |
| Table 13: Recommendation for the Immediate, Medium-Term, and Long-Term Interventions                  | 64 |
| Table 14: Recommendations Categorized by the Target Stakeholders                                      | 65 |
| List of Figures   |    |
| Figure 1: VSR Methodology Map   | 18 |

| Figure 1: VSR Methodology Map   | 18 |
|---|----|
| Figure 2: SDGs Milestone of Nepal   |    |
| Figure 3: Nepal's Institutional Set-up for Water and Sanitation               | 35 |
| Figure 4: Province Wise Budget Allocation by Source in FY 2023/2024           |    |
| Figure 5: Budget Allocation for Rural and Urban Areas                         | 47 |
| Figure 6: Source of Drinking Water of Households by Provinces                 |    |
| Figure 7: Province Wise Access to Toilet During Menstruation                  | 50 |
| Figure 8: Cause, Effect and Impact of Climate Change in Different Eco-regions | 59 |

#### References

Annexes

- Annex 1: Best Practices and Success Stories
- Annex 2: Kathmandu Declaration of Key Recommendations for Advancing the WASH Sector in Nepal 2023
- Annex 3: Federal WASH Sector Program/Projects 2023/2024(in Hundred Thousand NPR)
- Annex 4: WASH Expenditure against Budget Heads Under the MoWS 2022/2023 (in Million NPR)
- Annex 5: Federal WASH Budget by Development Partners: 2016/2017-2023/2024 (in Billion NPR)
- Annex 6: List of Participants in the Provincial and National Consultations

Annex 7: List of KII Participants

#### Voluntary Sub-National Review (VSR) 2024 Highlights

The Nepal *Voluntary Sub-National Review (VSR) 2024* provides an in-depth analysis of the progress made by Nepal's sub-national governments, particularly municipal governments, in achieving *Sustainable Development Goal 6 (SDG 6): Ensuring Clean Water and Sanitation for All.* The review, prepared by the Municipal Association of Nepal (MuAN) in collaboration with the United Cities and Local Governments (UCLG World) and UCLG ASPAC, with support from the European Union, highlights the critical importance of water and sanitation services in enhancing public health, promoting economic development, and ensuring environmental sustainability. Water and sanitation are fundamental human rights essential for survival and well-being. Access to safe drinking water and adequate sanitation facilities is vital for preventing waterborne diseases, improving health outcomes, and promoting gender equality. However, Nepal faces significant challenges in providing equitable access to these essential services, particularly in rural and underserved urban areas. The diverse geography of the country, compounded by the impacts of climate change, exacerbates the difficulties in establishing and maintaining robust water and sanitation services.

#### Key Highlights of the VSR 2024

#### Nepal's Efforts in Achieving SDGs:

- Aligned with 193 UN member states on the 2030 Sustainable Development Agenda since January 1, 2016.
- First country to publish a SDG Country Status Report in 2015, setting a baseline for tracking progress.
- Constitution of Nepal (2015) reflects SDG principles, promoting inclusive growth and sustainability.
- Nepal launched the "SDG Status and Roadmap 2016-2030," incorporating global and local indicators into national planning and budgeting.
- SDGs mainstreamed into national planning and budgeting since the 14th National Periodic Plan (2016/17-2018/19).
- Introduced systematic coding for SDG budget allocations since FY 2073-74 Federal Budget to ensure effective tracking of resources.
- The 16th National Periodic Plan (2024/25-2029/30) includes a dedicated chapter on SDGs.
- Nepal established institutional mechanisms like the SDG Steering Committee (chaired by the Prime Minister) and the National Strategy for Developing the Data System (NSDS) to ensure evidence-based monitoring and reporting of SDG progress across all levels of government.
- Developed the 'LDC Graduation Smooth Transition Strategy 2024' for sustainable development post-2026.
- Developed several strategic documents, including SDGs Status and Roadmap 2016-2030; Needs Assessment, Costing, and Financing Strategy 2017; Localization Resource Book 2021; SDG Coding Resource Book 2022; National Framework for LNOB 2022, SDG Revised Indicators 2023, etc. to govern SDG implementation.

 At the sub-national level, Chief Ministers of the seven provinces and local government association chairpersons are integral members of the National High-Level Steering Committee, promoting unified SDG implementation across governance levels. Each province has established SDG Steering Committees to facilitate implementation, while Policy and Planning Commissions integrate the SDGs into provincial initiatives. District Coordination Committees (DCCs) ensure alignment with SDG objectives at the local level.

#### Nepal's Overall Progress on Achieving SDG 6

Nepal has made significant progress in achieving SDG 6 related to water and sanitation. As of 2022, 96.4% of households had access to basic water supply, while 61.1% of the population used safely managed sanitation services, approaching the 62% target. However, challenges remain, with only 25.81% of the population accessing quality drinking water and high and mid-level water supply coverage at just 24.84%. Despite constructing nearly 42,000 water supply systems, only 28.13% are fully functional. Access varies regionally, with 82.88% in the Mountain region compared to only 18.62% in the Terai, where households predominantly rely on tube wells. Nepal has excelled in sanitation, achieving 95.5% basic sanitation coverage, being the first in South Asia to declare all local levels open defecation-free (ODF) in 2019. Nonetheless, the country grapples with untreated wastewater management, with only 2.1% of waste treated and ongoing water-borne diseases highlighting the need for improved sanitation practices. The 2021 Vulnerability and Risk Assessment indicates climate change impacts on WASH services, especially affecting marginalized communities, with the second Nationally Determined Contribution (NDC) aiming for substantial wastewater treatment by 2025.

#### Province Wise Progress in SDG 6

Nepal's progress in implementing SDG 6 varies across its provinces, highlighting notable disparities in access to water and sanitation services:

- **Basic Water Supply Coverage:** Nepal aims for 99% coverage, achieving 96.4% by 2022. Koshi (97.1%) and Bagmati (97.4%) provinces surpassed this average, while Karnali (86.1%) and Gandaki (91.3%) lagged behind.
- Household Access to Piped Water Supply: The national target is 90%. However, only 33.3% of households had piped water supply by 2022, with Madhesh at a low 5.2%. Lumbini province had the highest access at 50.4%, followed by Koshi (46.7%), Bagmati (40.8%), and Karnali (36.1%).
- Households Using Improved Sanitation Facilities: Nepal's target is 95% for improved, non-shared sanitation facilities. By 2022, the national average reached 64.6%. Provinces like Karnali (77.6%), Gandaki (76.3%), Sudurpashchim (74.6%), and Lumbini (73.4%) exceeded the national average, while Madhesh province showed only 42.3% access.

These disparities present the necessity for targeted interventions to achieve equitable access to water and sanitation services across all provinces, enhancing local capacities and addressing specific challenges to meet national targets.

#### Major Challenges, Areas of Improvement and Recommendations

The VSR 2024 offers a comprehensive examination of the water and sanitation landscape in Nepal. Although significant strides have been made in improving sanitation services, numerous

challenges persist that hinder the achievement of water and sanitation goals. These challenges not only affect public health and environmental sustainability but also impede progress toward the SDGs, particularly SDG 6, which aims to ensure availability and sustainable management of water and sanitation for all. As urbanization continues to accelerate in Nepal, the pressures on water and sanitation infrastructure and services are mounting. Addressing below identified challenges is essential for improving the quality of life for cities and communities and safeguarding natural resources. The report outlines specific challenges faced by local governments and areas for improvements along with targeted recommendations to enhance sanitation practices, strengthen regulatory frameworks, and foster community engagement.

#### Key challenges include:

- Policy Barriers: Unclear legal definitions and roles across government levels cause confusion and delays in formulating local WASH policies. Weak regulation of environmental risks like sand and aggregate mining, combined with poor enforcement of water quality standards, further hinder progress. Municipal-private sector partnerships in WASH remain limited.
- *Implementation Barriers:* Fragmented institutional structures complicate coordination between federal, provincial, and local governments. Local governments, especially in rural areas, face capacity constraints, while many water supply systems are dysfunctional. Budget limitations and exclusion of marginalized groups further exacerbate these issues.
- **Resource Barriers:** Local governments face financial constraints, relying heavily on external funding. There is a shortage of skilled workers and insufficient resources for long-term WASH facility maintenance.
- **Capacity Barriers:** Sub-national governments, especially municipal governments lack the necessary skills, knowledge, and planning capacity. Limited training programs and insufficient localization as well as implementation support for service providers hamper effective WASH management.
- **Environmental and Climate Challenges:** Climate change impacts, such as floods and droughts, damage WASH infrastructure and deplete water sources. Urgent action is needed to develop climate-resilient infrastructure and sustainable water management practices.

#### Areas of improvement for effective SDG 6 localization and implementation:

- **Regular SDG 6 Progress Assessments:** Conduct province-specific assessments and public expenditure tracking to identify gaps and ensure transparency.
- Address Resource Gaps: Immediate preparation of municipal WASH plans to close resource gaps in delivering water, sanitation, and hygiene (WASH) as a fundamental right.
- **Capacity Building for Local Governments:** Roll out targeted capacity-building programs for provincial and local governments to improve knowledge of SDG 6 and enhance planning, monitoring, and implementation.
- **Reactivation of WASH Coordination Committees:** Revitalize inactive WASH Coordination Committees (WASH-CCs) at municipal and ward levels to ensure coordinated WASH efforts.

- **Strengthening Institutional WASH:** Enhance WASH programs in schools and healthcare facilities to ensure wider adoption of national approaches for institutional WASH.
- **Expand Access to System Water in the Terai:** Improve the functionality and reliability of water supply systems, especially in Madhesh Province, where access remains critically low.
- *Increase Private Water Tap Access:* Address the high rate of malfunctioning water systems and increase the percentage of households with private water taps.
- *Leave No One Behind (LNOB):* Focus on ensuring equitable access to WASH services for marginalized groups, including women, Dalits, minorities, and vulnerable populations.
- *Increase WASH Budget Allocation:* Address the funding shortfall and leverage private sector involvement for consistent and adequate WASH financing.
- **Expand Sewer Sanitation Systems:** Improve sanitation by expanding sewered sanitation systems, which currently cover only 11% of the population.
- **Promote Peer Learning and Knowledge Sharing:** Facilitate platforms for local and provincial governments to share WASH best practices, innovative solutions, and strategies for SDG 6 localization.

#### Key recommendations:

- **Policy Barriers:** Develop clear, coherent policies and strengthen enforcement mechanisms. Promote inter-governmental collaboration and coordination across all government levels, including local and provincial WASH-CCs. CSOs/NGOs should advocate for clear policy frameworks and raise awareness on policy needs.
- *Implementation Barriers:* Increase budget allocation, provide incentives, and engage communities in planning. Strengthen enforcement of quality standards and improve water system functionality. Development partners should offer financial and technical assistance while mobilizing community participation.
- **Resource Barriers:** Ensure consistent financial support and promote private sector partnerships. Local governments should prioritize resource mobilization, and development partners must provide long-term funding for maintenance.
- Capacity Barriers: Implement nationwide and targeted training programs, enhance local government capacity, and establish WASH focal persons. Development partners and CSOs should support capacity building through training programs and knowledge-sharing platforms.
- **Environmental and Climate Challenges:** Promote climate-resilient infrastructure and sustainable water management strategies. Enforce environmental protection regulations and support climate adaptation strategies across all levels of government.
- **Province-Specific Assessments:** Conduct regular assessments and implement recommendations. Local governments and CSOs should monitor progress and report on community-level outcomes.
- **Peer Learning and Knowledge Sharing:** Establish knowledge-sharing platforms and facilitate peer learning across government levels. Development partners and CSOs should support international best practices and promote community learning.

#### **Chapter 1: Introduction**

#### **1.1 Background and Context**

#### About Municipal Association of Nepal (MuAN)

The MuAN, founded in 1994, is the representative organization and a collective voice of municipalities. All 293 municipalities including metropolitan and sub-metropolitan cities of Nepal are members of MuAN. MuAN has successfully established its credibility as a national voice for urban municipalities accomplishing several important landmark achievements in policy reform, decentralization, local or urban governance, gender equality, social inclusion, localization of Sustainable Development Goals (SDGs), climate change adaption, disaster risk reduction, and management, environment conservation, health-related hazards, etc. Since its inception, MuAN has been working for four major areas: policy advocacy, information/networking both at the national and international level, technical and advisory supports as well as capacity development of municipalities. MuAN has been one of the major partners of the Nepal Government in supporting policy/law-making processes and implementation of the acts, regulations, guidelines, and policies of the government at the local level. Also, MuAN has been supporting municipal governments by developing necessary dummy laws/policies/guidelines, and enhancing the capacity of newly created and existing municipalities, elected representatives, and functionaries through knowledge sharing and providing technical expertise necessary in the new federal context. It represents its member municipalities' collective interests to the central government and international community.

MuAN is the key player in urban and local development, promoting good governance and sustainable development by advocating policy reforms, providing technical assistance, mobilizing local resources, building awareness, and sharing information among its member-municipalities. To carry out all these activities, MuAN has been working with sectorial ministries, bilateral and multilateral agencies, I/NGOs. MuAN is also affiliated with regional and global cities and local government associations, and other like-minded institutions across the world and shares information on urban and local governance issues with international and bi-lateral agencies. Similarly, MuAN has a coalition with other two local government associations of Nepal (NARMIN and ADCCN), development partners, professional and CSOs, and private sector actors to promote efficient and inclusive local governance in Nepal.

#### Background

Nepal, a land-locked country with an area of 147,181 square kilometers, is nestled between India to the south and China to the north. It boasts a diverse topography that ranges from the towering peaks of the Himalayas, including Mount Everest—the highest point in the world—to the flat expanses of the Tarai plains, which sit at just 60 meters above sea level. This unique geographical diversity is matched by a rich tapestry of history, culture, and natural beauty, attracting countless visitors each year. According to the 2021 population census, Nepal is home to 29.1 million people, with 51.13% females and 48.87% males. The youth between the ages of 16 and 40 make up a substantial 42.6%. Nepal is also a diverse country, comprising 142 distinct caste groups and 124 different languages. This rich ethnic and linguistic diversity is a defining feature of the nation, contributing to its unique social fabric. It's abundant natural resources, rich cultural heritage, and growing youth population present significant assets and a distinctive demographic advantage for

the nation's economic development. Despite being currently positioned as one of the least developed nations, Nepal aspires to graduate to a middle-income developing country by 2026 and achieve the SDGs by 2030.<sup>1</sup>

#### **Governance and Developmental Goals**

The Constitution of Nepal envisions a democratic, inclusive governance system aimed at achieving national security, health, development, and unity. The national agenda focuses on good governance, development, and prosperity, with a commitment to socialism based on democratic values and norms. The constitution also emphasizes prosperity, economic equality, and social justice by eradicating all forms of discrimination and the remnants of feudalism. Fundamental rights guaranteed by the constitution and the provisions outlined in the directive principles, policies, and obligations of the state are essential to this vision. Nepal's new governance arrangements have laid the foundation for nation-building through peace and stability. With political and policy stability, the country aims to improve the living standards of its citizens, ensuring that the benefits of change are realized by the present generation and felt by the common people.

#### Nepal's Commitment to SDGs

The SDGs, often referred to as the Global Goals, were conceived as a continuation and expansion of the Millennium Development Goals (MDGs). This comprehensive framework for sustainable development was endorsed by world leaders during a landmark United Nations Summit in September 2015 and became effective on January 1, 2016. The framework consists of 17 ambitious goals aimed at eradicating poverty, safeguarding the environment, and fostering prosperity for all. These goals were collectively adopted by 193 countries as part of a transformative agenda to be achieved by 2030.

The SDGs are distinctive in their universal appeal, urging action from all nations—regardless of their economic status—to promote prosperity. They emphasize that poverty eradication must be accompanied by strategies that drive economic growth and address diverse social needs such as education, health, social protection, and job opportunities, while also combating inequality to ensure that no one is left behind. The SDGs are categorized into four primary groups: Social, Environment, Economic, and Law and Governance Pillars.<sup>2</sup> Although the SDGs lack legal enforceability, governments are urged to assume responsibility and



devise domestic frameworks to realize the 17 Goals. Nepal took a proactive step in this direction by issuing its SDG Country Status Report in 2015. This comprehensive report laid the groundwork for the SDGs by establishing baseline indicators and contextualizing the country's progress towards achieving these global targets.

<sup>&</sup>lt;sup>1</sup> Government of Nepal. (2019). *Sixteenth (16<sup>th</sup>) Periodic Plan ((2024/25-2029/30)*, National Planning Commission, Accessed from <a href="https://npc.gov.np/images/category/24060505091516th%20Plan%20Final.pdf">https://npc.gov.np/images/category/24060505091516th%20Plan%20Final.pdf</a>

<sup>&</sup>lt;sup>2</sup> National Planning Commission. (2020). National SDGs Data Portal. Retrieved from http://sdg.npc.gov.np

In line with international commitments, Nepal aims to achieve the SDGs by 2030. The SDGs have been internalized and localized within development programs at federal, provincial, and local levels, adhering to the principle of leaving no one behind in all dimensions of development. Given Nepal's historical lag in socio-economic development compared to other similarly ranked nations, it is imperative to accelerate the pace of socio-economic progress. Under the constitutional mandate, the three levels of government—federal, provincial, and local—share the responsibility to advance Nepal's prosperity by promoting freedom, sovereignty, geographical integrity, and independence. There is a pressing need to formulate a long-term vision to realize the goal of "Prosperous Nepal, Happy Nepali," as cherished by the current government. This vision involves the sustainable and practical mobilization of resources and learning from the experiences of countries that have achieved significant development over the past twenty-five years through systemic reforms and efficient work styles.

#### Nepal's Participation in the Global SDG Review Process

In 2024, Nepal is submitting its third Voluntary National Review (VNR) Report among the 37 countries presenting their reports to the United Nations High-level Political Forum on Sustainable Development (HLPF) in July 2024.<sup>3</sup> Alongside this national effort, the Municipal Association of Nepal (MuAN) developed its second Voluntary Sub-National Review (VSR) Report with support from the United Cities and Local Governments (UCLG and UCLG Asia-Pacific).<sup>4</sup> This VSR aligns with the global SDG voluntary sub-national review process, which aims to engage sub-national governments in SDG reporting and analyze their roles in the localization of these goals. The 2024 Nepal VSR highlights the importance of sub-national governments in reporting on SDGs and underscores their contributions to achieving these goals in the country. By participating in the VSR process, Nepal aims to strengthen the involvement of sub-national governments in SDG implementation and enhance the understanding of their crucial roles in promoting sustainable development at the sub-national level.

#### **1.2** Purpose and the Objectives of the VSR 2024

The purpose of this VSR is to analyze Nepal's progress towards the SDGs at sub-national levels, share experiences, update the stage of implementation, identify challenges, and provide recommendations to accelerate SDG progress.

The key objectives of the VSR include:

- Inform the VNR 2024: The insights from the VSR will contribute to the VNR scheduled for 2024 by the Government of Nepal, ensuring a holistic understanding of the nation's SDG progress.
- Assess Integration and Localization of SDGs: Assess how well the SDGs have been integrated and localized, particularly SDG 6 (Water and Sanitation) within provincial and local government's development plans, policies and programs, identifying gaps and areas for improvement.

<sup>&</sup>lt;sup>3</sup> IIDS (26 October 2023), 43 Presenters to Carry Out VNRs at HLPF 2024, Accessed from <u>https://sdg.iisd.org/news/43-presenters-to-carry-out-vnrs-at-hlpf-2024/</u>

<sup>&</sup>lt;sup>4</sup> First voluntary review report of SDGs localization in Nepal was developed with the support of UCLG and in a collaborative effort involving the MuAN, NARMIN, and ADCCN.

- Integrate SDGs into Local Plans: Assist in embedding the SDGs into provincial and local development plans, aligning them with local priorities and contextualizing targets and indicators to reflect regional specificities.
- Identify Implementation Challenges: Highlight the challenges faced in implementing the SDGs, particularly SDG 6, offering a candid assessment of obstacles that need to be addressed.
- **Recommend Strategies for Progress**: Propose actionable strategies to accelerate progress in achieving the SDGs, particularly SDG 6, ensuring that the recommendations are practical and local context-specific.
- Raise Awareness and Understanding about SDGs: Enhance awareness among subnational entities regarding SDGs, its localization, importance of SDG related data management, analysis, and reporting, fostering more conducive environment for SDG localization and better tracking and evaluation of progress.

#### **1.3 Structure of the Report**

This report is structured to provide a comprehensive overview and analysis of the localization and implementation of SDG 6 (Water and Sanitation) at the sub-national level in Nepal. The structure of the report is designed to provide a logical flow of information, from background context and methodology to detailed analysis and actionable recommendations, ensuring a thorough understanding of the state of SDG 6 localization and implementation in Nepal. The chapters are organized as follows:

In Chapter 1, the introduction of the MuAN sets the context, accompanied by an overview of Nepal's commitment to the SDGs and its active participation in SDG reviews. This chapter also elucidates the objectives and significance of the VSR process, framing the subsequent chapters with clarity.

Chapter 2 meticulously details the methodology used in developing the report, emphasizing transparency in data collection, rigorous analysis, and the robustness of findings. Chapter 3 examines the enabling environment crucial for SDG implementation, analyzing key policies, institutional frameworks, and governance structures that support or hinder progress.

In Chapter 4, the report delves into the foundational aspects of SDG 6 localization, exploring how these goals are integrated into local-level planning processes, the rights vested in local governments concerning SDGs, and the specific indicators and targets relevant to SDG 6.

Chapter 5 provides a comprehensive narrative of Nepal's progress in achieving SDG 6 targets, focusing particularly on water and sanitation sectors, detailing achievements, ongoing challenges, and emerging trends.

Chapter 6 highlights the proactive measures undertaken by provincial and local governments to localize and implement SDG 6, showcasing successful initiatives and sharing best practices.

Chapter 7 critically analyzes the multifaceted challenges hindering SDG 6 localization, categorizing these challenges into policy barriers, implementation gaps, resource constraints, capacity limitations, and environmental sustainability concerns.

Finally, Chapter 8 synthesizes insights from the preceding chapters, offering targeted recommendations for overcoming identified challenges and concluding with a roadmap for advancing SDG 6 localization efforts in Nepal.

#### Chapter 2: Methodology for the Development of the Report

#### 2.1 Introduction of Methodological Approach

The VSR has employed a multifaceted and thorough process to attempt a comprehensive assessment of the SDGs in Nepal. The methodology integrates several critical components, starting with extensive desk reviews of existing literature, policies, and regulations relevant to SDG implementation. This foundational work was complemented by data collection efforts, which included the Key Informant Interviews (KIIs) with key government stakeholders at the sub-national level. To contextualize the findings and tailor strategies to local needs, a detailed context analysis was carried out. This analysis considered the unique socio-economic and environmental conditions of different regions within Nepal. Provincial consultation workshops were also a pivotal part of the process, providing platforms for local governments to discuss challenges, share experiences, and recommend strategies and solutions for SDG localization.

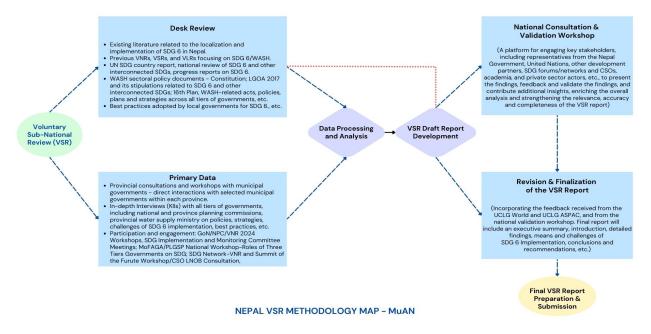


Figure 1: VSR Methodology Map

The VSR places an emphasis on SDG 6, which focuses on ensuring availability and sustainable management of water and sanitation for all. The focus on SDG 6 stems from the critical importance of WASH-related challenges faced by subnational governments in Nepal. WASH issues, including access to clean water and sanitation facilities, remain significant barriers to sustainable development and public health across the country. Subnational governments play a pivotal role in addressing these challenges, given their direct responsibility for local infrastructure development and service delivery. By spotlighting SDG 6, this review aims to assess and enhance the localization efforts at provincial and local levels, ensuring equitable access to WASH services and fostering sustainable development practices throughout Nepal's diverse geographic and socio-economic landscapes. The review will also examine the interlinkages between SDG 6 and other SDGs, including SDG 13 (Climate Action), as these goals are closely related to and impact the achievement of SDG 6. This holistic approach ensures that strategies for water and sanitation are aligned with broader health and environmental objectives.

The VSR report development phase synthesized all collected information and insights into a comprehensive document that outlines the current status, identifies key challenges, and provides actionable recommendations for improving SDG localization and implementation at the subnational level. This comprehensive methodological approach ensured that the VSR not only assessed current status and efforts but also provided a roadmap for future progress in achieving the SDGs at the sub-national level in Nepal.

#### 2.2 Literature and Desk Review

An extensive literature and desk review were undertaken to compile existing information and data pertinent to the localization and implementation of the SDGs, with a particular focus on SDG 6. The review encompassed both offline and online sources, including policy documents, laws, regulations, guidelines, and plans.

Key documents reviewed included the UCLG Guideline for VSR 2021, the UCLG VSR Insight Note, previous VNR and VSR reports from Nepal and other developing countries, the Nepal Government's SDGs Status and Roadmap 2016-2030, the SDGs Progress Assessment Report 2016-2019, the 16<sup>th</sup> Periodic Plans, the Needs Assessment, Costing and Financing Strategy for the SDGs 2017, the Leave No One Behind (LNOB) Framework 2023, the SDG Localization Guideline 2020, the SDG Implementation Process Handbook for Local Governments, the SDG Revised Indicators 2023, the SDG Coding Resource Book for Budgeting and Programming of Local Levels 2022, the National Review Reports of SDGs, and various plans and policies of the Nepal Government. These plans and policies include the 2015 Constitution of Nepal, the Local Government Operation Act 2017, and the Inter-Governmental Fiscal Management Act 2017.

Additionally, this review analyzed a variety of research reports, academic papers, analytical news articles, UN SDG reports, and publications from development partners, agencies, and civil society organizations (CSOs), providing a comprehensive foundation for the VSR. The VSR also examined critical documents, policies, laws, regulations, guidelines, plans, and reports from sub-national governments to gain a wider and clearer perspective on SDG localization at the subnational level. This included Five-Year Periodic Plans and Medium-Term Expenditure Frameworks (MTEF) of Provincial Governments, SDG Baseline Reports from all provincial governments, the SDG Localization Roadmap of Gandaki Province 2022-2030, the Status and Roadmap of SDG 2019-2030 of Bagmati Province, and SDG-Sensitive Public Expenditure Survey Reports from Bagmati, Koshi, and Gandaki Provinces.

Moreover, a wide array of sectoral strategies, plans, and policies were reviewed as part of the VSR. These included the Nepal Water Supply, Sanitation, and Hygiene Sector Development Plan 2016-2030, the Water Resources Policy 2020, the Water Supply and Sanitation Act 2022, the National Water Supply, Sanitation, and Hygiene Policy 2023, as well as provincial and municipal water and sanitation plans.

#### 2.3 Sampling and Selection of Local Governments

The MuAN purposefully selected a total of 47 local governments, consisting of urban municipalities, to participate in the provincial consultation workshops as part of the VSR process. Among these, there is 1 Metropolitan City and 18 Municipalities from Gandaki Province, as well as 1 Metropolitan City, 2 Sub-Metropolitan Cities, and 25 Municipalities from Koshi Province. By including municipalities from both Gandaki and Koshi provinces, MuAN attempted to capture the

unique challenges, opportunities, and experiences relevant to sustainable development efforts at the local level in Nepal. This purposive sampling and selection of local governments from both Gandaki Province and Koshi Province reflects a deliberate effort to capture a diverse range of geographic, demographic, size, and typological profiles across Nepal.

This strategic approach ensures a representation of the country's sub-national landscape within the VSR process. By including municipalities from different provinces, with varying population sizes, types and administrative structures, the VSR aimed to gather a rich tapestry of perspectives and experiences in localizing and implementing the SDGs. This diversity facilitates a more nuanced understanding of the challenges and opportunities inherent in sustainable development efforts across Nepal, ultimately contributing to more informed decision-making and targeted interventions at the sub-national level.

| Province | Metropolitan City | Sub-Metropolitan City         | Municipalities                  |
|----------|-------------------|-------------------------------|---------------------------------|
| Koshi    | Biratnagar        | Dharan Sub-Metropolitan City  | Barah Municipality              |
|          | Metropolitan City | Itahari Sub-Metropolitan City | Belaka Municipality             |
|          |                   |                               | Belbari Municipality            |
|          |                   |                               | Bhojpur Municipality            |
|          |                   |                               | Chainpur Municipality           |
|          |                   |                               | Chaudandigadhi Municipality     |
|          |                   |                               | Duhabi Municipality             |
|          |                   |                               | Gauradaha Municipality          |
|          |                   |                               | Haleshi Tuwachung Municipality  |
|          |                   |                               | Inaruwa Municipality            |
|          |                   |                               | Laligurans Municipality         |
|          |                   |                               | Letang Municipality             |
|          |                   |                               | Mahalaxmi Municipality          |
|          |                   |                               | Myanglung Municipality          |
|          |                   |                               | Panchkhapan Municipality        |
|          |                   |                               | Pathari Sanischare Municipality |
|          |                   |                               | Phungling Municipality          |
|          |                   |                               | Ramdhuni Municipality           |
|          |                   |                               | Rangeli Municipality            |
|          |                   |                               | Ratuwamai Municipality          |
|          |                   |                               | Shadananda Municipality         |
|          |                   |                               | Siddhicharan Municipality       |
|          |                   |                               | Sunawarshi Municipality         |
|          |                   |                               | Sundarharaicha Municipality     |
|          |                   |                               | Urlabari Municipality           |
| Total    | 1                 | 2                             | 25                              |
| Gandaki  | Pokhara           |                               | Baglung Municipality            |
|          | Metropolitan City |                               | Beni Municipality               |
|          |                   |                               | Besishahar Municipality         |
|          |                   |                               | Bhanu Municipality              |
|          |                   |                               | Bhimad Municipality             |
|          |                   |                               | Bhirkot Municipality            |
|          |                   |                               | Chapakot Municipality           |

Table 1: List of Sampled/Selected Municipalities for VSR Consultation

|            |   | Dhorpatan Municipality    |
|------------|---|---------------------------|
|            |   | Gaidakot Municipality     |
|            |   | Jamaini Municipality      |
|            |   | Kushma Municipality       |
|            |   | Madhyanepal Municipality  |
|            |   | Phalewas Municipality     |
|            |   | Putalibazar Municipality  |
|            |   | Rainas Municipality       |
|            |   | Suklagandaki Municipality |
|            |   | Sundarbazar Municipality  |
|            |   | Waling Municipality       |
| n <b>l</b> | 1 | 18                        |

#### 2.4 Provincial VSR Consultation Workshops

As part of the VSR process, two provincial VSR consultation workshops were organized. The first of these workshops was held on April 28, 2024, in Koshi Province. It brought together representatives from 28 local governments, including Mayors and Deputy Mayors. This workshop facilitated in-depth discussions on the specific challenges faced by local governments in Koshi Province and provided an opportunity for them to share experiences, and collaboratively recommend strategies for the effective localization of the SDGs.

A similar provincial VSR consultation workshop was organized for local leaders from Gandaki Province on May 17, 2024. This workshop also saw active participation from 19 local government officials, who engaged in collaborative discussions aimed at enhancing the localization and implementation of the SDGs within their municipalities.

These provincial VSR consultation workshops not only boosted a sense of shared responsibility and commitment among local leaders of selected 47 municipalities but also generated valuable insights and recommendations. The collective wisdom and experiences shared during these sessions have significantly contributed to the VSR process, ensuring that the strategies and solutions proposed are both practical and grounded in the realities faced by local governments across Nepal.

#### 2.5 Key Informant Interviews (KIIs) and Discussions

As an integral part of the VSR process, a series of key informant interviews (KIIs) and discussions were conducted with key stakeholders from the Provincial Governments of Gandaki and Bagmati. These interactions were crucial for gaining in-depth insights into the efforts and challenges faced by provincial and local authorities in the implementation of the SDGs, particularly SDG 6 (Clean Water and Sanitation). The VSR team from the MuAN engaged in comprehensive discussions with the Office of the Chief Minister and Council of Ministers (OCMCM), the Provincial Planning Commissions, and various Sectoral Ministries in both Gandaki and Bagmati Provinces. These key informant interviews and discussions were aimed at understanding the strategic planning, policies, and institutional mechanisms in place to support the localization and implementation of the SDGs at the province level.

Moreover, the VSR Team conducted KII with the Mayor of Hetauda Sub-Metropolitan City in Makwanpur and Ratnagar Municipality in Chitwan, both located in Bagmati Province. Detailed

discussions were held with the Mayors of both municipalities. These discussions focused on the municipalities' specific efforts and challenges related to the SDGs, with a particular emphasis on SDG 6. The team explored various initiatives and programs implemented by the municipalities, assessed the operational challenges they faced, and discussed about the strategy and recommendation for effective localization of SDG 6.

The insights gained from these KIIs and discussions have been invaluable in enriching the VSR process and generating the challenges and recommendations. They have provided a nuanced understanding of the ground realities and diverse perspectives from different administrative levels. This comprehensive engagement ensures that the VSR report is grounded in practical experiences and offers actionable recommendations tailored to the specific needs and contexts of the local governments in Nepal.

#### Chapter 3: Enabling Environment for the Implementation and Localization of SDGs

#### 3.1 SDGs and the Federalization in Nepal

Nepal's transition to a federal system has significantly influenced the implementation and localization of the SDGs. The country's federal setup, established by the Constitution of Nepal 2015, decentralizes governance into three tiers: the federal, provincial, and local governments. Each tier has distinct roles and responsibilities, creating a structured framework for SDG implementation across various levels of governance.

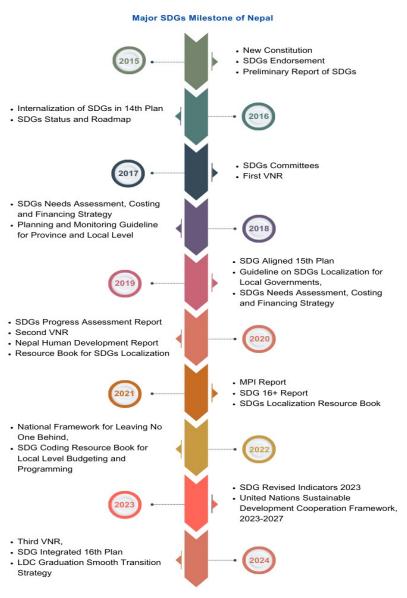
**Federal Government's Role:** At the federal level, the government is primarily responsible for setting national policies, frameworks, and standards for SDG implementation. This includes integrating the SDGs into national development plans, such as the 15th and 16th Periodic Plans, and ensuring alignment with international commitments. The National Planning Commission (NPC) plays a crucial role in coordinating SDG efforts across sectors and regions, developing comprehensive strategies, and monitoring progress towards achieving the goals. The federal government also facilitates capacity-building initiatives and provides technical and financial support to provincial and local governments.

**Provincial Government's Role:** Provincial governments serve as an intermediary between the federal and local levels, ensuring that national policies and standards are effectively localized and implemented. They are responsible for regional planning and coordination, aligning provincial development plans with the SDGs, and addressing region-specific challenges and opportunities. Provincial Planning Commissions work closely with sectoral ministries and local governments to develop and implement targeted programs that advance the SDGs. They also play a vital role in monitoring and evaluating progress, providing feedback, and ensuring that regional priorities are addressed.

**Local Government's Role:** Local governments, including municipalities and rural municipalities, are at the forefront of SDG implementation. They are responsible for translating national and provincial plans into concrete actions that directly impact communities. This involves developing local development plans, policies, and programs that address specific SDG targets. Local governments engage with community stakeholders to identify needs, mobilize resources, and ensure that development initiatives are inclusive and equitable. They also play a critical role in data collection, monitoring, and reporting on SDG progress at the grassroots level.

The federalization process in Nepal presents both challenges and opportunities for SDG implementation. On one hand, the decentralization of power allows for more localized and contextspecific approaches to sustainable development. On the other hand, it robust reauires coordination mechanisms and capacity-building efforts to ensure that all three tiers of government can effectively collaborate and align their efforts towards common goals.

Effective communication, resource sharing, and capacity development are essential to overcoming these challenges. The federal structure, when supported bv strong intergovernmental coordination and stakeholder engagement, has the potential to enhance the efficiency and impact of SDG across initiatives Nepal. Bv leveraging the unique strengths and responsibilities of each tier of government, Nepal can make significant progress towards achieving the SDGs and strengthening sustainable. inclusive development throughout the country.





#### 3.2 Nepal's Efforts in Achieving SDGs at the Federal and Sub-National Level

Nepal has formulated and is actively implementing the "SDG Status and Roadmap 2016-2030." This roadmap includes not only global indicators but also specific indicators tailored to Nepal's unique context. These SDGs were integrated into the national planning and budgeting processes, starting from the 14<sup>th</sup> Periodic Plan, thereby embedding them into the national development agenda.

To estimate the financial resources required to achieve the SDGs in Nepal, a comprehensive approach involving needs assessment, cost estimation, and financial strategy formulation has been undertaken. Consequently, the Sixteenth National Periodic Plan has been crafted to be conducive to sustainable development, featuring a dedicated chapter on the SDGs. Since the federal budget of 2073-74, the allocation and segmentation of funds for the SDGs have been systematically coded.

At the provincial level, efforts to internalize the SDGs include the creation of "Baseline Reports of the SDGs" to align provincial objectives with national goals. These reports establish quantitative targets up to 2030. Provinces have also integrated SDG indicators into their first five-year plans, formulating a strategic blueprint that addresses policy, institutional, and partnership needs. This includes expenditure assessments and investment requirements to achieve the SDGs at the provincial level.

Recognizing that successful sustainable development and goal achievement necessitate action from all government levels, a resource book has been developed to facilitate the localization of the SDGs. Procedural guidance for provincial and local planning systems ensures the integration of sustainable development goals into these frameworks. Some local levels have initiated the practice of incorporating sustainable development indicators into their periodic development plans and annual programs.

Institutional arrangements are in place to measure progress towards the SDGs, including the integration of SDG indicators into the monitoring and evaluation frameworks of both the federal and the provinces. A "National Strategy for Developing the Data System (NSDS)" has been developed to guide evidence-based planning, data collection, processing, and storage for monitoring and evaluating SDG progress. At the national level, the SDG implementation is overseen by the SDG Steering Committee, chaired by the Hon'ble Prime Minister, the SDG Coordinating Committee under the Vice Chairman of the National Planning Commission (NPC), and the SDG Thematic Monitoring Committee coordinated by NPC members.

Nepal has completed periodic evaluations of SDG progress for 2016-2019 and has submitted voluntary reports to the High-Level Political Forum (HLPF) of the United Nations in 2017 and 2020, presenting the country's SDG status. Moreover, in a pioneering move in 2020, Nepal positioned itself among the early adopters of this approach by developing the first Voluntary Sub-National Review (VSR) report. With the support of UCLG, the first ever VSR report of SDGs localization in Nepal was made possible through a collaborative effort involving the MuAN, the NARMIN, and the ADCCN.<sup>5</sup>

Another significant milestone was achieved when the Dhulikhel Municipality took the initiative to publish its Voluntary Local Review (VLR) in 2022.<sup>6</sup> This localized review provides a comprehensive insight into the progress, challenges, and initiatives undertaken by the municipality in alignment with the SDGs. It serves as a testament to the commitment of local authorities in Nepal to transparently assess their efforts and contribute to the broader national and global sustainability agenda. The VLR not only reflects the dedication of local governments in embracing the SDGs but also showcases the spirit of collaboration fostered among various municipal associations in Nepal.

As the country continues to navigate its development journey, the localization of SDGs spearheaded by MuAN and other local government associations stands as a model for promoting effective and context-specific sustainable development practices at the grassroots level. This local-global synergy reinforces the idea that sustainable development is a collective responsibility, requiring coordinated efforts at all levels of governance.

<sup>&</sup>lt;sup>5</sup> MuAN/NARMIN/ADCCN/UCLG. (2020). *Voluntary Review: SDGs Localization in Nepal*, available at: <u>https://gold.uclg.org/sites/default/files/nepal\_2020.pdf</u>

<sup>&</sup>lt;sup>6</sup> Dhulikhel Municipality. 2022. Voluntary Local Review, available at: <u>https://gold.uclg.org/sites/default/files/vlr-dhulikhel.pdf</u>

#### 3.3 Nepal's SDG Framework

Nepal's commitment to the SDGs is underpinned by a robust legislative and policy framework designed to integrate these global objectives into the national development agenda. This framework involves coordinated efforts across all levels of government—federal, provincial, and local—to ensure comprehensive and effective implementation.

Nepal endorsed the 2030 sustainable development agenda, aligning with 193 other member states of the United Nations. This agenda, which came into effect on January 1, 2016, comprises 17 goals aimed at eradicating poverty, protecting the planet, and ensuring prosperity for all.<sup>7</sup> In response, Nepal prepared its SDG Country Status Report in 2015, becoming the first nation to publish such a document, thereby demonstrating its dedication to achieving the SDGs. This report set the baseline for tracking progress and laid the groundwork for subsequent policy formulation and implementation.<sup>8</sup>

**Legislative Framework:** Nepal's legislative framework for the SDGs is intricately aligned with the 2030 Agenda for Sustainable Development, establishing a robust foundation for the implementation and localization of these global goals. Central to this alignment is the Constitution of Nepal 2015, which reflects the core values and objectives of the SDGs through its directive principles, fundamental rights, and state policies. This alignment underscores Nepal's commitment to fostering sustainable development through a legal and institutional framework that promotes inclusive growth, social equity, and environmental sustainability.

Since the 14<sup>th</sup> National Periodic Plan (2016/17-2018/19), Nepal has made significant strides in mainstreaming the SDGs into its national planning and budgeting systems. The integration of the SDGs into the development agenda ensures that sectoral plans, policies, and targets are consistently aligned with the global goals.<sup>9</sup> This integration is evident in the current 16<sup>th</sup> National Periodic Plan (2024/25-2029/30), which includes a dedicated chapter on the SDGs, identifying challenges and strategies to reinforcing their importance in national development strategies and achieve these goals by 2030.<sup>10</sup> Furthermore, specific codes corresponding to the SDGs are assigned to all national development programs through the Medium-Term Expenditure Framework (MTEF), ensuring that budget allocations and development initiatives are directly linked to achieving the SDGs.<sup>11</sup> Moreover, the Government of Nepal has developed an 'LDC Graduation Smooth Transition Strategy 2024' in preparation for the country's anticipated graduation from the Least Developed Country (LDC) status in 2026. This strategy is designed to ensure a seamless transition and sustained progress towards the SDGs, highlighting the government's proactive approach to long-term development planning.

The legislative and strategic framework for SDG implementation in Nepal is reinforced by several key documents developed by the NPC. These documents include:

 SDGs Status and Roadmap 2016-2030: Provides a strategic overview of Nepal's development journey in alignment with the global SDG agenda, outlining a preliminary list of

<sup>&</sup>lt;sup>7</sup> United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*.

<sup>&</sup>lt;sup>8</sup> National Planning Commission. (2015). Nepal's Sustainable Development Goals Country Report. Kathmandu, Nepal.

<sup>&</sup>lt;sup>9</sup> National Planning Commission. (2015). SDG Status and Roadmap: 2016-2030. Government of Nepal.

<sup>&</sup>lt;sup>10</sup> National Planning Commission. (2024). 16<sup>th</sup> National Periodic Plan (2024/25-2029/30). Government of Nepal.

<sup>&</sup>lt;sup>11</sup> National Planning Commission. (2019). 15<sup>th</sup> National Periodic Plan (2019/20-2023/24). Government of Nepal.

415 indicators to reflect the national context for the monitoring and evaluation of the SDGs against a global total of 232 indicators.

- SDGs Needs Assessment, Costing and Financing Strategy 2017: Offers a thorough analysis of the country's requirements, ensuring that the goals are contextualized to address Nepal's specific challenges and opportunities, and delineates the financial considerations and resource mobilization mechanisms necessary for the successful realization of the SDGs.
- **SDGs Localization Resource Book 2021:** Provides a practical framework for translating the global goals into actionable, community-specific initiatives, ensuring that the SDGs resonate at the grassroots level.
- SDG Coding Resource Book for Local Level Budgeting and Programming 2022: This comprehensive guide provides standardized codes for each SDG, facilitating systematic tracking and reporting of budget allocations and expenditures at the local government level, enabling precise alignment of local initiatives with national and global development goals, this resource book enhances transparency, accountability, and efficiency in the pursuit of sustainable development across Nepal.
- National Framework for Leave No One Behind (LNOB) 2022: This national framework is designed to fulfill the core principle of "Leave No One Behind" by prioritizing the monitoring of indicators through disaggregated data, thereby addressing the needs of the most marginalized communities and groups.
- **SDG Revised Indicators 2023:** This updated version of the SDG indicators outlines Nepal's targets and milestones for the years 2019, 2022, 2025, and 2030. The monitoring framework within this report has been revised and enhanced based on the latest available data.
- **National Reviews of SDGs:** Involves various stakeholders to monitor progress and ensure accountability in achieving the SDGs.

These documents highlight Nepal's commitment to the SDGs and provide robust guides for planning, implementation, and monitoring. Nepal stands among the pioneering nations globally, having formulated a roadmap for the SDGs spanning from 2016 to 2030.<sup>12</sup> Moreover, the SDGs have been well integrated into the periodic plans of sub-national governments. Robust monitoring and evaluation guidelines are in place to track progress and make necessary adjustments, ensuring that the implementation of the SDGs is effective and inclusive across all levels of government. Nepal's legislative framework for SDG implementation is characterized by a strong alignment between national laws and the 2030 Agenda, comprehensive institutional mechanisms, and inclusive planning processes. This framework not only supports the integration of the SDGs into national and provincial development strategies but also ensures broad-based participation and accountability in the pursuit of sustainable development goals.

**Institutional Mechanisms:** The NPC is the principal body overseeing the SDG agenda and its monitoring. The institutional framework for SDG implementation in Nepal includes two High-Level Committees and nine Thematic Working Groups under the NPC tasked with rolling out and implementing the SDGs by 2030. The *National Steering Committee*, which serves as the apex body guiding the pursuit of SDGs, is chaired by the Right Hon'ble Prime Minister and the Chair of the NPC. Its members include the Hon'ble Vice Chair of the NPC, the Hon'ble Minister of Finance, the Hon'ble Minister of Foreign Affairs, and the Chief Secretary of the Government.

<sup>&</sup>lt;sup>12</sup> National Planning Commission. (2018). SDG Needs Assessment, Costing and Financing Strategy. Kathmandu, Nepal.

The Secretary of the NPC Secretariat serves as the Member Secretary. The second mechanism is the *Implementation Coordination and Monitoring Committee*, chaired by the Hon'ble Vice Chairman of the NPC, with the Hon'ble Member in charge of macro-economic issues serving as the deputy coordinator. Members of this committee include the Secretaries of the Ministry of Finance and the Ministry of Foreign Affairs, as well as the Chairmen/Presidents of the Nepal Chamber of Commerce (NCC), the Federation of Nepalese Chamber of Commerce and Industries (FNCCI), and the Confederation of Nepalese Industries (CNI). The Joint Secretary of the Economic Management Division of the NPC acts as the Member Secretary. These committees are also mandated to include representatives from civil society and other stakeholders as invited members. This Committee oversees the alignment and integration of SDG-related activities across various sectors.<sup>13</sup>

At the legislative level, the *Sustainable Development and Good Governance Committee* under the National Assembly (upper house) is responsible for monitoring the progress of SDG implementation. This committee includes representatives from all major political parties, ensuring comprehensive oversight and scrutiny of the national budget concerning the SDGs. To support members of parliament in their legislative roles related to the SDGs, the committee has established a resource center in Kathmandu, which enhances their capacity to contribute effectively to the achievement of the SDGs.<sup>14</sup>

**Institutional Arrangement at the Sub-National Level:** The Chief Ministers of the seven provinces and the Chairpersons of Local Government Associations (LGAs) are integral members of the *National High-Level Steering Committee*. This inclusion ensures a unified approach to SDG implementation across all levels of governance. At the provincial level, the *SDG Steering Committee*, chaired by the Chief Minister, is responsible for coordinating and facilitating the implementation of the SDGs within the province. This committee plays a crucial role in aligning provincial efforts with the national SDG framework, promoting cohesive and coordinated progress. Moreover, the *SDG Coordinating Committee*, managed by the Vice President of the Provincial Planning Commission, oversees the coordination of SDG efforts at the provincial level.

Each provincial government has established *Policy and Planning Commissions* to manage their planning and policy initiatives. These commissions are tasked with integrating the SDGs into provincial plans and policies, ensuring alignment with the national SDG framework. Most of the *Provincial Policy and Planning Commissions* have prepared periodic plans that incorporate the core principles of the SDGs. Additionally, they have developed SDG Baseline Reports and, in some cases, their own SDG Coding Resource Books for Budget and Program, as well as SDG-Sensitive Provincial Expenditure Tracking Survey (PETS) Reports.

District Coordination Committees (DCCs), which serve as the primary entities for monitoring and supervising local-level development initiatives, have been actively encouraged to align their operations and strategies with the objectives of the SDGs. At the local level, an SDG Implementation Committee, chaired by the Head or Chairperson of the local government, is responsible for the effective implementation of the SDGs. This structure ensures that SDG initiatives are integrated into local development plans and actions, promoting comprehensive and inclusive progress towards the goals.

<sup>&</sup>lt;sup>13</sup> National Planning Commission. (2020). *National SDGs Data Portal*. Retrieved from <u>http://sdg.npc.gov.np</u>

<sup>&</sup>lt;sup>14</sup> Sustainable Development and Good Governance Committee. (2020). *Parliamentary Oversight on Implementation of SDGs: A Handbook with Checklist.* Federal Parliament, Kathmandu, Nepal.

#### 3.4 Leave No One Behind (LNOB)

Nepal has made deliberate efforts to integrate the concept of "Leave No One Behind" (LNOB). The fundamental equity-based principle of the SDGs resonates strongly in Nepal, which has adopted a forward-looking and transformative constitution emphasizing inclusive governance, justice, and the enjoyment of fundamental rights by all. Overall progress and growth without the spirit of LNOB would neither be sufficient nor acceptable. It is crucial to acknowledge that vulnerable people and communities to ensure their inclusion across all applicable SDG goals and indicators. Hence, the NPC has developed a comprehensive 'National Framework for LNOB 2022' to create an enabling policy environment aimed at reaching and supporting individuals and communities who have been left behind.

In the context of Nepal, vulnerable groups include the poor, caste, ethnic and religious minorities, Dalits, indigenous people, children, elderly people, persons with disabilities, women, sexual and gender minorities (LGBTQI+), migrants, refugees, and other groups.<sup>15</sup>

#### 3.5 Gaps and Areas Requiring Improvement

After extensive literature review, provincial and national consultation, and key informant interviews, following gaps and areas for improvement are identified that remain crucial to ensure effective implementation and localization across all levels of governance:

- Coordination and Alignment Challenges: Despite the clear division of responsibilities among federal, provincial, and local governments, there are ongoing challenges in coordinating SDG efforts effectively. Ensuring alignment of policies, plans, and budgetary allocations across all tiers of government remains a persistent issue, impacting the cohesive implementation of SDGs.
- **Capacity Constraints:** Many local governments, especially in remote and rural areas, face capacity constraints in terms of technical expertise, human resources, and financial capabilities. Building the capacity of local officials and institutions to effectively plan, implement, and monitor SDG-related initiatives is essential to achieving meaningful progress.
- Data Availability and Quality: Reliable and disaggregated data is fundamental for evidencebased decision-making and monitoring SDG progress. Despite efforts to strengthen data systems, challenges persist in data collection methodologies, coverage, and accuracy, particularly at the sub-national level.
- Inclusive Participation and Stakeholder Engagement: While there are mechanisms for stakeholder engagement, including civil society organizations and marginalized communities, there remains a need to enhance inclusivity in decision-making processes. Ensuring meaningful participation of all segments of society is crucial for addressing diverse development needs and ensuring no one is left behind.
- Policy Reform and Institutional Frameworks: Continuous review and adaptation of policy and institutional frameworks are necessary to respond to evolving challenges and opportunities. Aligning sectoral policies with the SDGs, revising outdated regulations, and strengthening institutional capacities are essential steps towards creating an enabling environment for sustainable development. Particularly, the *Solid Waste Management Act*

<sup>&</sup>lt;sup>15</sup> National Planning Commission. (2022). *National Framework for LNOB 2022*. Government of Nepal.

2011, National Sanitation and Hygiene Master Plan 2011, National Urban Water Supply & Sanitation Sector Policy 2009, Drinking Water Quality Standards 2006, Water Supply Management Board Act 2006, National Water Plan 2005, Water Resources Strategy 2002, Solid Waste (Management & Resource Mobilization) Rules 1992, Water Resource Rules 1993, and Nepal Water Supply Corporation Act 1989 need immediate amendment.

• **Resource Mobilization and Financing:** Adequate financial resources are pivotal for SDG implementation. Despite efforts to mainstream SDGs into national and provincial budgets, there is a need for innovative financing mechanisms, private sector engagement, and international cooperation to bridge financing gaps and sustain long-term development initiatives.

By prioritizing these areas for improvement, Nepal can enhance its capacity to achieve the SDGs, promote sustainable development, and leave no one behind.

#### Chapter 4: SDG Implementation and Localization at the Sub-National Level

# 4.1 Rationale and Involvement of Nepal's Provincial and Local Governments in SDG Implementation and Localization

The SDGs, adopted by all United Nations Member States in 2015, provide a comprehensive framework to address global challenges such as poverty, inequality, climate change, and peace. While the SDGs are global, their successful implementation requires localized actions. Provincial and local governments play a pivotal role in translating these global goals into practical, actionable plans tailored to the unique needs and contexts of their communities.

- Constitutional Rights and Responsibilities: All three levels of government—national, provincial, and local—are assigned responsibilities by the constitution and laws. Therefore, the 2030 Agenda is not solely a national concern. Nepal's 2015 Constitution has entrusted local governments with service delivery, good governance, and infrastructure development, which are crucial for sustainable development. These rights, mandates and responsibilities underscore the need for readiness at the provincial and local levels to achieve the SDGs effectively.<sup>16</sup>
- **Proximity to Citizens**: Provincial and local governments in Nepal are closest to the citizens and are more attuned to their needs and challenges. This proximity allows for a more nuanced understanding of local issues and fosters more effective, targeted interventions. Engaging these governments ensures that policies and programs are grounded in local realities, enhancing their relevance and impact.
- **Transfer of Public Service Responsibilities**: In Nepal, for example, the Constitution, Local Government Operation Act, 2074, and other laws have transferred significant public service responsibilities to the local level. These include basic and secondary education, primary health care, water supply and sanitation, and social services—all of which are directly linked to SDG indicators. This decentralization empowers local governments to address SDG-related challenges more effectively.

<sup>&</sup>lt;sup>16</sup> UNDP. (2016). *Localizing the SDGs: Guidance for Local Governments and Stakeholders*. New York: United Nations Development Programme.

- **Decentralization of Resources**: Local governments have the right to collect revenue and receive financial resources from higher government levels through financial transfers. This decentralization provides local governments with the necessary financial resources to implement SDG-related programs within their jurisdictions. The ability to mobilize these resources enhances investment in sustainable development at the local level.
- **Policy Development and Implementation**: Provincial and local governments are crucial in developing and implementing policies that align with the SDGs. They can integrate the SDGs into local development plans, ensuring that provincial and local priorities are aligned with global goals. This alignment is critical for cohesive national strategies that reflect local priorities.
- **Prioritization Based on Local Contexts**: Given the geographically uneven development achievements, local governments are better positioned to prioritize and localize the SDGs according to their specific environments. This localized prioritization ensures that development efforts are more relevant and effective in addressing the unique challenges of each region.
- Increasing Quality and Productivity of Local Spending: Large resources are often allocated to low-return projects at the local level, reducing the productivity of public expenditure. Localizing the SDGs helps direct local resources toward development priorities, thereby increasing the quality and productivity of local spending and ensuring that resources are used more efficiently.<sup>17</sup>
- **Resource Mobilization and Allocation**: Effective SDG implementation requires substantial financial resources. Local governments play a key role in mobilizing domestic resources, including local taxes and public-private partnerships. They are also responsible for allocating these resources efficiently to various sectors and projects that support the SDGs.
- **Public Engagement and Partnerships**: Engaging local communities and fostering partnerships with civil society organizations, businesses, and other stakeholders is a core function of local governments. These partnerships enhance the reach and effectiveness of SDG initiatives by leveraging diverse resources, expertise, and networks. Local governments can facilitate inclusive participation, ensuring that all community members, especially marginalized groups, have a voice in sustainable development processes.
- **Ensuring Inclusion**: The SDGs emphasize "Leave No One Behind" in development. To make development results equitable, local governments must conduct targeted programs in poverty-stricken and deprived areas. By ensuring rights related to information and monitoring at the local level, local governments can properly oversee development processes to ensure inclusivity.
- Coordination Between Government Levels: Localization of the SDGs involves adapting their principles and essence to local conditions and needs. In Nepal, this means transforming national development priorities into local frameworks through the 16th Plan and the SDG Roadmap. This approach promotes cooperative federalism by establishing interrelationships between national, provincial, and local periodic plans.

<sup>&</sup>lt;sup>17</sup> World Bank. (2020). Enhancing Government Effectiveness and Transparency: The Fight Against Corruption. Washington, DC.

• **Minimization of Resource Duplication**: For resource-limited countries, prioritizing and using available resources in a planned manner is essential. Localization of the SDGs supports strengthening the sustainable development system based on local needs and preferences, removing duplication in resource allocation among the three government levels.

The involvement of provincial and local governments in the implementation and localization of the SDGs is not just beneficial but essential. Their unique position enables them to drive sustainable development from the ground up, ensuring that global goals translate into tangible local benefits. By harnessing their proximity to citizens, administrative authority, and capacity for innovation, provincial and local governments can significantly accelerate progress towards achieving the SDGs, creating resilient, inclusive, and sustainable communities worldwide.

#### 4.2 Integration and Localization of SDGs in Local Level Planning and Programming

In Nepal, the integration and localization of SDGs within local level planning and programming are critical for advancing the nation's development agenda. By embedding SDGs into local planning frameworks, tailored strategies can be devised to address region-specific challenges such as poverty, gender inequality, and environmental degradation. This approach empowers local authorities and communities to take ownership of the development process, fostering a sense of collective responsibility and engagement.

The responsibility for the SDGs established by Nepal is distributed among different levels of government, as delineated by the constitution. Certain programs and activities aimed at achieving the SDGs fall under the exclusive jurisdiction of provincial and local authorities, while others are categorized under shared responsibilities. Consequently, the attainment of the SDGs necessitates profound interconnection, cooperation, coordination, and integrated efforts among the federal, provincial, and local levels of government.

To effectively achieve the SDGs, it is imperative to integrate and localize these goals to the provincial and local contexts and to align and prioritize national goals at these levels. There should be a single and same interface for the Local Government Institutional Capacity Self-Assessment (LISA) and SDGs. Moreover, policies and programs should be formulated and implemented in a coordinated and cooperative manner.

Within the framework of federalism, an integrated approach is essential for achieving the desired outcomes. This involves setting provincial and local goals based on national priorities. For instance, in areas with high levels of poverty, greater resources should be allocated to poverty alleviation programs. Similarly, in provinces with significant caste or gender discrimination, these issues should be prioritized, whereas in areas lacking economic infrastructure, infrastructure development should be given precedence.

Integrating and localizing the SDGs allows for the prioritization of sustainable development based on local needs, the assessment of local conditions relative to national goals, and the setting of targets that contribute to both sub-national and national achievements. The commitment to "Leave No One Behind" underpins the SDGs. Significant disparities in achievement between different regions, castes, and communities at the local level can render national-level accomplishments meaningless. Thus, the integration and localization of the SDGs is of national importance. Integration and localization involve aligning national strategies with local needs, understanding, adapting, planning, crafting tailored policies, collecting data for monitoring, and evaluating progress from both national and local perspectives. This approach also provides a basis for utilizing additional resources. Therefore, it is appropriate to integrate the SDGs into the periodic development and annual plans at all governmental levels and to connect local and provincial achievements to national progress in attaining the SDGs.

#### 4.3 Rights of Local Governments and SDGs

The nexus between the rights of local governments and the SDGs underscores the pivotal role of decentralized governance in achieving national development goals. Local governments hold exclusive and concurrent mandates vital for SDG implementation. Exclusively, they formulate and execute policies for local economic development, resource management, and provision of basic services, aligning with SDGs on poverty eradication, environmental sustainability, and inclusive growth. Concurrently, they collaborate with higher tiers of government, engage stakeholders, and monitor progress, fostering collective action towards SDG attainment. Upholding these rights empowers local authorities to tailor strategies, leverage resources, and drive sustainable development tailored to the unique needs of their communities, thereby bolstering Nepal's progress towards the SDGs.

The exclusive and concurrent rights and mandates allocated to local governments in relation to SDGs are delineated as follows:

| S.N. | Development<br>Sector         | Exclusive Constitutional Rights<br>and Mandates (Schedule-8)  | Concurrent/Shared<br>Constitutional Rights of<br>All Tiers of Governments  | SDGs  |
|------|-------------------------------|---|--|---|
| 1    | Economic<br>Development       | <ol> <li>Cooperative</li> <li>Local market management</li> <li>Rural roads, agricultural roads,<br/>irrigation</li> <li>Agriculture and animal<br/>husbandry, agricultural<br/>production management,<br/>animal health, cooperatives</li> <li>Management, operation and<br/>control of agricultural extension</li> </ol>   | <ol> <li>Cooperative</li> <li>Agriculture</li> <li>Poverty alleviation</li> <li>Landless squatters<br/>management</li> <li>Royalties derived from<br/>natural resources</li> </ol> | <ol> <li>End Poverty</li> <li>Zero Hunger</li> <li>Decent Job<br/>and Economic<br/>Growth</li> <li>Reduced<br/>Inequality</li> </ol>                  |
| 2    | Social<br>Development         | <ol> <li>Basic and secondary education</li> <li>Basic health and sanitation         <ul> <li>(sewage) arrangements</li> <li>Management of senior citizens, persons with disabilities and the disabled</li> <li>Compilation of unemployment statistics</li> <li>Drinking water</li> <li>Preservation and development of language, culture and fine arts</li> </ul> </li> </ol> | <ol> <li>Education, sports and<br/>newspapers</li> <li>Health</li> <li>Drinking water</li> <li>Social security</li> </ol>  | <ol> <li>Good Health<br/>and Wellbeing</li> <li>Quality<br/>Education</li> <li>Gender<br/>Equality</li> <li>Clean Water<br/>and Sanitation</li> </ol> |
| 3    | Infrastructure<br>Development | <ol> <li>Local level development projects<br/>and projects,</li> <li>Local roads, rural roads,<br/>agricultural roads, irrigation</li> </ol>  | 5. Electricity<br>15. Motor vehicle permits  | <ol> <li>Affordable and<br/>Clean Energy</li> <li>Industry,<br/>Innovation and<br/>Infrastructure</li> </ol>  |

Table 2: Exclusive and Concurrent Rights/Mandates of Local Governments Related to SDGs

|   |  | <ul> <li>14. Distribution of real estate assets,</li> <li>19. Drinking water, small hydropower projects, alternative energy,</li> </ul>  |   | 11. Sustainable<br>Cities and<br>Communities   |
|---|--|--|---|--|
| 4 | Environment<br>Management                          | <ol> <li>Sanitation (waste management)</li> <li>Environmental protection and<br/>biodiversity</li> <li>Disaster Management</li> <li>Conservation of water bodies,<br/>wildlife, mines and minerals</li> </ol>  | <ol> <li>Forests, forests, wildlife,<br/>birds, water use,<br/>environment, ecology<br/>and biodiversity</li> <li>Mines and minerals</li> <li>Disaster management</li> </ol>  | <ul> <li>12. Responsible<br/>Consumption<br/>and<br/>Production</li> <li>13. Climate Action</li> <li>15. Life on Land</li> </ul> |
| 5 | Organizational<br>Development<br>and<br>Governance | <ol> <li>Municipal/City Police</li> <li>FM (radio operation</li> <li>Local taxes: (property tax, house<br/>restoration tax, real estate<br/>registration fee, vehicle tax),<br/>service fee, tourist tax,<br/>advertisement tax, business tax,<br/>land tax, property tax, fines,<br/>entertainment tax and property<br/>tax collection.</li> <li>Management of local services</li> <li>Compilation of local data and<br/>records</li> <li>Management of village<br/>councils, city councils, district<br/>councils, local courts,<br/>conciliation and mediation</li> <li>Local records management</li> </ol> | <ol> <li>Journals</li> <li>Taxes, customs,<br/>penalties, royalties, fees</li> <li>Personal event records,<br/>birth, death, marriage<br/>and facts</li> <li>Archaeological sites,<br/>ancient monuments<br/>and museums</li> </ol> | <ul> <li>16. Peace, Just<br/>and Strong<br/>Institutions</li> <li>17. Global<br/>Partnership</li> </ul>                          |

Source: SDG Localization Guideline 2077 (NPC), and SDG Coding Resource Book for Local Level Budgeting and Programming 2022 (NPC).

#### 4.4 SDG 6 Indicators and Targets

Nepal's commitment to SDG 6 (Water and Sanitation) focuses on ensuring the availability and sustainable management of water and sanitation for all. This entails addressing challenges related to access to clean water and adequate sanitation facilities, particularly in rural and marginalized communities. Nepal has been implementing various initiatives to improve water infrastructure, promote water conservation practices, and enhance sanitation facilities across the country.

#### Table 3: SDG 6 Targets and Indicators

|        | SDG 6: Ensure availability and sustainable management   | of water   | r and san | itation fo | or all     |      |
|--------|---|------------|-----------|------------|------------|------|
|        | Targets and Indicators  | 2015       | 2019      | 2022       | 2025       | 2030 |
| Target | 6.1 By 2030, achieve universal and equitable access to safe   | and affor  | dable dr  | inking w   | ater for a | all. |
| 6.1.1  | Proportion of population using safely managed drinking water s  | services   |           |            |            |      |
| 1      | Basic water supply coverage (%)   | 87ª        | 90.2      | 92.6       | 95         | 99   |
|        | 6.2 By 2030, achieve access to adequate and equitable sanit tion, paying special attention to the needs of women and girl     | Is and the | ose in vu | Inerable   | situation  | is.  |
| 1      | Proportion of population using safely managed sanitation<br>services including a hand-washing facility with soap and<br>water | 30         | 46        | 62         | 74         | 90   |
| 2      | Basic sanitation coverage (%)   | 82a        | 86.5      | 89.9       | 93.3       | 99   |
| 3      | Percent of children under age 5 with Diarrhoea in the last 2 weeks  | 12         | 8         | 6          | 4          | 1    |

| 6.3.1  | sing recycling and safe reuse.<br>Proportion of domestic and industrial wastewater flows safely t   | reated                |                            |                                    |                              |                        |
|--|---|-----------------------|----------------------------|------------------------------------|------------------------------|------------------------|
| 1  | Proportion of untreated industrial<br>waste water (%)   | 99c                   | 75.3                       | 57.5                               | 39.7                         | 10                     |
| 2  | Percentage reduction of untreated domestic waste water  | 99                    | 99                         | 96                                 | 85                           | 70                     |
| withdr   | 6.4 By 2030, substantially increase water-use efficiency acro<br>awals and supply of freshwater to address water scarcity and<br>suffering from water scarcity.<br>Level of water stress: freshwater withdrawal as a proportion of  | d substar             | ntially re                 | duce the                           | number                       |                        |
| 1  | Wastage of water – Irrigation (Field losses in %)   | 40                    | 35                         | 25                                 | 20                           | 1                      |
| 2  | Non- Revenue Water (%)  | 20c                   | 16                         | 13                                 | 10                           | 5                      |
| -  | 6.5 By 2030, implement integrated water resources manage<br>oundary cooperation as appropriate.   |                       |                            |                                    | J J                          |                        |
| 6.5.1  | Degree of integrated water resources management   |                       | 16                         | 28                                 | 40                           | 60                     |
| 6.5.1<br>Target<br>in wate                               | Degree of integrated water resources management<br>6.a By 2030, expand international cooperation and capacity-<br>er- and sanitation-related activities and programmes, includin<br>acy, wastewater treatment, recycling and reuse technologies<br>Amount of water- and sanitation-related official development   | ng water              | support                    | to devel                           | oping co                     | untrie                 |
| 6.5.1<br>Target<br>in wate<br>efficier                   | Degree of integrated water resources management<br>6.a By 2030, expand international cooperation and capacity-<br>er- and sanitation-related activities and programmes, includin<br>acy, wastewater treatment, recycling and reuse technologies   | ng water              | support<br>harvesti        | to devel<br>ng, desa               | oping co<br>lination,        | untrie<br>water        |
| 6.5.1<br>Farget<br>n wate<br>efficier<br>6.a.1<br>Farget | Degree of integrated water resources management<br>6.a By 2030, expand international cooperation and capacity-<br>er- and sanitation-related activities and programmes, includin<br>acy, wastewater treatment, recycling and reuse technologies<br>Amount of water- and sanitation-related official development<br>assistance that is part of a government-coordinated spending | ng water<br>5<br>0.7g | support<br>harvesti<br>0.6 | <b>to devel</b><br>ng, desa<br>0.6 | oping co<br>lination,<br>0.6 | untrie<br>water<br>0.6 |

#### Chapter 5: Implementation and Progress of SDG 6 (Water and Sanitation) in Nepal

#### 5.1 Environment: Nepal's Institutional and Legislative Framework for Water and Sanitation

Nepal's legislative and institutional framework provides a robust foundation for the implementation of SDG 6 (water and sanitation), which focuses on ensuring the availability and sustainable management of water and sanitation for all. This well-defined, multi-tiered federal structure, coupled with dedicated national plans and international commitments, offers Nepal a significant opportunity to enhance access to clean water and sanitation. In terms of structure, Nepal's water and sanitation sector is organized into a comprehensive setup. At the federal level, the Ministry of Water Supply (MoWS) plays a central role, supported by the National Water, Sanitation and Hygiene Coordination Committee (N-WASH CC) and other line ministries.

The Department of Water Supply and Sewerage Management (DWSSM) operates under the MoWS, with the N-WASHCC Secretariat, MIS Unit, and MIS Secretariat ensuring efficient management information systems. Additionally, the Regulatory Support Unit and Business Support Unit provide policy guidance, oversight, and coordination. At the provincial level, the Provincial Water Supply Ministry oversees activities, with the Provincial WASH Coordination Committee (P-WASHCC) and a provincial MIS Unit facilitating local governance. Local governments, including municipalities and rural municipalities, have their own MIS Units and Municipal WASH Coordination Committees (M-WASHCC) to implement and monitor water and

sanitation projects effectively. This federated multi-tiered structure ensures that water and sanitation services are managed and delivered efficiently across Nepal.

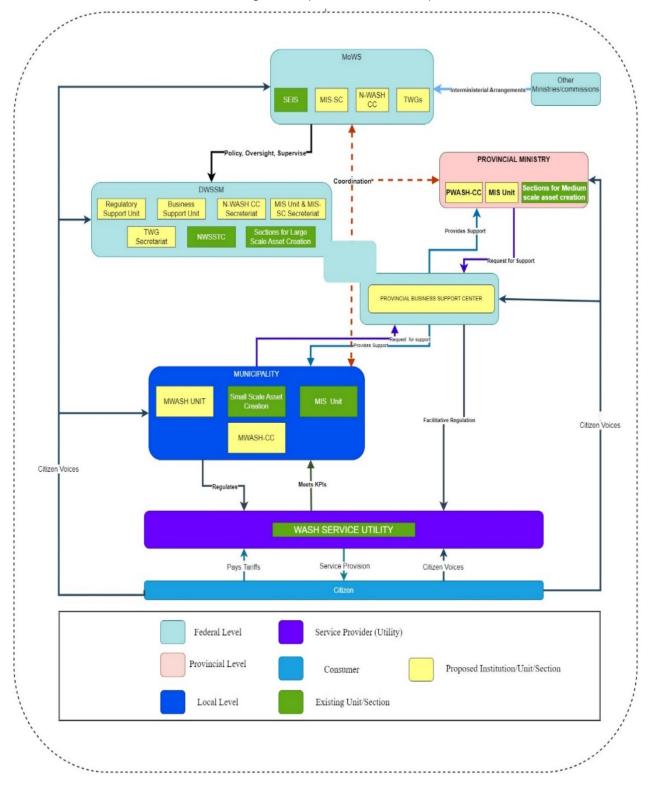


Figure 3: Nepal's Institutional Set-up for Water and Sanitation/MoWS 2024

In terms of legislation, Nepal's Constitution, along with a comprehensive set of policies and acts, delineates clear roles and responsibilities across federal, provincial, and local levels of government.

**Constitution of Nepal 2015:** Nepal's commitment to ensuring access to clean water and sanitation is enshrined in its 2015 Constitution. The Constitution guarantees each citizen the right to access clean water and hygiene (Article 35(4)), and highlights the right to a clean and healthy environment (Article 30(1)) and consumer rights (Article 44). It further mandates state policies related to water, including the multi-purpose development of water resources prioritizing domestic investment and public participation, ensuring reliable and affordable energy supply, and sustainable irrigation and river management (Article 51). These provisions establish constitutionally mandated actionable targets for water governance.

| Entities                              | Schedule | Item No. and Item of the Schedule  |
|---------------------------------------|----------|--|
| Federal<br>Government                 | 5        | 7. International treaties or agreements, mutual legal assistance, international borders, international boundary rivers                               |
|                                       |          | 11. Policies relating to conservation and multiple uses of water resources   |
|                                       |          | 14. Central level: large electricity, irrigation, and other projects   |
|                                       |          | 27. National and international environment management, national parks, wildlife reserves and wetlands, national forest policies, and carbon services |
| Province<br>Government                | 6        | 7. Province-level electricity, irrigation, and water supply services, navigation   |
|                                       |          | 19. Use of forests and waters and management of the environment within the Province  |
| Concurrent jurisdiction of the        | 7        | 13. Province boundary rivers, waterways, environment protection, biological diversity  |
| Federation and the<br>Provinces       |          | 18. Tourism, water supply, and sanitation  |
| Provinces                             |          | 23. Utilization of forests, mountains, forest conservation areas, and waters flowing between and across provinces                                    |
| Local Governments                     | 8        | 19. Water supply, small hydropower projects, alternative energy  |
|                                       |          | 21. Protection of watersheds, wildlife, mines, and minerals  |
| Concurrent                            | 9        | 5. Services such as electricity, water supply, irrigation  |
| jurisdiction of all<br>three tiers of |          | 7. Forests, wildlife, birds, water uses, environment, ecology, and bio-diversity   |
| governments                           |          | 14. Royalty from natural resources   |

Table 4: Jurisdiction of the Federal, Province, and Local Governments on Water and Sanitation<sup>18</sup>

The Constitution of Nepal establishes a federal structure comprising seven provinces and 753 local governments (Article 56). The distribution of powers among the three levels of government is detailed in Article 57, with the Federation holding residual authority. Articles 59 and 60 address financial authority and revenue distribution, crucial for effective water resource management.

<sup>&</sup>lt;sup>18</sup> ADPC (2023). Assessment of Water Sector Policies and Guidelines of Nepal: Identifying Gaps and Addressing Needs. Bangkok.

Schedules 5 to 9 of the Constitution play a vital role in allocating and managing water resources. Schedule 9, in particular, outlines the concurrent powers held by the Federation, States, and Local Levels, with water management prominently featured. Effective implementation of these provisions requires a clear understanding of the roles and responsibilities of each tier of government to better plan, manage, and safeguard water resources.

**Local Government Operation Act 2017 (LGOA):** It significantly decentralizes water and sanitation responsibilities to local governments. Clause 11, Sub-clause 4, assigns concurrent rights over health, drinking water, and other services to both federal and municipal governments. The LGOA 2017 grants exclusive powers to local governments for "basic health and sanitation" and extends their authority to implement, monitor, and formulate policies, strategies, and standards.

The LGOA 2017 also tasks local governments with the construction, operation, and maintenance of public toilets, household waste collection, and surface water management. In addition, clause 14 of the LGOA 2017 gives the mandate to local governments for WASH Management Board formation at the local level.

**WASH Sector Development Plan (SDP) 2024-2043:** The SDP (Sector Development Plan) provides a unified roadmap aligned with national and global development goals, focusing on effective resource allocation, enhanced coordination, and ensuring no one is left behind. It addresses key challenges such as financial and governance gaps, climate change adaptation, and gender equality, while strengthening institutional capacities and fostering data-driven decision-making. The plan aims to propel Nepal towards universal access to safe and sustainable WASH services, fostering resilient communities and contributing to broader goals of public health, social justice, and sustainable development.

Structured around seven key themes—Access and Service Quality, Data and M&E, Capacity Development, Policy Framework, GESI (Gender Equality and Social Inclusion), Climate Resilience, and Sector Financing—the SDP ensures inclusivity, especially for vulnerable and marginalized communities. These themes, informed by the Joint Sector Review (JSR) 2023, aim to achieve "safely managed" WASH services in Nepal by addressing emerging challenges and ensuring long-term sustainability.

**16<sup>th</sup> Five Year Plan (2024/25 to 2028/29):** The Government of Nepal launched the ambitious 16<sup>th</sup> Periodic Plan, with an estimated implementation cost of approximately Rs 11.1 trillion (NPC, 2024). The 16<sup>th</sup> Plan aims to establish social justice in health, education, employment, housing, safety, and service delivery in Nepal. Recognizing water and sanitation as critical components of service delivery, the 16<sup>th</sup> Plan includes a dedicated section on water and sanitation in *Chapter 6: Development of Quality Physical Infrastructure and Intensive Inter-Connectedness*.

The 16<sup>th</sup> Plan identifies several challenges in the water and sanitation sector, such as unmanaged settlement, rapid urbanization, extensive watershed use, and climate change impacts. Moreover, the plan highlights the importance of mitigating climate change impacts, identifying and protecting traditional water sources, ensuring the sustainable use of water, providing safe and quality drinking water to citizens, and managing sewerage systems. Prioritizing water and sanitation, the 16<sup>th</sup> Plan outlines strategies for protecting and preserving water resources and localizing waste management system.

Key sectoral legislation along with other policies and plans, with inter alia on water and sanitation:

| Legislation (Acts, Policies, Strategies, Plans)                              | Key Provisions on Water and Sanitation   |
|--|--|
| National Water Supply, Sanitation and Hygiene<br>Policy, 2023                | Ensures universal access to safe drinking water and<br>sanitation services, promotes hygiene education,<br>and emphasizes the importance of sustainable water<br>resource management.                                    |
| Irrigation Policy, 2023  | Focuses on the development and maintenance of<br>irrigation systems, integrating water supply and<br>sanitation measures to support agricultural<br>productivity and ensure safe water use in farming<br>communities.    |
| National River and Water-Induced Disaster<br>Management Policy, 2023         | Establishes guidelines for the prevention and<br>management of water-induced disasters, including<br>measures for safeguarding water supply and<br>sanitation infrastructure.  |
| Domestic Wastewater Effluent Standard, 2022                                  | This standard defines characteristics and limits for domestic wastewater effluent.   |
| Water Supply and Sanitation Act, 2022  | Defines the legal framework for the provision,<br>regulation, and management of water supply and<br>sanitation services, outlining the roles and<br>responsibilities of various governmental levels and<br>stakeholders. |
| National Drinking Water Quality Standard, 2022                               | Sets national standards for drinking water quality to<br>protect public health and ensure safe and clean<br>water for all citizens.  |
| GESI Strategy and Action Plan on Climate<br>Change 2021-2030                 | Promotes gender equality and social inclusion in water and sanitation projects, addressing the impacts of climate change on vulnerable communities.  |
| National Water Resources Policy, 2019  | It includes river basin masterplans, IWRM<br>integration, capacity building, data management,<br>intergovernmental collaboration, and water-induced<br>disaster prevention.  |
| M&E Framework for Water Supply System Functionality and Sustainability, 2019 | The M&E framework focuses on Functionality and<br>Sustainability of Water Supply and led to the<br>establishment of NWASH-MIS, serving as a model<br>for similar frameworks.   |
| National Irrigation Master Plan, 2019  | Outlines the strategic plan for the development and<br>expansion of irrigation facilities, incorporating water<br>supply and sanitation considerations in irrigation<br>projects.  |
| Climate Change Policy, 2019  | Addresses the impacts of climate change on water resources and sanitation systems, promoting resilience and adaptation measures.   |
| National Forest Policy, 2019   | Highlights the role of forests in maintaining water cycles and supporting watershed management, with implications for water supply and sanitation.   |

Table 5: Key Provisions on Water and Sanitation from Various Sectoral Legislation, Policies, and Plans

| Ministry of Energy, Water Resources and Irrigation 2018 White Paper | Details policy directions for the integrated<br>management of water resources, energy production,<br>and irrigation, including provisions for water supply<br>and sanitation.   |
|---|---|
| Total Sanitation Guideline, 2017                                    | Provides guidelines for achieving total sanitation,<br>including community-led initiatives, hygiene<br>education, and the promotion of safe sanitation<br>practices.  |
| Total Sanitation Guideline, 2016                                    | It has defined and included basic and higher-level indicators and aims for clean and healthy Nepal.   |
| Solid Waste Management Rule, 2013                                   | Regulates the management of solid waste to prevent<br>pollution of water resources and ensure sanitary<br>conditions.   |
| Environment Friendly Local Governance<br>Framework, 2013            | Focuses on toilet and waste management and environmental sanitation governance.   |
| Solid Waste Management Act, 2011                                    | Establishes the legal framework for solid waste management, including provisions for protecting water sources from contamination.   |
| National Sanitation and Hygiene Master Plan, 2011                   | Aims to achieve universal access to sanitation and<br>hygiene, with strategic actions and coordination<br>mechanisms at all governmental levels. Focuses on<br>SDF and total sanitation, LGs leadership and multi-<br>stakeholder collaboration.  |
| Water Supply Management Board Act, 2006                             | Establishes the Water Supply Management Board to oversee the provision and regulation of water supply services.   |
| Water Resources Strategy, 2002                                      | Outlines long-term (5 years), medium term (15 years) and long-term (25 years) strategies for the development and management of water resources, including provisions for water supply and sanitation, with an aim to providing people with access to safe and adequate drinking water and sanitation to ensure health security. |
| Nepal Water Supply Corporation Act, 1989                            | Establishes the Nepal Water Supply Corporation to manage and operate water supply services, ensuring reliable and safe water delivery.  |

The Government of Nepal has recognized water and sanitation as a basic human necessity and is committed to achieving universal, safely managed water and sanitation access by 2030, in line with SDG 6.

# 5.2 Provincial and Local Legislations on Water and Sanitation

Nepal's governance structure is comprised of seven provinces, each with its own legislative body and executive offices. In total, the country features 753 local governing bodies, which include six metropolitan cities, 11 sub-metropolitan cities, 276 municipalities, and 460 rural municipalities. This framework signifies Nepal's commitment to decentralizing water and sanitation management, promoting local governance, and ensuring community involvement in resource management. Each province in Nepal is responsible for the development of water resources within its jurisdiction. This includes planning, regulation, and management of water supply and sanitation services. The provinces have legislative powers to develop and enforce laws that cater to their specific needs, although these laws often evolve from existing national laws and policies.

The federal laws act as default or inherited laws, applicable in the absence of province-specific legislation. Therefore, while provinces have the autonomy to tailor laws to their unique context, the development of these regulations is an ongoing process, reflecting the dynamic nature of governance in Nepal.

### Provincial Legislation on Water and Sanitation

While provinces are vested with the authority to develop water resources, the transition from national to provincial legislation is gradual and complex. Provinces often continue to implement federal laws as inherited regulations until they establish their own specific policies. For instance:

- **Koshi Province** has introduced the Provincial Electricity Act 2019, marking a significant step in provincial legislation. However, the proposed Irrigation Bill, which would delineate provincial jurisdiction over irrigation projects, remains unapproved. This bill proposes provincial management of irrigation projects within 200 to 20,000 hectares in the Terai region and 50 to 1,000 hectares in the hills and mountains.
- **Madhesh Province** has enacted the Provincial Act related to Electricity, 2020, indicating a move towards self-governance in energy management.
- **Sudurpashchim Province** has passed the Environment Protection Act 2019, showcasing efforts to address environmental concerns at the provincial level.

These legislative actions reflect the provinces' attempts to establish autonomy and develop sectorspecific regulations, though significant work remains.

### Local Level Legislation

At the local level, municipalities are responsible for implementing WASH initiatives. However, the progress varies significantly:

- Water and Sanitation Management Board Act: Very few local governments have developed and endorsed water and sanitation management board act.
- **Completed and Endorsed Municipal WASH Plans:** Over 200 municipalities have completed and endorsed their WASH plans and the process is ongoing in 71 municipalities.
- Data Collection for WASH Plan Preparation: Data collection has been accomplished in 291 municipalities, ongoing in 64 municipalities, while 340 municipalities have not yet started the process.

Approximately 26.5% of local governments have completed their WASH plan preparation, with ongoing efforts in 10%, primary data collected by 39%, and around 45% yet to start the WASH Plan preparation (NWASH MIS, 2024).

The legislative and practical efforts to improve water and sanitation at the provincial and local levels in Nepal reflect a complex but essential transition. Effective management of water resources, coupled with clear legal frameworks, is crucial for sustainable development. Policymakers and stakeholders must collaborate to address these challenges, ensuring the provision of safe and quality water and sanitation services across all regions of Nepal.

## 5.3 Key Water and Sanitation Sector Actors, Institutions and Functions

Nepal has numerous important institutions and actors dedicated to the water and sanitation sector, distributed across the three tiers of government: federal, provincial, and local. These institutions are crucial in various aspects, including the formulation of policies, strategic planning, execution of projects, and monitoring and oversight of water and sanitation-related activities. Their collaborative efforts ensure the effective delivery of water and sanitation services and contribute to the overall health and well-being of the population.

| Level   | Actors, Institutions   | Functions  |
|---------|--|--|
| Federal | <ul> <li>Ministries: Prime Minister's Office, Ministry of<br/>Finance, Ministry of Water Supply</li> <li>(MOWS)/Department of Water Supply and<br/>Sewerage Management (DWSSM), Ministry of<br/>Health and Population (MOHP)/Department of<br/>Health Services, Ministry of Education,<br/>Science, and Technology (MOEST)/Centre for<br/>Human Resource Development, Ministry of<br/>Federal Affairs and General Administration<br/>(MOFAGA), Ministry of Industry, Commerce,<br/>and Supplies (MOICS).</li> <li>National Planning Commission (NPC),<br/>National Sanitation and Hygiene Coordination<br/>and Steering Committee, Federal-Level<br/>School WASH Coordination Committee,<br/>Multisector Steering Committees, etc.</li> <li>Municipal Association of Nepal (MuAN) and<br/>various WASH projects led by MuAN such as<br/>MuNASS/UCLG ASPAC/BMGF, WASH<br/>Governance/UNICEF, etc., and National<br/>Association of Rural Municipalities (NARMIN),<br/>Association of District Coordination<br/>Committees of Nepal (ADCCN).</li> <li>WASH Cluster, DPs (UN, INGOs, NGOs),<br/>private sector (Federation of Nepalese<br/>Chambers of Commerce and Industry<br/>[FNCCI], Confederation of Nepalese<br/>Industries [CNI], etc.) and civil society<br/>organizations (CSOs); NGO Federation, The<br/>Federation of Drinking Water and Sanitation<br/>Users Nepal (FEDWASUN), etc.</li> </ul> | <ul> <li>Making policies, regulations/Acts and strategies/roadmaps (e.g., Integrated Water and Sanitation Policy, Water and Sanitation Act, Hand Hygiene for All Roadmap 2022-2030, water quality standards, hospital waste management guidelines).</li> <li>Strengthening WASH governance at all three levels of governance.</li> <li>Inter-ministerial and donor/development partner coordination.</li> <li>Monitoring, capacity building of all three levels on the use of national WASH monitoring system (NWASH) and data collection, recording, analysis, and reporting on sustainability of systems.</li> <li>Making policy and regulation on fecal sludge management (FSM) and operations and maintenance (O&amp;M).</li> <li>Design and construction of large projects.</li> <li>Advocacy, behavior change communication, and awareness raising at national level.</li> <li>Development of business plans for private sector engagement.</li> </ul> |

### Table 6: Nepal's Major Water and Sanitation Institutions<sup>19</sup>

<sup>&</sup>lt;sup>19</sup> USAID. 2023. Sanitation and Hygiene Sector Human Resource Capacity Needs Assessment: Nepal Country Report. Washington, DC., USAID Water, Sanitation, and Hygiene Partnerships and Learning for Sustainability (WASHPaLS) #2 Activity.

| Provincial  | Ministries of Water Supply, Social<br>Development, Rural Development, Energy,<br>Education, Health (responsible for WASH<br>activities at community, school, and health<br>care facilities).<br>Provincial WASH Coordination Committee (P-<br>WASHCC).<br>Water Supply and Sanitation Divisional<br>Offices (WSSDOs), DPs, CSOs (NGO<br>Federation, FEDWASUN).  | Design, implementation, and monitoring<br>of WASH projects (medium size).<br>Development of provincial WASH plans<br>and roadmaps, policies, regulations in<br>line with the federal acts and policies.  |
|---|---|--|
| <b>Local -</b><br>Rural<br>Municipality,<br>Urban<br>Municipality | Municipality and Rural Municipality.<br>Municipality WASH Unit (Social development,<br>Health, Education, WASH may take lead).<br>Committees: District Coordination Committee,<br>Municipal WASH Coordination Committee (M-<br>WASHCC), WASH in School Coordination<br>Committee and School Management<br>Committee, Health Facility Operation and<br>Management Committee, Water and<br>Sanitation User Committee (WSUC).<br>Women groups, volunteers and community-<br>led total sanitation facilitators.<br>Local entrepreneurs, private sector. | Establishment of WASH unit with<br>needed staff, collection, analysis, and<br>input of data into the NWASH system.<br>Preparation of Municipal WASH (M-<br>WASH) Plans.<br>Implementation, follow up, and<br>supervision of WASH activities,<br>reporting.<br>Coordination among the WASH actors<br>O&M of WASH facilities.<br>Emptying of containment systems, solid<br>and liquid waste management, FSM.<br>Upgrading of WASH service facilities at<br>healthcare facilities, schools, public<br>places. |

**Source:** MoWS 2024, UN Water GLASS Report 2019 and Nepal Case Study Report 2019, 2022, USAID 2023 Country Report, USAID Global Water Strategy 2022-2027, World Bank Water Sector Governance and Infrastructure Support Project 2022, ADPC 2023, etc.

# 5.4 Nepal's Overall Progress on Achieving SDG 6 (Water and Sanitation)

The country has made notable advancements in access to basic water supply, with 96.4 percent of households having access to basic water supply in 2022. Similarly, the proportion of the population using safely managed sanitation services, including a hand-washing facility with soap and water, reached 61.1 percent in 2022, close to the target of 62 percent. According to the Department of Water Supply and Sewerage Management (DWSSM), however, high and mid-level water supply coverage remains low at 24.84 percent, as well as only 25.81 percent of the population has access to quality drinking water.

Almost 42,000 water supply systems have been constructed, with more than 92 percent located in hill and high hill areas. Of these systems, only 28.13 percent are fully functional, while 23.79 percent require reconstruction and restoration.<sup>20</sup> Access to piped water supply varies significantly across regions, with 82.88 percent of households in the Mountain region, 80.50 percent in the Hill region, and only 18.62 percent in the Terai region having access. In the Terai, most households rely on tube wells as their primary drinking water source.<sup>21</sup> However, water-borne diseases and

<sup>&</sup>lt;sup>20</sup> Department of Water Supply and Sewerage Management (DoWSSM). (2022). *Annual Report 2022*. Government of Nepal.

<sup>&</sup>lt;sup>21</sup> SDGs National Network. Breaking Structural Barriers- Achieving the SDGs: Voluntary Mid-Term Review of the SDGs in Nepal, Civil Society Spotlight Report 2023. National Campaign for Sustainable Development Nepal, Save the Children-Nepal, January 2024, Kathmandu.

monsoon-related epidemics persist as significant challenges for the WASH sector in Nepal, highlighting the need for enhanced water quality and sanitation practices. Additionally, the treatment of industrial and domestic wastewater demands urgent attention, as a substantial amount of untreated wastewater is still being released into the environment.

| Indicator | Description of SDG Indicators  | Baseline |      | Targets | Progress |      |       |
|-----------|--|----------|------|---------|----------|------|-------|
| mulcator  | Description of SDG indicators  | 2015     | 2019 | 2022    | 2030     | 2019 | 2022  |
| 6.1.1     | Proportion of population using<br>safely managed drinking water<br>services  | 15       | 35   | 50      | 90       | 25   | 25.81 |
| 6.1.1.1   | Access to basic water supply (%)   | 87       | 90.2 | 92.6    | 99       | 88   | 96.4  |
| 6.2.1.1   | Proportion of population using<br>safely managed sanitation services<br>including a hand-washing facility<br>with soap and water | 30       | 46   | 62      | 90       | 61.1 | 61.1  |
| 6.2.1.2   | Basic sanitation coverage (%)  | 82       | 86.5 | 89.9    | 99       | 89.9 | 95.5  |
| 6.2.1.3   | Percentage of children under age 5 with Diarrhea in the last 2 weeks   | 12       | 8    | 6       | 1        | 10   | 10    |
| 6.3.1.1   | Proportion of untreated industrial wastewater (%)  | 99       | 75.3 | 57.5    | 10       | 95   | 95    |
| 6.3.1.2   | Percentage reduction of untreated domestic wastewater  | 99       | 99   | 96      | 70       | 96.8 | 96.8  |

#### Table 7: SDG 6 Progress Chart<sup>22</sup>

Nepal has made remarkable strides in the sanitation sector, being the first in South Asia and second globally, after Cambodia, in overall sanitation progress since 2015, with 95.5 percent of households having access to basic sanitation facilities in 2022, exceeding the target of 89.9 percent. Nepal completed a 22 percent progress in basic sanitation nationwide and was declared an open defecation-free (ODF) and total sanitation-initiated nation after declaring all local levels ODF in September 2019.<sup>23</sup> Access to basic handwashing facilities increases with wealth, with only 45 percent of the population in the lowest wealth quintile having basic handwashing facilities compared to 97 percent in the highest quintile. The COVID-19 pandemic has heightened awareness of handwashing, but massive campaigns are needed to educate poor and rural populations on proper handwashing practices to combat hand-borne diseases like COVID-19.<sup>24</sup>

Moreover, the 2021 Vulnerability and Risk Assessment (VRA) report highlights the impacts of climate change on the quantity and quality of WASH infrastructures and services, particularly affecting women, the poor, and marginalized communities due to climate-induced water-related diseases (VRA, 2021). Nepal faces challenges in managing wastewater and faecal sludge, with only 2.1 percent of waste being treated. The second Nationally Determined Contribution (NDC) aims to treat 380 million liters of wastewater per day and manage 60,000 cubic meters of faecal sludge per year by 2025.<sup>25</sup>

<sup>&</sup>lt;sup>22</sup> National Planning Commission. 2024. Voluntary National Review of Sustainable Development Goals. Government of Nepal, Kathmandu.

<sup>&</sup>lt;sup>23</sup> NGO Federation. (2023). *Nepal Civil Society Report on SDGs – 2023*. Nepal SDG Forum, Kathmandu.

<sup>&</sup>lt;sup>24</sup> Ministry of Health and Population [MoHP], USAID, New ERA, and ICF. 2023. Nepal Demographic and Health Survey 2022. Kathmandu, Nepal: Government of Nepal, Kathmandu.

<sup>&</sup>lt;sup>25</sup> Government of Nepal. (2020). Second Nationally Determined Contribution (NDC). Kathmandu.

### Chapter 6: Provincial and Local Governments' Efforts to Localize and Implement SDG 6

### 6.1 Efforts of Provincial and Local Governments to Localize and Implement SDGs

In Nepal, efforts to localize and implement SDGs are spearheaded by provincial and local governments through dedicated committees overseen by the Vice Chairs of provincial planning commissions. These committees serve as crucial platforms for coordinating and driving SDG initiatives within their respective provinces. Guided by members of the NPC assigned to each province, these committees ensure the effective alignment and execution of SDG-related strategies at the provincial level. By leveraging local resources and expertise, they contribute significantly to advancing sustainable development tailored to the diverse needs and priorities of Nepal's provinces.

**Provincial Government Initiatives:** Provincial Policy and Planning Commissions play a central role in integrating SDGs into provincial planning and policy frameworks. These commissions have developed periodic plans that incorporate SDG principles, reflecting commitments to sustainable water and sanitation management. For instance, Bagmati Province's recent 5-Year plan and Gandaki Province's strategic documents explicitly prioritize SDGs, outlining specific actions to achieve targets. Additionally, provinces have produced SDG Baseline Reports and customized resources such as SDG Coding Resource Books for Budget and Program, ensuring financial allocations align with SDG objectives.

At the governance level, Chief Ministers and Local Government Association (LGA) Chairpersons contribute to a cohesive approach through the National High-Level Steering Committee. This collaboration fosters unified strategies for SDG implementation across all administrative levels. Within provinces, the SDG Steering Committees, chaired by Chief Ministers, oversee the alignment of provincial initiatives with national SDG frameworks. Meanwhile, SDG Coordinating Committees led by Vice Presidents of Provincial Planning Commissions enhance coordination and implementation effectiveness.

**Local Government Actions:** The localization of SDGs at the local level is facilitated by committees chaired by mayors or chairpersons, tasked with integrating and monitoring SDG progress within local development plans. These committees actively engage communities and utilize local knowledge to tailor SDG strategies, ensuring alignment with local needs and challenges. District Coordination Committees (DCCs) serve as pivotal entities for monitoring and guiding local development initiatives, aligning these efforts with overarching SDG objectives. Several local governments have independently undertaken Voluntary Local Reviews (VLRs) to track progress and identify areas for improvement.

Moreover, MuAN developed a comprehensive Voluntary Subnational Review (VSR) Report in 2020, highlighting local achievements and strategies in SDG implementation. At the grassroots level, SDG Implementation Committees, led by local government heads, drive forward inclusive development agendas by harnessing community participation and resources. Hence, Nepal's provincial and local governments demonstrate robust commitment and proactive measures in advancing SDGs. Despite regional variations in progress, these efforts underscore a collective drive towards equitable access and resilient community development. Continued collaboration and targeted interventions are essential to address disparities and ensure sustainable development across Nepal's diverse provinces.

## 6.2 Situation and Province Wise Progress in SDG 6 Implementation

Although Nepal has made significant progress in achieving SDG 6, the level of advancement varies across its provinces.

| SDG   | Nepal  | Progress in Provinces (Up to 2022) |       |         |         |         |         |               |         |  |  |
|---|--------|------------------------------------|-------|---------|---------|---------|---------|---------------|---------|--|--|
| Indicators  | Target | Nepal                              | Koshi | Madhesh | Bagmati | Gandaki | Lumbini | Sudurpashchim | Karnali |  |  |
| Basic water<br>supply<br>coverage<br>(%)  | 99     | 96.4                               | 97.1  | 97.4    | 91.3    | 94.1    | 96.1    | 95.4          | 86.1    |  |  |
| Household<br>with access<br>to piped<br>water<br>supply (%)                                   | 90     | 33.3                               | 46.7  | 5.2     | 40.8    | 50.4    | 32.9    | 21.3          | 36.1    |  |  |
| Households<br>using<br>improved<br>sanitation<br>facilities<br>which are<br>not shared<br>(%) | 95     | 64.6                               | 70.1  | 42.3    | 64      | 76.3    | 73.4    | 74.6          | 77.6    |  |  |

Table 8: Province Wise Progress on SDG 6 (Water and Sanitation)

Source: Province Planning Commissions (2024), National Planning Commission (2024), VNR Report (2024), MoWS, (2022).

**Basic Water Supply Coverage:** Nepal has set an ambitious target of 99 percent basic water supply coverage. By 2022, the national average reached 96.4 percent, with notable regional disparities. Koshi and Bagmati provinces exceeded the national average with coverage rates of 97.1 percent and 97.4 percent, respectively. Conversely, Karnali and Gandaki provinces reported lower coverage rates at 86.1 percent and 91.3 percent, respectively.

**Household Access to Piped Water Supply:** The national target for household access to piped water supply is 90 percent. However, only 33.3 percent of households across Nepal had access to piped water supply by 2022. This indicator reveals significant provincial disparities. Madhesh province showed the lowest access at 5.2 percent, while Lumbini province had the highest access at 50.4 percent. Other provinces such as Koshi (46.7 percent), Bagmati (40.8 percent), and Karnali (36.1 percent) also reported higher access compared to the national average.

**Households Using Improved Sanitation Facilities:** Improved sanitation facilities, which are not shared, are crucial for health and well-being. Nepal's target for this indicator is 95 percent. By 2022, 64.6 percent of households used improved sanitation facilities nationwide. Provinces like Karnali (77.6 percent), Gandaki (76.3 percent), Sudurpashchim (74.6 percent), and Lumbini (73.4 percent) performed well, surpassing the national average. However, Madhesh province lagged significantly, with only 42.3 percent of households having access to improved sanitation facilities.

These provincial disparities indicate the need for targeted interventions to ensure equitable access to water and sanitation services across all provinces. Strengthening provincial capacities and addressing local challenges are essential for achieving the national targets and ensuring sustainable water and sanitation management for all.

## 6.3 Provinces Wise Budget Allocation for Water and Sanitation for FY 2023/2024

In the fiscal year 2023/2024, the overall budget for seven provinces amounted to NPR 279.6 billion. This represents a decrease of NPR 25.7 billion from the previous fiscal year (2022/23). The budget composition includes NPR 107.8 billion from federal transfers, comprising NPR 98 billion as federal grants and NPR 9.8 billion as external grants. Provinces' own revenue sources contributed NPR 171.8 billion to the total budget, highlighting their significant role in financing provincial expenditures.

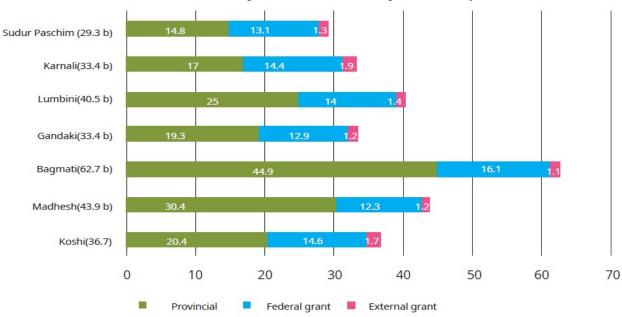


Figure 4: Province Wise Budget Allocation by Source in FY 2023/2024<sup>26</sup>

During the fiscal year 2023/24, seven provinces collectively allocated NPR 17.8 billion to the WASH Sector, with a notably sparse focus on sanitation. Out of this total budget, only NPR 54 million, equivalent to 0.3%, was dedicated to sewerage management. The breakdown of allocations by province reveals significant disparities: Koshi allocated NPR 2.6 billion, Madhesh NPR 2.8 billion, Bagmati NPR 3.5 billion, Gandaki NPR 2.5 billion (including NPR 1 million for sanitation), Lumbini NPR 1.9 billion (including NPR 53 million for sanitation), Karnali NPR 1.9 billion. Notably, Gandaki and Lumbini provinces were among the few that allocated specific amounts for sanitation, while the rest did not allocate any funds for sanitation services.<sup>27</sup>

Moreover, In the fiscal year 2022/23, seven provinces collectively spent NPR 16.8 billion on the WASH Sector, with a minimal allocation towards sanitation, specifically NPR 41 million, representing only 0.2% of the total expenditure. The expenditure breakdown by province is as follows: Koshi spent NPR 2.6 billion, Madhesh NPR 1.2 billion, Bagmati NPR 4 billion, Gandaki NPR 2.8 billion, Lumbini NPR 2.3 billion, Karnali NPR 1.8 billion, and Sudurpashchim NPR 2 billion. Notably, Bagmati, Gandaki, and Lumbini provinces allocated specific amounts for sanitation, with expenditures totaling NPR 4.5 million, NPR 5 million, and NPR 31 million respectively. The remaining provinces did not allocate or spend any funds on sanitation services during this period.<sup>28</sup>

<sup>28</sup> ibid.

<sup>&</sup>lt;sup>26</sup> Water Aid, WASH Financing 2023/2024.

<sup>&</sup>lt;sup>27</sup> Water Aid, WASH Financing 2023/2024, Nepal WASH Budget Brief 2024/UNICEF.

## 6.4 WASH Budget Allocation for Rural and Urban Areas

Over the past three years (2020/21 to 2022/23), federal allocations for WASH have been heavily concentrated in Nepal's urban regions, with between 78% and 90% directed towards three specific types of urban areas. This includes 29% to 39% allocated to the Kathmandu Valley, encompassing metropolitan cities and urban municipalities within Kathmandu, Lalitpur, and Bhaktapur districts. Another 26% to 32% went to other metropolitan and sub-metropolitan cities categorized as "Other urban areas," while urban municipalities received 13% to 31% of the allocations.

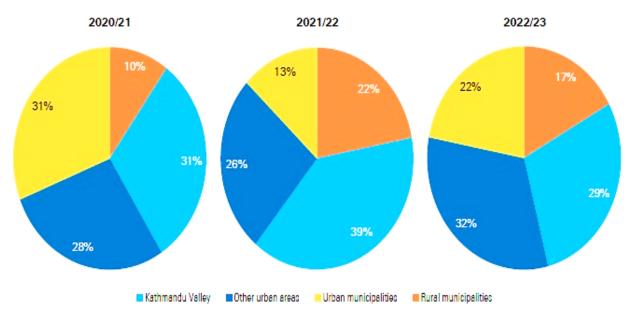


Figure 5: Budget Allocation for Rural and Urban Areas<sup>29</sup>

In stark contrast, rural areas, specifically rural municipalities, received only 10% to 22% of the budget. Despite these allocations, it's important to note that a significant portion of urban municipalities are, in fact, rural in nature. This disparity is highlighted by the 2021 census, which reported that 33.8% of Nepal's population resides in rural municipalities, underscoring the skewed distribution of federal WASH funds towards urban areas, despite the rural population size.

The above budget allocation refers solely to the Nepal Government's contribution and does not account for *private funds* (such as user fees, household investments, or commercial financing), public funds (including taxes, official grants, and government revenue), or mixed public and private funds (such as transfers from NGOs, foundations, INGOs, donors/ODA grants, remittances, and concessional financing/soft loans).<sup>30</sup>

## 6.5 Main Source of Drinking Water of Households by Provinces

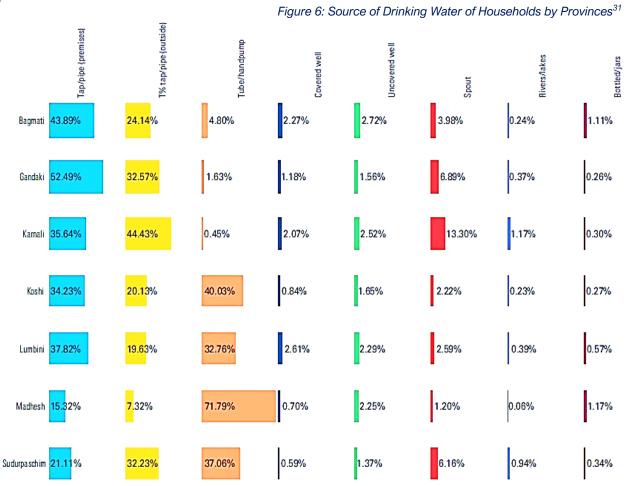
According to the 2021 Census findings, piped water access was reported by approximately 35% of households directly on their premises, with an additional 22% having access to piped water outside their premises. Tubewells or hand pumps served as the primary drinking water source for

<sup>&</sup>lt;sup>29</sup> UNICEF (2024). *Nepal WASH Budget Brief.* UNICEF Nepal Country Office, Lalitpur, April 2024.

<sup>&</sup>lt;sup>30</sup> Sanitation and Water for All (SWA). 2020. Water and Sanitation: How to make Public Investment Work: A Handbook for Finance Ministers.

30% of households, while 13% relied on jar or bottled water (5%), public spouts (4%), uncovered wells (2%), covered wells (1.5%), and surface water (0.5%). Variations in water sources were notable across Nepal's 77 districts

Madhesh predominantly relied on Tubewells or hand pumps, whereas other provinces primarily depended on Tubewells or piped water available either on their own premises or neighboring premises.



The western regions and Madhesh province exhibited the lowest access to piped or tap water on premises, with Terai districts along the southern belt showing the highest prevalence of Tubewells or hand pumps for drinking water. In Kathmandu Valley (comprising Kathmandu, Lalitpur, and Bhaktapur), jar and bottled water are most commonly used. Dang district in Lumbini had the highest proportion (26%) of households using covered and uncovered wells as their primary drinking water source.

## 6.6 Disposal of Toilet/Latrine Waste by Households in Provinces

The table 9 below presents a comprehensive overview of sanitation facilities utilized by households in various provinces of Nepal as of the latest census data. Flush toilets connected to septic tanks are the most prevalent sanitation option, with a total of 3,667,780 households across

<sup>&</sup>lt;sup>31</sup> CBS, 2023 (Chart Created by UNICEF, 2024)

all provinces adopting this method. In contrast, flush toilets using public sewerage systems are less common, serving 653,710 households nationwide. This disparity suggests that while many households have access to flush toilets, the majority rely on septic tanks rather than public sewerage systems. Pit latrines remain a significant sanitation solution, particularly in rural and less developed areas. Provinces such as Madhesh and Koshi report substantial use of pit latrines, with 561,660 and 394,698 households respectively opting for this traditional method. This underscores the ongoing reliance on basic sanitation infrastructure in these regions, reflecting both economic and infrastructural challenges in expanding modern sanitation services.

| Provinces     | Flush Toilets<br>(Public<br>Sewerage) | Flush Toilets<br>(Septic Tank) | Pit<br>Latrines | Public<br>Toilets | Without Toilet<br>Facilities | Total     |
|---------------|---------------------------------------|--------------------------------|-----------------|-------------------|------------------------------|-----------|
| Koshi         | 26,542                                | 726,577                        | 394,698         | 5,362             | 37,576                       | 1,190,755 |
| Madhesh       | 31,159                                | 414,032                        | 561,660         | 10,322            | 139,210<br>(46.17%)          | 1,156,383 |
| Bagmati       | 512,026<br>(78.32%)                   | 777,874                        | 253,51          | 5,031             | 19,471                       | 1,567,917 |
| Gandaki       | 18,456                                | 501,855                        | 132,898         | 2,131             | 6,292                        | 661,632   |
| Lumbini       | 45,867                                | 668,730                        | 357,955         | 4,763             | 64,030<br>(21.23%)           | 1,141,345 |
| Sudurpashchim | 11,511                                | 358,486                        | 177,975         | 3,485             | 25,315                       | 576,772   |
| Karnali       | 8,149                                 | 220,226                        | 126,779         | 1,287             | 9,596                        | 366,037   |
| Total         | 653,710                               | 3,667,780                      | 2,005,480       | 32,381            | 301,490                      | 6,660,841 |

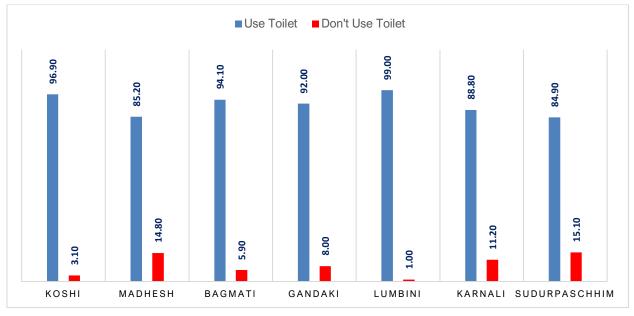
Source: CBS 2023.

Public toilets are comparatively scarce, with only 32,381 households nationwide using such facilities. Bagmati province records the highest number of households utilizing public toilets (5,031), indicating efforts to provide communal sanitation options in urban centers. A concerning finding is the number of households lacking any toilet facilities, totaling 301,490 nationwide. Notably, provinces like Lumbini and Madhesh report higher percentages of households without proper sanitation infrastructure, highlighting significant gaps in access to basic amenities. This highlights the need for targeted investments in sanitation infrastructure and awareness campaigns, particularly in rural and underserved areas where access remains limited. Provincial disparities in sanitation access are evident. Bagmati province stands out with the highest total of households using flush toilets (1,567,917), indicating better access to improved sanitation infrastructure compared to other provinces. In contrast, provinces like Karnali and Sudurpashchim report lower overall numbers across all sanitation categories, reflecting challenges in infrastructure development and economic disparities.

## 6.7 Province Wise Access to Toilet During Menstruation

Menstrual health and hygiene are major public health and social issues in Nepal. The data on province-wise access to toilets during menstruation in Nepal reveals significant disparities in sanitation coverage. Koshi Province exhibits one of the highest sanitation coverage, with 96.90% of individuals using toilets and only 3.10% not using them, indicating relatively comprehensive access to menstrual hygiene facilities. Similarly, Lumbini Province shows impressive figures with 99.00% using toilets and a mere 1.00% not using them, reflecting nearly universal access.





Source: NWASH MIS 2023, DoWSSM

Bagmati and Gandaki Provinces also demonstrate high levels of access, with 94.10% and 92.00% using toilets, respectively, though there are still notable gaps at 5.90% and 8.00%. Conversely, Madhesh and Sudurpashchim Provinces face more pronounced challenges. In Madhesh, 85.20% use toilets during menstruation, leaving 14.80% without access, highlighting a substantial portion of the population in need of improved sanitation facilities.

Sudurpashchim Province shows the lowest percentage of toilet use at 84.90%, with 15.10% not using toilets, indicating the greatest need for targeted interventions to enhance menstrual hygiene management. Karnali Province, with 88.80% using toilets and 11.20% not, also underscores significant gaps that must be addressed to ensure equitable access to sanitation across all regions. These disparities call for tailored strategies to enhance WASH services, particularly for marginalized and vulnerable communities.

# 6.8 WASH System Situation Assessment: Provincial Status

The Government of Nepal, through the Ministry of Water Supply, conducted a WASH System Situation Assessment as part of the Joint Sector Review (JSR) in 2023. The provincial status, challenges, and proposed strategies were derived from comprehensive consultations held during thematic workshops and field visits. These consultations utilized 35 sets of questionnaires, categorized by a traffic light system (green, yellow, red) to assess various aspects of the provincial WASH landscape across seven thematic areas.

The workshops provided a platform for stakeholders to identify key challenges and opportunities, guiding the formulation of actionable strategies for improvement. A standardized approach using Common Questionnaires and a Traffic Lights Indicator system helped ensure consistent assessment across all seven provinces. Each thematic area had a subset of 4 to 10 questions, and workshops for each group shaped the final traffic light outcomes, which included short, medium, and long-term actions. The results, shown in the Traffic Light Summary Table, provide a clear representation of agreed actions and strategies for each province. This system not only

simplifies communication but enhances transparency and comparability, supporting a more coordinated approach to addressing WASH challenges, especially in areas needing further attention, such as infrastructure, institutional capacity, and governance.

| Traffic Light Summary: Key Components with Thematic Area |  |           |         |         |         |         |         |                  |   |          |          |
|--|--|-----------|---------|---------|---------|---------|---------|------------------|---|----------|----------|
|  | Thematic Area/ Component   | Koshi     | Madhesh | Bagmati | Gandaki | Lumbini | Karnali | Sudur<br>Paschim |   | Total    | L        |
| Go   | vernance, Institutional Arrangement and Capacity Bu  | ilding (C | GIACB): |         |         |         |         |                  |   |          | -        |
| 1.   | Discussions to establish WASH legal frameworks and institutional mechanism                                     |           |         |         |         |         |         |                  | - | 7        | -        |
| 2.   | WASH legal frameworks presence   |           |         |         |         |         |         |                  | - | 5        | 2        |
| 3.   | Dedicated WASH institutional mechanisms  |           |         |         |         |         |         |                  | - | 7        | •        |
| 4.   | Effectiveness of WASH legal frameworks   |           |         |         |         |         |         |                  | - | 2        | į        |
| 5.   | Established provincial coordination mechanism between 3 tiers of government and concerned stakeholders         |           |         |         |         |         |         |                  | - | 5        | 2        |
| 6.   | Effective provincial coordination mechanism  |           |         |         |         |         |         |                  | - | 4        | 3        |
| 7.   | Established service provider/utility models for water and sanitation services                                  |           |         |         |         |         |         |                  | - | 7        | <b>-</b> |
| 8.   | Established regulatory framework with the provision of licensing and KPI                                       |           |         |         |         |         |         |                  | - | 1        | e        |
|  | Transparency and accountability mechanism  |           |         |         |         |         |         |                  | - | 6        |          |
| 10.  | Capacity gap assessment and preparation of capacity development plan   |           |         |         |         |         |         |                  | - | 3        | 4        |
| Saf  | ely Managed Water Supply Services:   |           |         |         |         |         |         |                  |   |          | _        |
| 1.   | Proper understanding on meaning of safely managed  |           |         |         |         |         |         |                  | 1 | 6        | <u> </u> |
| _  | water supply service and program developed   |           |         |         |         |         |         |                  |   |          |          |
| 2.   | Key bottleneck analysis to achieve SDG and Periodic  |           |         |         |         |         |         |                  | - | 3        | 1        |
| 3  | plan targets on safely managed water supply service<br>Presence of accredited lab/mini laboratory/kit facility |           |         |         |         |         |         |                  | - |          |          |
|  | and human resource   |           |         |         |         |         |         |                  | - | 7        |          |
| 4.   | Public disclosure and reporting mechanism for  |           |         |         |         |         |         |                  |   | 0        |          |
|  | assurance of water quality   |           |         |         |         |         |         |                  | - | 6        |          |
| Sa   | fely Managed Sanitation Services and Hygiene:  |           |         |         |         |         |         |                  |   |          |          |
| _  | Proper understanding on meaning of safely managed  |           |         |         |         |         |         |                  |   | 7        |          |
|  | sanitation service and hygiene   |           |         |         |         |         |         |                  | _ | <i>′</i> |          |
| 2.   | Key bottleneck analysis to achieve SDG and Periodic  |           |         |         |         |         |         |                  | 1 | 2        | 1        |
| _  | plan targets on safely managed sanitation service  |           |         |         |         |         |         |                  |   |          |          |
| 3.   | Presence of accredited lab/mini laboratory/kit facility<br>and human resource for monitoring SMSS              |           |         |         |         |         |         |                  | - | 1        |          |
| 4.   | Comprehensive understanding/suitability analysis of  |           |         |         |         |         |         |                  | - | 2        |          |
| 5.   | sewer and non-sewer sanitation<br>Standardization and regulating mechanism along the                           |           |         |         |         |         |         |                  |   |          |          |
|  | sanitation value chain (containment to safely reuse/disposal)  |           |         |         |         |         |         |                  | - | 2        | 3        |
| 6.   | Public disclosure and reporting mechanism for sanitation service level   |           |         |         |         |         |         |                  | - | 1        |          |
| Se   | ctor Financing:  |           |         |         |         |         |         |                  |   |          |          |
| _  | Assessment of Investment requirement and available financial resources   |           |         |         |         |         |         |                  | - | 6        |          |
| 2.   | Presence of WASH financial strategy, guiding documents and financial procedure to meet the investment plan     |           |         |         |         |         |         |                  | - | 1        |          |
| 3.   | WASH Business plan available and implemented   |           |         |         |         |         |         |                  | - | 3        | 4        |
| 4.   | Financing institution, private sector and household leveraged the supply of finance in WASH                    |           |         |         |         |         |         |                  | - | 6        | 3        |
| cc   | A & DRR:   |           |         |         |         |         |         |                  |   |          |          |
| 1.   |  |           |         |         |         |         |         |                  |   |          |          |
|  | level WASH plan, policy, program etc.  |           |         |         |         |         |         |                  | - | 5        |          |

Table 10: WASH System Situation Assessment<sup>32</sup>

<sup>&</sup>lt;sup>32</sup> MoWS. (2023). Water Supply, Sanitation & Hygiene: Sector Performance Report. Joint Sector Review. Kathmandu

| Thematic Area/ Component   | Koshi | Madhesh | Bagmati | Gandaki | Lumbini | Karnali | Sudur<br>Paschim |   | Tota | al |
|--|-------|---------|---------|---------|---------|---------|------------------|---|------|----|
| <ol> <li>Guidelines/ working procedure/ standards for<br/>mainstreaming climate change adaptation and<br/>disaster risk reduction in place for WASH landscape</li> </ol> |       |         |         |         |         |         |                  | - | 6    | 1  |
| 3. Vulnerability risk assessment done in existing WASH<br>infrastructures and services   |       |         |         |         |         |         |                  | - | 4    | 3  |
| GESI:  |       |         |         |         |         |         |                  |   |      |    |
| 1. GESI consideration reflected in WASH plan, policy, and legal frameworks   |       |         |         |         |         |         |                  | - | 6    | 1  |
| 2. GESI representation in WASH sector  |       |         |         |         |         |         |                  | - | 6    | 1  |
| 3. Concerns from GESI representative is listened, recorded, and acted upon   |       |         |         |         |         |         |                  | - | 6    | 1  |
| Sector Planning, M&E:  |       |         |         |         |         |         |                  |   |      |    |
| 1. Provincial/Local level WASH Plan alignment with SDG<br>6 goals and indicators   |       |         |         |         |         |         |                  | 2 | 5    |    |
| 2. Priority program and projects of WASH Plan included<br>and budgeted in annual fiscal plan   |       |         |         |         |         |         |                  | 1 | 5    | 1  |
| 3. WASH expenditures tracked and analysed  |       |         |         |         |         |         |                  | - | 3    | 4  |
| 4. Presence of dedicated MIS unit  |       |         |         |         |         |         |                  | - | 5    |    |
| 5. CCA/ DRM/ GESI related segregated data available in WASH monitoring and evaluation  |       |         |         |         |         |         |                  | - | 3    | 4  |

The WASH system situation assessment reveals significant gaps in governance, institutional capacity, water supply, sanitation, finance, climate change adaptation, and gender equality across the seven provinces of Nepal. Each province faces unique challenges that hinder the effective management of water, sanitation, and hygiene (WASH) services. Addressing these gaps is crucial for improving the overall quality of life and ensuring equitable access to essential services for marginalized communities.

| Province | Governance &<br>Institutional<br>Capacity  | Water<br>Supply   | Sanitation & Hygiene  | Finance  | Climate<br>Change  | Gender &<br>Social<br>Inclusion                                  |
|----------|--|---|---|--|--|--|
| Koshi    | Low political<br>will, lack of<br>human<br>resources,<br>weak inter-<br>sectoral links | Poor water<br>quality,<br>reliance on<br>shallow<br>tubewells       | Limited focus<br>on inclusive<br>sanitation, low<br>FSM<br>prioritization | No<br>sustainable<br>financing<br>strategies,<br>low private<br>sector<br>engagement | Poor<br>knowledge of<br>localizing<br>NAP,<br>vulnerability<br>assessments | Gaps in<br>gender and<br>disability-<br>friendly<br>policies     |
| Madhesh  | Absence of<br>legal<br>frameworks,<br>inadequate<br>human<br>resources                 | Majority rely<br>on shallow<br>tubewells,<br>dry season<br>scarcity | Limited<br>innovation in<br>sanitation<br>infrastructure                  | Lack of<br>dedicated<br>sanitation<br>financing<br>programs                          | Unprepared<br>for climate<br>challenges,<br>groundwater<br>depletion       | Limited<br>gender-<br>responsive<br>sanitation<br>policies       |
| Bagmati  | Insufficient<br>political<br>resolve, lack of<br>human<br>resources                    | Low-quality<br>services,<br>poor<br>awareness of<br>water safety    | Limited FSM<br>infrastructure,<br>low sanitation<br>safety                | Inadequate<br>financing<br>models for<br>WASH  | Limited<br>knowledge<br>on<br>vulnerability<br>assessments                 | Poor<br>integration<br>of gender<br>equality in<br>WASH<br>plans |

#### Table 11: WASH System Situation Assessment<sup>33</sup>

| Gandaki      | Nascent<br>political will,<br>unclear<br>institutional<br>arrangements | Limited<br>access to<br>safe water,<br>inadequate<br>testing                | Lack of budget<br>and planning<br>for sanitation     | Weak<br>financing<br>mechanisms,<br>no<br>investment<br>models              | Poor<br>integration of<br>DRR and<br>CCA in<br>WASH plans | Limited<br>capacity to<br>design<br>inclusive<br>WASH<br>structures |
|--------------|--|---|--|---|---|---|
| Lumbini      | Incipient<br>political<br>resolve,<br>inadequate<br>framework          | Lack of<br>water testing<br>labs,<br>unawareness<br>of quality<br>standards | Challenges in<br>FSM due to<br>land scarcity         | Significant<br>shortage of<br>sanitation<br>financing                       | Lack of<br>climate-<br>smart WASH<br>infrastructure       | Limited<br>capacity to<br>mainstream<br>gender in<br>WASH           |
| Karnali      | Absence of<br>legal<br>frameworks,<br>institutional<br>arrangements    | Lack of<br>water quality<br>labs, limited<br>testing<br>capacity            | Significant<br>financing gaps<br>for sanitation      | Inadequate<br>provincial<br>budget for<br>sanitation                        | No<br>vulnerability<br>risk<br>assessments                | Limited<br>gender<br>audit and<br>GESI<br>integration               |
| Sudurpaschim | Lack of WASH<br>policy<br>frameworks,<br>weak<br>coordination          | Poor quality,<br>reliability<br>issues, lack<br>of labs                     | Limited<br>sanitation<br>guideline<br>implementation | Lack of co-<br>financing<br>models,<br>weak private<br>sector<br>engagement | Lack of<br>climate-<br>resilient<br>systems               | No GESI<br>audit, poor<br>resource<br>allocation<br>for WASH        |

## 6.9 WASH System Situation and Capacity Building Needs in Municipalities

The table 10 provides an assessment of key building blocks essential for effective Water, Sanitation, and Hygiene (WASH) systems across eight municipalities in Nepal: Golbajar, Karjanha, Bagmati, Godavari, Thakurbaba, Geruwa, Aathbis, and Dullu. **Planning scores** reveal that municipalities range from 1.0 in Geruwa to 2.0 in Thakurbaba, indicating that while most municipalities have medium planning capabilities, there is significant room for improvement. Thakurbaba's higher score suggests better planning processes compared to others, reflecting a more strategic approach to WASH system development. Similarly, **Finance scores** vary from 1.0 in Geruwa and Aathbis to 2.5 in Godavari, indicating that most municipalities operate at a medium financial capacity. Godavari's higher score points to a relatively stronger financial situation, which may result from better budgeting practices and more effective allocation of funds for WASH projects.

| В | uilding Blocks                                      | Golbajar | Karjanha | Bagmati | Godavari | Thakurbaba | Geruwa | Aathbis | Dullu |
|---|---|----------|----------|---------|----------|------------|--------|---------|-------|
| 1 | Planning  | 1.4      | 1.8      | 1.2     | 1.6      | 2          | 1.0    | 1.6     | 1.8   |
| 2 | Finance   | 2.0      | 2.0      | 2.3     | 2.5      | 1.75       | 1.0    | 1.0     | 1.5   |
| 3 | Institutional<br>arrangement<br>and<br>coordination | 1.0      | 1.2      | 1.0     | 1.0      | 1.6        | 1.0    | 1.0     | 2.0   |
| 4 | Monitoring  | 1.0      | 1.1      | 1.2     | 1.5      | 1          | 1.0    | 1.0     | 1.6   |
| 5 | Water<br>Resource<br>Management                     | 1.0      | 1.0      | 1.3     | 1.33     | 1.33       | 1.0    | 1.0     | 1.33  |

Table 12: WASH System Situation in Municipalities<sup>34</sup>

<sup>&</sup>lt;sup>34</sup> CARE Nepal, Helvetas Nepal, Splash, Water Aid Nepal, and Welthungerhilfe. (2023). WASH System Research.

| • • | Summary Scores       Participating Local Governments in the Assessment         • Weak /Poor (<=1)       • Bagmati Province: Godavari Municipality, Bagmati Rural Municipality         • Medium (>1 and <=2)       • Madhesh Province: Karjanha and Golbazaar Municipality,         • Strengthening (>2 and <=3)       • Karnali Province: Dullu Municipality, Aathbis Municipality         • Lumbini Province: Thakurbaba Municipality, Geruwa Rural Municipality |     |      |      |      |      |      |      |      |
|-----|---|-----|------|------|------|------|------|------|------|
| A   | Average Score 1.29  |     | 1.33 | 1.44 | 1.55 | 1.64 | 1.19 | 1.32 | 1.64 |
| 8   | Learning and<br>Adaptation  | 1.0 | 1.0  | 1.2  | 1.0  | 1    | 1.0  | 1.5  | 1.0  |
| 7   | Service<br>delivery<br>infrastructure   | 1.6 | 1.5  | 1.6  | 1.75 | 1.5  | 1.5  | 1.5  | 1.63 |
| 6   | Regulation<br>and<br>accountability   | 1.3 | 1.0  | 1.5  | 1.75 | 2    | 2.0  | 2.0  | 2.25 |

**Institutional Arrangement and Coordination** scores are generally low, ranging from 1.0 in several municipalities to 2.0 in Dullu. This widespread weakness highlights the need for better institutional frameworks and coordination mechanisms to ensure efficient implementation and management of WASH programs. **Monitoring** scores are also weak, with most municipalities scoring between 1.0 and 1.6. These low scores suggest a significant need to strengthen monitoring systems, which are crucial for tracking and evaluating the effectiveness of WASH interventions.

**Water Resource Management** scores range from 1.0 to 1.33, indicating generally weak performance in managing water resources. Improving these scores will require more effective strategies for water use efficiency, quality assurance, and resilience to climate change impacts. Likewise, **Regulation and Accountability** scores vary more widely, from 1.0 in Karjanha to 2.25 in Dullu. This variation indicates that while some municipalities like Dullu have relatively strong regulatory frameworks and accountability mechanisms, others need substantial improvement in enforcing sanitation standards and promoting public health.

**Service Delivery Infrastructure** scores range from 1.5 to 1.75, indicating medium-level performance across the board. Although basic infrastructure is in place, there is a consistent need for improvements to enhance the reliability and quality of WASH services in all municipalities. Similarly, **Learning and Adaptation** scores are generally low, ranging from 1.0 to 1.5, indicating a weak capacity for learning from experiences and adapting to new challenges. Strengthening this area is essential for continuous improvement and innovation in WASH systems.

Most of the municipalities in Nepal exhibit medium-level performance in their WASH systems, with notable weaknesses in institutional arrangement, coordination, monitoring, and adaptive learning. Areas of relative strength, such as planning and finance in municipalities like Thakurbaba and Godavari, suggest that targeted capacity-building efforts in weaker areas could lead to overall system improvements. Enhancing institutional frameworks, improving financial management, and strengthening monitoring and learning capabilities are essential for achieving sustainable and effective WASH services across these municipalities.

Moreover, Nepal's municipalities are experiencing rapid urbanization, accompanied by increasing demands for effective WASH services. The provision of reliable access to clean water, proper sanitation facilities, and hygiene promotion is essential for public health and sustainable urban development. However, municipalities in Nepal face numerous challenges, including inadequate

infrastructure, limited financial resources, and varying levels of institutional capacity.<sup>35</sup> These challenges underscore the importance of comprehensive planning, efficient resource allocation, and collaborative governance frameworks to meet the growing WASH needs of urban and periurban populations.

Effective WASH planning in municipalities involves integrating water supply, sanitation infrastructure, and hygiene promotion initiatives into cohesive strategies that cater to the diverse needs of urban residents. Municipalities must navigate complex financial landscapes, relying on local revenue generation, federal grants, and external funding to sustainably finance WASH projects and operational costs. Institutional arrangements and coordination mechanisms play a crucial role in ensuring efficient service delivery and fostering partnerships with stakeholders, including government agencies, civil society organizations, and the private sector.<sup>36</sup>

Monitoring and evaluation are essential components of WASH management in municipalities, providing critical insights into service performance, infrastructure functionality, and community behavior change. Effective water resource management strategies are vital for ensuring reliable water supply, optimizing water use efficiency, and addressing challenges such as water quality and climate resilience.<sup>37</sup> Regulatory frameworks and accountability mechanisms enforce sanitation standards, promote public health, and ensure compliance with hygiene regulations, thereby safeguarding community well-being.

Investments in WASH infrastructure are pivotal for improving service coverage and enhancing living standards in urban areas. Municipalities prioritize the construction and maintenance of water supply networks, sewage systems, and sanitation facilities to meet the increasing demands of urban populations and mitigate public health risks.<sup>38</sup> Continuous learning and adaptation are critical for municipalities to respond to evolving challenges, integrate new technologies, and enhance community engagement in decision-making processes to achieve sustainable WASH outcomes.<sup>39</sup>

## 6.10 Efforts and Challenges to Leave No One Behind (LNOB)

Nepal's legal framework sets a strong foundation for inclusive WASH services. However, significant challenges persist in ensuring equitable access to these essential services. One of the primary issues is the problem of meter connection and the extension of pipes from the main distribution line to individual taps. This infrastructural gap disproportionately affects marginalized communities, including women, Dalits, and other excluded groups. Their representation in user groups remains inadequate, which hinders the inclusiveness of WASH initiatives.<sup>40</sup> Furthermore, while efforts have been made to upgrade improved sanitation facilities, transforming them into safe sanitation options in excluded clusters remains a challenge.<sup>41</sup> The management of safe sanitation and household sanitation in marginalized slum clusters is another grey area that requires urgent attention.<sup>42</sup>

<sup>&</sup>lt;sup>35</sup> UNICEF. (2021). WASH in Municipalities: Planning and Implementation Guidelines. Kathmandu: UNICEF Nepal.

<sup>&</sup>lt;sup>36</sup> Asian Development Bank. (2019). Urban Water Supply and Sanitation Sector Project. Retrieved from <u>https://www.adb.org</u>

<sup>&</sup>lt;sup>37</sup> UNDP. (2020). Water Resource Management for Sustainable Development. Retrieved from https://www.undp.org

<sup>&</sup>lt;sup>38</sup> World Health Organization. (2023). *Guidelines for Drinking-water Quality*. Geneva: WHO Press.

 <sup>&</sup>lt;sup>39</sup> UN-Water. (2021). Integrated Monitoring and Reporting Framework for SDG 6. Retrieved from <a href="https://www.unwater.org">https://www.unwater.org</a>
 <sup>40</sup> WaterAid. (2020). Water, Sanitation, and Hygiene: A Pathway to Realising Gender Equality and the Empowerment of Women and Girls. <a href="https://www.wateraid.org/us/publications/water-sanitation-and-hygiene-a-pathway-to-realising-gender-equality">https://www.unwater.org</a>

<sup>&</sup>lt;sup>41</sup> UNICEF. (2019). Water, Sanitation and Hygiene (WASH). Retrieved from https://www.unicef.org/wash

<sup>&</sup>lt;sup>42</sup> WHO. (2021). Guidelines on Sanitation and Health. Retrieved from https://www.who.int/publications/i/item/9789241515517

Access to system water, menstrual health, and hygiene management are critical issues that are often overlooked in addressing the needs of excluded segments. WASH is inherently interconnected with shelter, disaster resilience, and economic status. Therefore, comprehensive and inclusive WASH strategies must be developed and implemented by all rural and municipal authorities, many of which have yet to initiate such efforts. Inclusive institutional WASH and public place WASH also present significant challenges. Ensuring equality and non-discrimination in these areas requires targeted policies and interventions. Public facilities, schools, and healthcare centers must be equipped with adequate WASH amenities to serve all individuals, particularly those from marginalized groups.<sup>43</sup>

**Koshi Province** has made some progress in extending WASH services to marginalized communities. However, women, Dalits, and indigenous groups still face significant barriers to accessing clean water and sanitation facilities. Efforts to address menstrual hygiene management have been initiated but require further strengthening.<sup>44</sup> Similarly, **Madhesh Province** has one of the highest populations of Dalits and marginalized communities in Nepal. Despite various programs aimed at improving WASH services, many of these communities still lack access to safe water and sanitation. The inclusion of women and Dalits in decision-making processes remains limited, impacting the effectiveness of WASH interventions.

**Bagmati Province**, home to the capital city Kathmandu, shows a mixed picture. Urban areas have better WASH infrastructure, but rural and peri-urban areas lag behind. Marginalized groups, including the LGBTIQ population, elderly, and children, often face discrimination and inadequate access to WASH services. The provincial government has initiated inclusive WASH programs but implementation is slow.<sup>45</sup> In **Gandaki Province**, significant efforts have been made to improve WASH services in rural areas. However, marginalized communities, especially women and Dalits, still face challenges in accessing these services. The provincial government is working on inclusive policies, but there is a need for more robust implementation and monitoring. Likewise, **Lumbini Province** has seen improvements in WASH services, particularly in urban areas. However, rural areas remain underserved. The provincial government has initiated programs targeting marginalized and vulnerable communities, but these efforts need to be scaled up to ensure no one is left behind.

**Karnali Province,** one of the most remote and underdeveloped regions in Nepal, faces significant challenges in WASH service delivery. Marginalized communities, including the elderly and children, are particularly affected. The provincial government has been working with various partners to improve WASH infrastructure and services, but progress is slow due to logistical challenges. Similarly, **Sudurpashchim Province** has made strides in improving WASH services, particularly in disaster-prone areas. However, the inclusion of women, Dalits, and other marginalized groups in WASH decision-making and service delivery remains a challenge. The provincial government is focusing on inclusive WASH strategies, but more needs to be done to ensure effective implementation ensuring that every individual has access to safe, adequate, and equitable water, sanitation, and hygiene services.

In addition to SDG 6, numerous other SDGs and their indicators show that Madhesi Dalits, Hill Dalits, and Muslims consistently lag behind. This is evident in areas such as financial access (e.g.,

<sup>&</sup>lt;sup>43</sup> JMP. (2020). Progress on Drinking Water, Sanitation and Hygiene in Schools. Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Retrieved from <u>https://washdata.org/report/jmp-2020-wash-schools</u>

<sup>&</sup>lt;sup>44</sup> Ministry of Water Supply and Sanitation (MoWS). (2022). *Provincial WASH Strategy and Implementation.* Kathmandu: Government of Nepal.

 $<sup>^{45}</sup>$  ibid

owning a bank account), food expenditure, child health (e.g., incidence of diarrhea, immunization rates), maternal and reproductive health, early childhood education, safe housing, and access to clean energy.<sup>46</sup> Similarly, the Madhesi community and Terai indigenous groups frequently fall short compared to the general population. There are 51 distinct sub-groups within the Madhesi Dalit, Hill Dalit, Madhesi Other Caste, Terai Janajati, and Muslim categories, collectively making up nearly 40 percent of the population.<sup>47</sup> Consequently, a substantial portion of the population is being left behind. Social and cultural discrimination is particularly acute for certain groups, and historically marginalized populations continue to experience daily discrimination.

Moreover, gender inequality remains pervasive, with women experiencing discrimination in social, economic, and political realms. Women belonging to Dalit, indigenous, minority, and Muslim communities, as well as those with disabilities, continue to endure both gender-based and identity-based discrimination. Dalit individuals encounter caste-based discrimination and untouchability, often resulting in landlessness and significantly lower economic status compared to the dominant caste population. This group experiences higher levels of exclusion, marginalization, and landlessness. Dalit women, in particular, suffer from multiple layers of discrimination. Addressing these challenges demands a multi-faceted approach that involves community participation, robust policy implementation, and continuous monitoring and evaluation. Only through coordinated efforts can the vision of LNOB be realized.

## 6.11 Linkages and Interconnectedness of SDG 6 with other SDGs

The SDG 6 (Water and sanitation) is essential to achieving other several SDGs. While working to enhance access to clean water and sanitation (SDG 6), we address poverty by enhancing overall health and productivity (SDG 1). For instance, access to clean water reduces waterborne diseases, leading to healthier populations that can contribute more effectively to economic activities, thereby reducing poverty levels.<sup>48</sup> Ensuring equal access to WASH facilities also promotes gender equality (SDG 5). Women and girls often bear the burden of fetching water, which can limit their opportunities for education and employment. Providing nearby and reliable WASH facilities allows them to pursue educational and economic opportunities, thereby fostering gender equality.

Additionally, improved sanitation facilities in schools help ensure that girls can manage their menstrual hygiene with dignity, which directly impacts their school attendance and performance.<sup>49</sup> Committing to the sustainable use and management of water aligns with the broader goal of responsible consumption and production (**SDG 12**). Efficient water use, reducing waste, and recycling water are critical practices for sustainability. Karnali's completion of seven multiple-use business plans for communities with abundant access to drinking water enables the reuse of water, thereby supporting kitchen gardening and the commercialization of local crops such as lemons, green vegetables, potatoes, and tomatoes. This not only fosters economic growth (**SDG 8**) but also addresses hunger (**SDG 2**) by improving food security and nutrition through increased agricultural productivity.<sup>50</sup>

<sup>&</sup>lt;sup>46</sup> SDGs National Network. Breaking Structural Barriers- Achieving the SDGs: Voluntary Mid-Term Review of the SDGs in Nepal, Civil Society Spotlight Report 2023. National Campaign for Sustainable Development Nepal, Save the Children-Nepal, January 2024, Kathmandu

<sup>&</sup>lt;sup>47</sup> Tribhuvan University (TU). (2018). *Nepal Social Inclusion Survey 2018.* Central Department of Anthropology, TU, Kathmandu.

 <sup>&</sup>lt;sup>48</sup> WHO. (2021). Guidelines on Sanitation and Health. Retrieved from <u>https://www.who.int/publications/i/item/9789241515517</u>
 <sup>49</sup> UNICEF. (2019). Water, Sanitation and Hygiene (WASH). Retrieved from <u>https://www.unicef.org/wash</u>

 <sup>&</sup>lt;sup>50</sup> Pralhad Gairapipli. (2024). Water, Sanitation and Hygiene: An Inclusive Agenda in Nepal, DAI, retrieved from <u>https://dai-global-</u> developments.com/articles/water-sanitation-and-hygiene-an-inclusive-agenda-in-nepal/

WASH sector policies and water use master plans at the federal, provincial, and local levels ensure inclusion, community participation, and environmental preservation, building stronger and more just institutions (SDG 16). These legal provisions and frameworks ensure that all stakeholders, including marginalized communities, have a voice in WASH-related decisions, promoting transparency and accountability.

Ongoing activities at all three tiers of government, such as the assessment of spring sources, construction of water projects and schemes, and protection of water sources through drainage management, fencing, plantation, recharge pits, intake, and gabion wall constructions, actively safeguard biologically significant areas (SDG 15). These activities are crucial for maintaining biodiversity and ensuring that natural water sources remain viable for future generations.

Linkage with SDG 13 (Climate Action): Water and sanitation services are vulnerable to the impacts of climate change. The Government of Nepal has implemented a range of policies, plans, and guidelines related to the water and sanitation sector. Many of these, such as the National Sanitation and Hygiene Master Plan (2011), WASH Sector Development Plan, and Total Sanitation Guideline, emphasize the need to protect water resources to support climate change adaptation. The WASH sector in Nepal is highly impacted by climate change, and existing WASH documents have addressed building the sector toward greater climate resilience. The WASH Sector Development Plan mentions strategies to make the sector more climate adaptive, highlighting that good sanitation practices can also reduce greenhouse gases. However, due to data gaps, actual quantification remains challenging.<sup>51</sup>

Nepal's water sanitation sector (SDG 6) policies and programs directly contribute to climate resilience and support emission reduction through wastewater and fecal sludge management. Climate-resilient water safety plans have been rolled out as an integral part of new and existing water supply systems, enhancing water quality to meet national standards and ensuring the functionality and sustainability of the water supply system over the long term. The WASH sector has initiated programs on climate change and natural hazard insurance in larger water supply schemes to increase system and community resilience.

The Ministry of Water Supply (MoWS) has also prioritized wastewater, fecal sludge, and solid waste management as integrated components of water supply and sanitation. These programs emphasize the reuse of treated waste and linkages with the cleaner renewable energy sector (like biogas) and agriculture sector (organic fertilizer), valorizing sanitation wastes and markets. This initiative not only supports the reduction of greenhouse gas emissions from the waste sector but also reduces emissions from importing liquefied petroleum gas (LPG) and chemical fertilizers into Nepal. Additionally, fostering products such as biogas reduces biomass consumption and associated emissions.<sup>52</sup>

In Nepal, the WASH sector is highly impacted by climate change. Climate-related hazards, including droughts, floods, fires, and landslides, adversely affect water and sanitation services by damaging infrastructure and contaminating water sources. These hazards exacerbate existing challenges in service delivery. For example, droughts and heatwaves reduce water availability towards the end of the dry season; while flooding and landslides disrupt WASH services during the monsoon season.

 <sup>&</sup>lt;sup>51</sup> Ministry of Water Supply (MoWS). (2020). Proposed Water and Sanitation Sector Targets for Nepal's Enhanced Nationally Determined Contribution. Submitted to Ministry of Forests and Environment by MoWS. Government of Nepal.
 <sup>52</sup> ibid

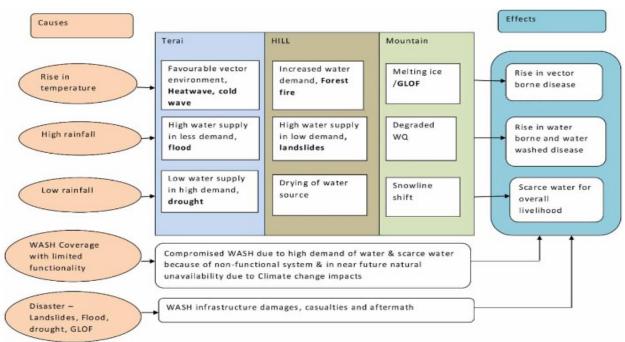


Figure 8: Figure: Cause, effect and impact of climate change in different eco-regions<sup>53</sup>

These hazards have far-reaching consequences on people's livelihoods and the environment, resulting in displacement, injuries, loss of life, extensive damage to infrastructure, decreased crop yields, food insecurity, malnutrition, health risks, and the need for reconstruction, thereby increasing climate vulnerability. Consequently, achieving SDG 6 becomes even more challenging. Hence, the increasing adverse impact of climate change on water resources and WASH services calls for urgent action to develop and implement 'water-smart' climate policies and 'climate-smart' water policies. By recognizing the interconnectedness of SDG 6 with various SDGs, Nepal can make integrated plans and informed decisions to accelerate SDG 6 localization and implementation.

## Chapter 7: Challenges of SDG 6 Localization and Implementation at the Subnational Level

# 7.1 Challenges of SDG 6 Localization and Implementation<sup>54</sup>

The SDG 6, which aims to ensure availability and sustainable management of water and sanitation for all, is critical for the health, dignity, and prosperity of communities worldwide. In Nepal, achieving SDG 6 at the subnational level presents a complex array of challenges that must be addressed to ensure equitable access to clean water and sanitation.

**Policy Barriers:** Policy barriers encompass the legal and regulatory frameworks that govern the management and delivery of water and sanitation services. In Nepal, the transition to a federal system has introduced complexities in the relationships between federal, provincial, and local governments. Clear and coherent policies are essential to define roles, responsibilities, and accountability, and to ensure effective coordination among various levels of government.

<sup>&</sup>lt;sup>53</sup> S. Sharma et al., (2021). Drinking Water Status in Nepal: An Overview in the Context of Climate Change. Journal of Water, Sanitation and Hygiene for Development, Vol 11, No 6.

<sup>&</sup>lt;sup>54</sup> Challenges and recommendations are generated from the in-depth KIIs, provincial and national consultations, as well as literature reviews.

- Lack of clear legal definitions and responsibilities among federal, provincial, and local governments leading to overlaps and confusion.
- Inadequate policies for regulating activities such as mining of sand, aggregates, and rocks, which pose environmental risks.
- The development of a local WASH act and the formulation, revision, or updating of other essential policy regulations mandated by the LGOA 2017 for WASH sector initiatives have not aligned as intended.
- Need for comprehensive and coherent legislation developed collaboratively by policymakers and stakeholders.
- Insufficient enforcement of existing policies and regulations regarding water quality and sanitation standards.
- Limited examples of collaborative engagement by the municipality in delivering infrastructure facilities with external agencies, particularly the private sector. This highlights the need for the municipality to formulate policies that attract investment from the private sector, including small and medium enterprises, in WASH initiatives.

**Implementation Barriers:** Implementation barriers refer to the practical challenges encountered in executing water and sanitation projects. These barriers can arise from logistical issues, coordination difficulties, and capacity limitations within local governments. Effective implementation is crucial for ensuring that water and sanitation services reach all communities, particularly in remote and rural areas.

- Fragmented institutional structure with unclear roles and potential duplication of efforts.
- Difficulty in coordinating WASH services among federal, provincial, and local governments after the federal system transition.
- Limited capacity of local governments, especially in rural areas, hinders project implementation and monitoring.
- Many water supply systems require repair or upgrading, with only 28% currently functional.
- Insufficient budget and the requirement for a 30% matching fund from local governments and the community is discouraging the people and stakeholder participation.
- Discrepancies between national data and the actual access to basic water services.
- Weak regulatory framework and unclear ownership of water sources.
- Insufficient data on WASH indicators and inadequate monitoring systems.
- Delays and poor quality of work by service providers and construction companies.
- Nepal's diverse topography makes it difficult to reach and monitor WASH facilities in remote areas.
- Localizing national commitments on WASH to the municipal level is essential for contributing to federal government efforts towards collective achievement.
- Exclusion of targeted populations and areas from services and projects.
- Insufficient focus on prioritizing the unserved and unreached populations, particularly the GEDSI target groups, in planning activities and budget allocation for effective implementation.

**Resource Barriers:** Sub-national governments lack the financial, human, and material resources necessary for the successful implementation of WASH projects. Adequate resources are critical for building and maintaining infrastructure, ensuring water quality, and providing sanitation services.

- Lack of financial resources and budget constraints within local governments.
- Local governments show a strong reliance on federal, provincial government and external resources rather than prioritizing its own for WASH, indicating a low commitment to municipal

resources. While there are good procurement practices in place, the municipalities have not effectively implemented a rigorous monitoring process or adopted regulatory practices to ensure quality.

- Insufficient skilled manpower to implement and maintain WASH projects.
- Challenges in managing and allocating resources effectively.
- Difficulty in securing resources for long-term monitoring and maintenance of WASH facilities.

**Capacity Barriers:** Subnational and local governments have limited skills, knowledge, and institutional capabilities required to implement and manage WASH services effectively. Building the capacity of local governments and stakeholders is essential for sustainable development and the achievement of SDG 6.

- Lack of knowledge and capacity of local governments as well as elected representatives and official to implement and monitor WASH projects.
- Absence of dedicated WASH units and capable focal persons within municipalities.
- Lack of training and capacity-building programs for local government elected representatives, officials and stakeholders.
- Lack of comprehensive WASH planning and financing guidelines.
- Insufficient data and evidence-based planning practices.
- Reliance on external consultants for planning rather than community-based approaches.
- Some local governments have WASH-related guidelines, but municipalities have limited capacity for implementation and, crucially, for monitoring the quality of outputs. Capacity building and post-implementation support mechanisms from the municipality for service providers, particularly WSUCs, remain inadequate.

**Environmental and Climate Challenges:** Environmental and climate challenges are significant barriers to the sustainable management of water and sanitation services in Nepal. Climate change impacts, such as extreme weather events, can damage infrastructure and disrupt service delivery, exacerbating existing vulnerabilities.

- Climate change impacts such as droughts, floods, fires, and landslides have been damaging water and sanitation infrastructure in Nepal.
- Alterations to hydrology and morphology due to sand and aggregate mining posing additional environmental risks.
- Increased vulnerability of water sources to contamination and depletion is major challenge across Nepal.
- Difficulty in managing water resources sustainably in the face of climate change.
- Need for climate-resilient infrastructure and adaptation strategies to mitigate the impacts of climate change on WASH services at the sub-national level.

## 7.2 Areas of Improvement for Effective SDG 6 Localization and Implementation

Ensuring effective localization and implementation of SDG 6 requires improvements in several critical areas, including but not limited to:

• **Province-Specific SDG 6 Progress Assessments:** There are limited assessments evaluating the progress of SDG 6 localization and implementation across the country. Hence, regularly evaluate the progress of SDG 6 localization and implementation at the sub0national level to identify gaps and areas requiring attention. These assessments should be complemented by public expenditure tracking surveys to ensure transparent and efficient use of resources.

- Resource Gap in WASH Assurance: There is a significant resource gap in assuring WASH as a fundamental right, as directed by the constitution. Immediate preparation and implementation of a municipal WASH plans are necessary to establish a solid WASH foundation at the local level.
- Capacity and Knowledge Gap amongst Sub-National Governments: There is a significant gap in terms of capacity, skills, and knowledge among provincial and local governments regarding the SDGs, particularly Goal 6. Addressing this gap is crucial for effective localization and implementation of SDG 6. Hence, targeted capacity building programs should be rolled out for provincial and local government representatives, officials, provincial assembly members, and other stakeholders on SDG 6 implementation and monitoring. These programs should focus on enhancing understanding of SDG 6 targets, indicators, and strategies for effective integration into local policies and plans. Online multi-lingual knowledge management portal should be developed to facilitate the sharing of knowledge on SDG 6, best practices, lessons learned, and SDG 6-related resources across all federal, provincial, and local levels.
- Inactivity of WASH-CCs: Municipality and ward-level WASH Coordination Committees (WASH-CCs) are largely inactive where they have been formulated, and over 35 percent of local government units have yet to form these committees. Revitalizing and establishing WASH-CCs is crucial for coordinated WASH efforts.
- Institutional WASH: Institutional WASH, particularly in schools, remains a critical issue. Despite the federal government's star approach initiative for school WASH, nearly 70 percent of local governments have not adopted or localized this approach. Enhancing institutional WASH programs is essential for broader impact.
- **Prolonged Water Supply Project Timelines:** In the Terai region, the extended construction periods of large-scale water supply projects are problematic, with some schemes remaining incomplete for up to 18 years. Streamlining project timelines and ensuring timely completion is vital to meet water supply needs.
- Limited Access to System Water in the Terai Area: Access to system water in the Terai area, especially in Madhesh Province, is critically low, with current access at almost 22 percent. Alarmingly, 20 percent of these systems become non-functional before service initiation. Improving system reliability and expanding access is imperative.
- **Public vs. Private Water Taps:** According to the DWSSM, 69 percent of households (HHs) rely on public taps where system water is available, while only 31 percent have private taps. Moreover, out of nearly 44,000 registered water supply systems, predominantly in hill and mountain regions, only 27 percent are fully functional. Addressing the high rates of system malfunction and extending private tap access are necessary steps.
- Leave No One Behind (LNOB): Several marginalized groups lack access to improved sanitation facilities and clean drinking water, hindering SDG 6 progress. Hence, one critical area of improvement for the effective localization and implementation of SDG 6 is the commitment to the principle of Leave No One Behind (LNOB). This involves addressing the needs of the most marginalized and vulnerable populations to ensure equitable access to water and sanitation services. Key strategies include:

- Inclusion and Equality Challenges: Issues of inclusion, equality, non-discrimination, menstrual hygiene management (MHHM), institutional WASH, inclusive citywide sanitation, faecal sludge management, sewerage system management in urban areas, and wastewater treatment persist. Targeted interventions to address these challenges are needed to ensure no one is left behind.
- ✓ Targeted Programs for Vulnerable Groups: Design and execute targeted programs that address the specific challenges faced by vulnerable populations, including marginalized women, Dalits, minority Muslims, children, LGBTIQ community, etc. This includes improving access to menstrual hygiene management (MHHM) for women and girls, enhancing institutional WASH facilities in schools and healthcare centers, and ensuring that water and sanitation programs and systems are inclusive and effective.
- Community Engagement and Participation: Foster active community engagement and participation in the planning and implementation of WASH initiatives. Empowering local communities to take part in decision-making processes ensures that the needs and voices of all segments of the population are heard and addressed.
- Monitoring and Accountability: Establish robust monitoring and accountability mechanisms to track progress towards achieving LNOB objectives. Regularly collect and analyze disaggregated data to identify disparities and implement corrective measures to bridge gaps in service delivery.
- Budget Allocation for WASH: Achieving SDG 6 necessitates consistent increases in the WASH budget. The Government of Nepal's annual expenditure on WASH accounts for about 3% of the national budget, with a funding shortfall of NRS 30 billion (approximately US\$ 280 million) to meet existing demands.<sup>55</sup> Ensuring sufficient and reliable budget allocation is crucial for sustained progress. Hence, it is important to explore opportunities for leveraging WASH financing by encouraging private sector involvement and tapping into alternative financing sources.
- On-site vs. Sewered Sanitation Systems: A significant portion (89 percent) of the population relies on on-site sanitation systems, while only 11 percent have access to a sewered sanitation system. Expanding and improving sewered sanitation infrastructure is critical for enhanced sanitation management.
- Peer Learning and Knowledge Sharing: Current knowledge-sharing practices on WASH among local and provincial governments are insufficient. Hence, various platforms for peer learning and knowledge exchange should be facilitated among sub-national governments. This will enable the sharing of best practices, innovative solutions, and successful strategies to accelerate SDG 6 localization efforts across different provinces.

Addressing these areas of improvement is essential for the effective localization and implementation of SDG 6, ensuring sustainable water and sanitation management across the provinces and local governments.

<sup>&</sup>lt;sup>55</sup> WaterAid Nepal, 2018.

#### Chapter 8: Recommendations and Conclusion

#### 8.1 Recommendations

Ensuring universal access to safe and sustainable water and sanitation services underpins the ambitious targets of SDG 6, essential for the health, dignity, and prosperity of communities worldwide. In Nepal, the journey towards achieving SDG 6 at the subnational level is fraught with multifaceted challenges that demand immediate, medium-term, and long-term interventions. These challenges span policy fragmentation, implementation hurdles, resource constraints, capacity gaps, and environmental vulnerabilities, all exacerbated by the recent transition to a federal system. Addressing these challenges is not only critical for meeting international commitments but also for safeguarding public health, promoting social equity, and fostering sustainable development across the country. This comprehensive set of recommendations aims to guide federal, provincial, and local governments, alongside development partners, in overcoming barriers and accelerating progress towards achieving SDG 6 by 2030.

Following are the recommendations for SDG 6 localization and implementation in Nepal, categorized by the urgency of interventions:

| Priority                 | Recommendations  | Policy<br>Interventions   | Implementation<br>Interventions   | Resource<br>Allocation   | Capacity<br>Building   | Environmenta<br>I and Climate<br>Adaptation   |
|--------------------------|--|---|---|--|--|---|
| Immediate<br>(1-2 years) | Clarify Legal<br>Frameworks and<br>Responsibilities      | Develop clear<br>legal definitions<br>and<br>responsibilities<br>among all<br>government<br>levels.           | Establish a clear<br>institutional<br>structure to avoid<br>duplication of<br>efforts.                | Allocate<br>sufficient<br>budget for<br>WASH<br>projects (30%<br>increase).                | Initiate<br>targeted<br>training and<br>capacity-<br>building<br>programs.                               | Implement<br>climate-<br>resilient<br>infrastructure<br>and adaptation<br>strategies.         |
|                          | Enhance<br>Institutional<br>Coordination                 | Formulate and<br>update policies<br>regulating<br>mining<br>activities.                                       | Strengthen<br>coordination<br>mechanisms among<br>all government<br>levels.                           | Secure<br>resources for<br>immediate<br>monitoring<br>and<br>maintenance.                  | Establish<br>dedicated<br>WASH units<br>and appoint<br>capable focal<br>persons.                         | Conduct<br>environmental<br>risk<br>assessments<br>and integrate<br>sustainable<br>practices. |
|                          | Increase Financial<br>Resources and<br>Budget Allocation | Enforce existing<br>policies and<br>regulations<br>regarding water<br>quality and<br>sanitation<br>standards. | Implement<br>immediate repair<br>and upgrading of<br>non-functional water<br>supply systems.          | Reduce<br>reliance on<br>external<br>resources by<br>prioritizing<br>municipal<br>funding. |  |   |
| Medium-                  | Develop<br>Comprehensive<br>WASH Legislation             | Collaborate to<br>develop<br>comprehensive<br>legislation for<br>the WASH<br>sector.                          | Address<br>discrepancies in<br>data through<br>accurate and<br>reliable collection<br>and monitoring. | Develop<br>effective<br>resource<br>management<br>strategies.                              | Provide<br>ongoing<br>training on<br>SDG 6 targets,<br>indicators, and<br>implementatio<br>n strategies. | Monitor long-<br>term<br>environmental<br>changes and<br>implement<br>adaptation<br>measures. |
| Term<br>(3-5 years)      | Improve Project<br>Implementation<br>and Monitoring      | Update and<br>align local<br>WASH acts with<br>national<br>guidelines.  | Enhance the quality<br>of work by service<br>providers through<br>stringent regulatory<br>frameworks. | Implement<br>rigorous<br>monitoring<br>processes to<br>ensure quality.                     | Develop online<br>multi-lingual<br>knowledge<br>management<br>portals.                                   |   |
|                          | Optimize<br>Resource<br>Management                       | Develop and<br>enforce policies<br>to attract   | Prioritize completion of water supply   | Develop<br>effective<br>resource   | Encourage<br>continuous  |   |

Table 13: Recommendation for the Immediate, Medium-Term, and Long-Term Interventions

|                           |   | private sector<br>investments in<br>WASH<br>initiatives.   | projects, especially in the Terai region.   | allocation<br>strategies for<br>sustainability.  | learning and innovation.   |   |
|---------------------------|---|--|---|--|--|---|
| Long-Term<br>(6-10 years) | Institutionalize<br>Inclusive Policies    | Institutionalize<br>policies for<br>equitable<br>access to<br>WASH<br>services.                          | Expand access to<br>sewered sanitation<br>systems and<br>improve on-site<br>sanitation<br>management. | Secure long-<br>term funding<br>for WASH<br>projects<br>through<br>diversified<br>sources. | Maintain<br>continuous<br>capacity-<br>building<br>efforts.                                      | Implement<br>community-<br>based water<br>resource<br>management<br>approaches.           |
|                           | Sustainable WASH<br>Services              | Develop<br>targeted<br>interventions to<br>address<br>inclusion and<br>non-<br>discrimination<br>issues. | Ensure functionality<br>and sustainability of<br>all newly<br>constructed water<br>supply systems.    | Establish<br>financial<br>mechanisms<br>for ongoing<br>maintenance<br>and upgrades.        | Encourage<br>peer learning<br>and<br>knowledge-<br>sharing among<br>sub-national<br>governments. | Monitor and<br>adapt to long-<br>term<br>environmental<br>impacts on<br>WASH<br>services. |
|                           | Ensure Long-Term<br>Funding               | Develop<br>inclusive<br>policies to<br>ensure<br>participation of<br>marginalized<br>groups.             | Implement<br>monitoring systems<br>to track progress<br>and implement<br>corrective<br>measures.      |  |  |   |
|                           | Leave No One<br>Behind (LNOB)             | Design and<br>execute<br>programs for<br>vulnerable<br>groups<br>ensuring<br>inclusion.                  | Foster community<br>engagement and<br>participation in<br>WASH planning and<br>implementation.        |  |  |   |
| Cross-<br>Cutting         | Monitoring and<br>Accountability          | Establish robust<br>monitoring and<br>accountability<br>mechanisms.                                      | Regularly collect<br>and analyze<br>disaggregated data<br>to identify and<br>address disparities.     |  |  |   |
|                           | Peer Learning and<br>Knowledge<br>Sharing | Create<br>platforms for<br>peer learning<br>and knowledge<br>exchange.                                   | Encourage<br>continuous learning<br>and innovation in<br>WASH service<br>delivery.                    |  |  |   |

Moreover, following are the recommendations for addressing the challenges and improving SDG 6 localization and implementation in Nepal, targeting different levels of government and stakeholders.

| Table 14: Recommendations Categorized by the Target Stakeholders |
|--|
|--|

| Challenges &<br>Areas of<br>Improvement | Federal<br>Government  | Provincial<br>Governments   | Local Governments  | Development<br>Partners  | CSOs/NGOs   |
|---|--|---|--|--|---|
| Policy Barriers                         | <ul> <li>Develop clear,<br/>coherent policies</li> <li>Strengthen<br/>enforcement<br/>mechanisms</li> <li>Promote inter-<br/>governmental<br/>collaboration</li> </ul> | <ul> <li>Facilitate<br/>coordination<br/>with local<br/>governments</li> <li>Establish<br/>provincial<br/>WASH-CCs</li> </ul> | <ul> <li>Align local policies<br/>with national<br/>regulations</li> <li>Establish local<br/>WASH-CCs</li> </ul> | <ul> <li>Provide<br/>technical<br/>support for<br/>policy<br/>development</li> <li>Share best<br/>practices</li> </ul> | <ul> <li>Advocate for<br/>clear policy<br/>frameworks</li> <li>Raise awareness<br/>on policy needs</li> </ul> |
| Implementation<br>Barriers              | <ul> <li>Increase budget<br/>allocation</li> <li>Provide incentives<br/>and matching funds</li> </ul>  | Foster inter-<br>governmental<br>coordination   | Engage<br>communities in<br>planning   | Offer financial<br>and technical<br>assistance   | Advocate for<br>effective<br>implementation   |

|  | Strengthen<br>enforcement of<br>quality standards   | Support<br>capacity<br>building<br>initiatives  | <ul> <li>Prioritize<br/>repair/upgrading of<br/>systems</li> <li>Implement robust<br/>maintenance<br/>systems</li> </ul>    | <ul> <li>Support<br/>capacity<br/>building<br/>programs</li> </ul>   | Mobilize     communities for     participation  |
|--|---|---|---|--|---|
| Resource<br>Barriers                             | <ul> <li>Ensure consistent<br/>financial support</li> <li>Promote private<br/>sector partnerships</li> </ul>                            | <ul> <li>Mobilize<br/>provincial<br/>resources</li> <li>Encourage<br/>private sector<br/>investment</li> </ul>                      | <ul> <li>Mobilize local<br/>resources</li> <li>Secure long-term<br/>funding for<br/>maintenance</li> </ul>                  | <ul> <li>Provide<br/>financial<br/>support</li> <li>Facilitate<br/>resource<br/>mobilization</li> </ul>  | <ul> <li>Advocate for<br/>adequate<br/>resource<br/>allocation</li> <li>Support<br/>community-<br/>based resource<br/>management</li> </ul> |
| Capacity<br>Barriers                             | <ul> <li>Implement<br/>nationwide training<br/>programs</li> <li>Establish dedicated<br/>WASH units</li> </ul>                          | <ul> <li>Conduct<br/>regular<br/>capacity<br/>assessments</li> <li>Implement<br/>targeted<br/>training<br/>programs</li> </ul>      | <ul> <li>Enhance capacity of<br/>local officials</li> <li>Establish dedicated<br/>WASH focal persons</li> </ul>             | <ul> <li>Support<br/>capacity<br/>building<br/>initiatives</li> <li>Provide training<br/>resources</li> </ul>                                  | <ul> <li>Conduct training<br/>programs</li> <li>Support capacity<br/>building at the<br/>community level</li> </ul>                         |
| Environmental<br>and Climate<br>Challenges       | <ul> <li>Promote climate-<br/>resilient<br/>infrastructure</li> <li>Enforce<br/>environmental<br/>protection<br/>regulations</li> </ul> | • Support<br>development<br>of climate<br>adaptation<br>strategies  | <ul> <li>Implement climate-<br/>resilient WASH<br/>projects</li> <li>Protect local water<br/>sources</li> </ul>             | <ul> <li>Provide<br/>technical<br/>assistance for<br/>climate<br/>resilience</li> <li>Share best<br/>practices and<br/>technologies</li> </ul> | <ul> <li>Advocate for<br/>climate-resilient<br/>practices</li> <li>Raise awareness<br/>on environmental<br/>protection</li> </ul>           |
| Province-<br>Specific<br>Progress<br>Assessments | <ul> <li>Conduct regular<br/>assessments</li> <li>Implement public<br/>expenditure<br/>tracking surveys</li> </ul>                      | <ul> <li>Monitor and<br/>evaluate<br/>provincial<br/>progress</li> <li>Share<br/>findings with<br/>local<br/>governments</li> </ul> | <ul> <li>Participate in<br/>progress<br/>assessments</li> <li>Implement<br/>recommendations<br/>from assessments</li> </ul> | <ul> <li>Provide support<br/>for conducting<br/>assessments</li> <li>Share<br/>international<br/>best practices</li> </ul>                     | <ul> <li>Monitor local progress</li> <li>Report on community-level outcomes</li> </ul>  |
| Resource Gap<br>in WASH<br>Assurance             | <ul> <li>Increase WASH<br/>budget allocation</li> <li>Ensure consistent<br/>financial support</li> </ul>                                | <ul> <li>Mobilize<br/>additional<br/>provincial<br/>resources</li> <li>Encourage<br/>investment in<br/>WASH</li> </ul>              | <ul> <li>Prepare and<br/>implement<br/>municipal WASH<br/>plans</li> <li>Prioritize WASH<br/>funding</li> </ul>             | <ul> <li>Provide<br/>financial<br/>assistance</li> <li>Support<br/>resource<br/>mobilization<br/>efforts</li> </ul>                            | Advocate for<br>increased WASH<br>funding     Support<br>community<br>resource<br>management  |
| Capacity and<br>Knowledge<br>Gap                 | <ul> <li>Implement training<br/>programs</li> <li>Develop<br/>knowledge-sharing<br/>platforms</li> </ul>                                | <ul> <li>Conduct<br/>capacity<br/>assessments</li> <li>Implement<br/>targeted<br/>training</li> </ul>                               | <ul> <li>Enhance local<br/>capacity</li> <li>Establish<br/>knowledge-sharing<br/>mechanisms</li> </ul>                      | <ul> <li>Support<br/>capacity<br/>building</li> <li>Facilitate<br/>knowledge<br/>exchange</li> </ul>   | <ul> <li>Provide training<br/>programs</li> <li>Promote<br/>knowledge<br/>sharing</li> </ul>  |
| Inactivity of<br>WASH-CCs                        | <ul> <li>Revitalize WASH-<br/>CCs</li> <li>Provide financial<br/>support for activities</li> </ul>                                      | Support<br>formation and<br>activation of<br>WASH-CCs   | <ul> <li>Establish and<br/>activate local<br/>WASH-CCs</li> <li>Facilitate regular<br/>meetings</li> </ul>                  | <ul> <li>Provide<br/>technical<br/>support</li> <li>Share best<br/>practices</li> </ul>  | Advocate for<br>active WASH-<br>CCs     Support<br>community<br>engagement  |
| Institutional<br>WASH                            | <ul> <li>Promote school<br/>WASH programs</li> <li>Provide financial<br/>support for<br/>initiatives</li> </ul>                         | Support<br>adoption of<br>federal<br>school WASH<br>initiatives   | <ul> <li>Implement and<br/>localize school<br/>WASH programs</li> <li>Ensure regular<br/>monitoring</li> </ul>              | <ul> <li>Provide<br/>financial and<br/>technical<br/>support</li> <li>Share best<br/>practices</li> </ul>                                      | <ul> <li>Advocate for<br/>institutional<br/>WASH</li> <li>Raise awareness<br/>in communities</li> </ul>                                     |
| Prolonged<br>Water Supply                        | Streamline project     approval processes   | <ul> <li>Monitor<br/>project<br/>progress</li> </ul>  | Ensure timely     implementation  | <ul> <li>Provide<br/>financial<br/>support</li> </ul>  | <ul> <li>Advocate for<br/>timely project<br/>completion</li> </ul>  |

| Project<br>Timelines                                  | <ul> <li>Increase oversight<br/>on project timelines</li> </ul>   | <ul> <li>Facilitate<br/>timely<br/>completion</li> </ul>   | Monitor project<br>timelines   | <ul> <li>Share project<br/>management<br/>best practices</li> </ul>  | Monitor local     project progress   |
|---|---|--|--|--|--|
| Limited Access<br>to System<br>Water in Terai<br>Area | <ul> <li>Increase investment<br/>in water supply<br/>systems</li> <li>Promote equitable<br/>distribution</li> </ul>         | Facilitate     provincial     investment in     water     systems  | <ul> <li>Improve system<br/>reliability</li> <li>Expand access to<br/>water systems</li> </ul>                       | <ul> <li>Provide<br/>financial and<br/>technical<br/>support</li> <li>Share best<br/>practices</li> </ul>                  | <ul> <li>Advocate for<br/>improved water<br/>access</li> <li>Support<br/>community water<br/>management</li> </ul>                       |
| Public vs.<br>Private Water<br>Taps                   | <ul> <li>Increase funding for<br/>private tap<br/>installations</li> <li>Promote equitable<br/>access</li> </ul>            | • Support local governments in expanding private taps  | <ul> <li>Expand access to private taps</li> <li>Improve system functionality</li> </ul>                              | <ul> <li>Provide<br/>financial<br/>support</li> <li>Share best<br/>practices</li> </ul>                                    | <ul> <li>Advocate for<br/>equitable access<br/>to private taps</li> <li>Support<br/>community<br/>initiatives</li> </ul>                 |
| Leave No One<br>Behind (LNOB)                         | <ul> <li>Promote inclusive<br/>policies and<br/>programs</li> <li>Ensure equitable<br/>resource<br/>distribution</li> </ul> | Support<br>targeted<br>programs for<br>vulnerable<br>groups  | <ul> <li>Design and<br/>implement inclusive<br/>programs</li> <li>Engage<br/>marginalized<br/>communities</li> </ul> | <ul> <li>Provide<br/>financial and<br/>technical<br/>support</li> <li>Share best<br/>practices</li> </ul>                  | <ul> <li>Advocate for<br/>inclusion and<br/>equity</li> <li>Support<br/>community<br/>engagement</li> </ul>                              |
| Budget<br>Allocation for<br>WASH                      | <ul> <li>Increase WASH<br/>budget allocation</li> <li>Ensure consistent<br/>financial support</li> </ul>                    | <ul> <li>Mobilize<br/>additional<br/>provincial<br/>resources</li> <li>Encourage<br/>investment in<br/>WASH</li> </ul> | <ul> <li>Prioritize WASH<br/>funding</li> <li>Implement efficient<br/>budgeting practices</li> </ul>                 | <ul> <li>Provide<br/>financial<br/>support</li> <li>Facilitate<br/>resource<br/>mobilization<br/>efforts</li> </ul>        | <ul> <li>Advocate for<br/>increased WASH<br/>funding</li> <li>Support<br/>community<br/>resource<br/>management</li> </ul>               |
| On-site vs.<br>Sewered<br>Sanitation<br>Systems       | <ul> <li>Invest in sewered<br/>sanitation<br/>infrastructure</li> <li>Promote balanced<br/>sanitation solutions</li> </ul>  | Facilitate<br>provincial<br>investment in<br>sewered<br>systems  | <ul> <li>Improve and expand<br/>sewered systems</li> <li>Maintain on-site<br/>systems</li> </ul>                     | <ul> <li>Provide<br/>financial and<br/>technical<br/>support</li> <li>Share best<br/>practices</li> </ul>                  | <ul> <li>Advocate for<br/>balanced<br/>sanitation<br/>solutions</li> <li>Support<br/>community<br/>sanitation<br/>initiatives</li> </ul> |
| Peer Learning<br>and Knowledge<br>Sharing             | <ul> <li>Develop<br/>knowledge-sharing<br/>platforms</li> <li>Facilitate peer<br/>learning</li> </ul>                       | Promote<br>inter-<br>governmental<br>knowledge<br>exchange   | <ul> <li>Establish local<br/>knowledge-sharing<br/>mechanisms</li> <li>Participate in peer<br/>learning</li> </ul>   | <ul> <li>Support<br/>knowledge-<br/>sharing<br/>initiatives</li> <li>Share<br/>international<br/>best practices</li> </ul> | <ul> <li>Promote<br/>knowledge<br/>sharing</li> <li>Facilitate<br/>community<br/>learning</li> </ul>                                     |

## 8.2 Conclusion

The localization and implementation of SDG 6 at the sub-national level in Nepal are pivotal for ensuring the availability and sustainable management of water and sanitation for all. Despite significant efforts and progress, numerous challenges remain that hinder the effective realization of this goal. Addressing these challenges requires a coordinated and collaborative approach involving federal, provincial, and local governments, as well as development partners, CSOs, and NGOs.

Nepal's transition to a federal system has introduced complexities in policy formulation, implementation, and resource allocation. Clear and coherent policies, coupled with strong enforcement mechanisms, are essential to define the roles and responsibilities of different government levels and ensure effective coordination. Enhancing capacity at the local level is crucial for the successful implementation and monitoring of WASH projects. This includes establishing dedicated WASH units, providing targeted training programs, and fostering community engagement.

Resource mobilization remains a critical barrier, with local governments heavily reliant on federal support and external assistance. Increasing budget allocations, encouraging private sector investment, and promoting sustainable financial practices are vital for bridging the resource gap. Furthermore, addressing environmental and climate challenges through climate-resilient infrastructure and adaptation strategies is necessary to mitigate the impacts of climate change on water and sanitation services.

Inclusivity and equity must be at the forefront of SDG 6 localization efforts. Ensuring that marginalized and vulnerable populations have access to clean water and sanitation services is imperative for achieving the Leave No One Behind (LNOB) principle. Targeted interventions, community participation, and robust monitoring mechanisms are essential to identify and address disparities in service delivery.

Institutional WASH, particularly in schools, remains a critical area for improvement. Adopting federal initiatives at the local level and ensuring regular monitoring can significantly enhance the impact of WASH programs in educational institutions. Additionally, addressing prolonged water supply project timelines, improving system reliability, and expanding access to both public and private water taps are necessary steps to meet the growing demands for water services.

Peer learning and knowledge sharing among local and provincial governments are vital for accelerating SDG 6 localization efforts. Establishing platforms for the exchange of best practices, innovative solutions, and successful strategies can drive progress and foster a collaborative environment for achieving SDG 6.

The effective localization and implementation of SDG 6 in Nepal require a multi-faceted approach that addresses policy, implementation, resource, capacity, and environmental barriers. By fostering collaboration among all stakeholders, increasing investment in WASH infrastructure, enhancing local capacity, and prioritizing inclusivity, Nepal can make significant strides toward ensuring that all its citizens have equitable access to clean water and sanitation. The journey toward achieving SDG 6 is challenging, but with concerted efforts and sustained commitment, it is within reach.

# References

- Asian Development Bank. (2019). *Urban Water Supply and Sanitation Sector Project*. Retrieved from <u>https://www.adb.org</u>
- CARE Nepal, Helvetas Nepal, Splash, Water Aid Nepal, and Welthungerhilfe. (2023). WASH System Research.
- Department of Water Supply and Sewerage Management (DoWSSM). (2022). *Annual Report 2022.* Government of Nepal.
- Dhulikhel Municipality. 2022. Voluntary Local Review, available at: <u>https://gold.uclg.org/sites/default/files/vlr-dhulikhel.pdf</u>
- Government of Nepal. (2015). *Nepal's Sustainable Development Goals Country Report*. National Planning Commission. Kathmandu, Nepal.
- Government of Nepal. (2015). SDG Status and Roadmap: 2016-2030. National Planning Commission.
- Government of Nepal. (2019). 15<sup>th</sup> National Periodic Plan (2019/20-2023/24). National Planning Commission.
- Government of Nepal. (2019). Sixteenth (16<sup>th</sup>) Periodic Plan ((2024/25-2029/30), National Planning Commission, Accessed from https://npc.gov.np/images/category/24060505091516th%20Plan%20Final.pdf
- Government of Nepal. (2020). National SDGs Data Portal. National Planning Commission, Retrieved from <u>http://sdg.npc.gov.np</u>
- Government of Nepal. (2020). National SDGs Data Portal. National Planning Commission. Retrieved from <u>http://sdg.npc.gov.np</u>
- Government of Nepal. (2020). *Parliamentary Oversight on Implementation of SDGs: A Handbook with Checklist.* Sustainable Development and Good Governance Committee. Federal Parliament, Kathmandu, Nepal.
- Government of Nepal. (2020). *Second Nationally Determined Contribution (NDC)*. Kathmandu.
- Government of Nepal. (2022). *National Framework for LNOB 2022*. National Planning Commission.
- Government of Nepal. (2024). *Voluntary National Review of Sustainable Development Goals*. National Planning Commission. Kathmandu.
- IIDS (26 October 2023), 43 Presenters to Carry Out VNRs at HLPF 2024, Accessed from https://sdg.iisd.org/news/43-presenters-to-carry-out-vnrs-at-hlpf-2024/
- JMP. (2020). Progress on Drinking Water, Sanitation and Hygiene in Schools. Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Retrieved from <a href="https://washdata.org/report/jmp-2020-wash-schools">https://washdata.org/report/jmp-2020-wash-schools</a>
- Ministry of Health and Population [MoHP], USAID, New ERA, and ICF. 2023. *Nepal Demographic and Health Survey 2022.* Kathmandu, Nepal: Government of Nepal, Kathmandu.
- Ministry of Water Supply (MoWS). (2020). Proposed Water and Sanitation Sector Targets for Nepal's Enhanced Nationally Determined Contribution. Submitted to Ministry of Forests and Environment by MoWS. Government of Nepal.
- Ministry of Water Supply (MoWS). (2023). *Water Supply, Sanitation & Hygiene: Sector Performance Report. Joint Sector Review*, Kathmandu.
- Ministry of Water Supply and Sanitation (MoWS). (2022). *Provincial WASH Strategy and Implementation.* Kathmandu: Government of Nepal.
- MuAN/NARMIN/ADCCN/UCLG. (2020). Voluntary Review: SDGs Localization in Nepal, available at: <a href="https://gold.uclg.org/sites/default/files/nepal\_2020.pdf">https://gold.uclg.org/sites/default/files/nepal\_2020.pdf</a>

- National Planning Commission. (2024). 16<sup>th</sup> National Periodic Plan (2024/25-2029/30). Government of Nepal.
- NGO Federation. (2023). *Nepal Civil Society Report on SDGs 2023*. Nepal SDG Forum, Kathmandu.
- Pralhad Gairapipli. (2024). *Water, Sanitation, and Hygiene: An Inclusive Agenda in Nepal,* DAI, retrieved from <u>https://dai-global-developments.com/articles/water-sanitation-and-hygiene-an-inclusive-agenda-in-nepal/</u>
- S. Sharma et al., (2021). Drinking Water Status in Nepal: An Overview in the Context of Climate Change. Journal of Water, Sanitation and Hygiene for Development, Vol 11, No 6.
- Sanitation and Water for All (SWA). (2020). Water and Sanitation: How to Make Public Investment Work: A Handbook for Finance Ministers.
- SDGs National Network. *Breaking Structural Barriers- Achieving the SDGs: Voluntary Mid-Term Review of the SDGs in Nepal, Civil Society Spotlight Report 2023.* National Campaign for Sustainable Development Nepal, Save the Children-Nepal, January 2024, Kathmandu.
- Tribhuvan University (TU). (2018). *Nepal Social Inclusion Survey 2018.* Central Department of Anthropology, TU, Kathmandu.
- UN-Water. (2021). *Integrated Monitoring and Reporting Framework for SDG 6*. Retrieved from <u>https://www.unwater.org</u>
- UNDP. (2016). Localizing the SDGs: Guidance for Local Governments and Stakeholders. New York.
- UNDP. (2020). *Water Resource Management for Sustainable Development*. Retrieved from <u>https://www.undp.org</u>
- UNICEF. (2019). *Water, Sanitation and Hygiene (WASH).* Retrieved from <u>https://www.unicef.org/wash</u>
- UNICEF. (2021). WASH in Municipalities: Planning and Implementation Guidelines. Kathmandu: UNICEF Nepal.
- UNICEF. (2024). Nepal WASH Budget Brief. UNICEF Nepal Country Office, Lalitpur, April 2024.
- United Nations. (2015). Transforming our World: The 2030 Agenda for Sustainable Development.
- Water Aid. (2024). WASH Financing 2023/2024.
- WaterAid. (2020). *Water, Sanitation, and Hygiene: A Pathway to Realizing Gender Equality and the Empowerment of Women and Girls*. <u>https://www.wateraid.org/us/publications/water-sanitation-and-hygiene-a-pathway-to-realising-gender-equality</u>
- WHO. (2021). *Guidelines on Sanitation and Health.* Retrieved from <u>https://www.who.int/publications/i/item/9789241515517</u>
- WHO. (2021). Guidelines on Sanitation and Health. Retrieved from https://www.who.int/publications/i/item/9789241515517
- WHO. (2023). *Guidelines for Drinking-water Quality*. Geneva: WHO Press.

# Annexes

Annex 1: Best Practices and Success Stories

## a) Dhulikhel Municipality: Founding of first Co-Treatment Plant in Nepal (Source: MuAN)

Nepal's first co-treatment facility, the "Shreekhandrapur Wastewater and Faecal Sludge Treatment Plant," in Dhulikhel, was officially inaugurated on World Environment Day, 5 June 2024. The event was attended by Mr. Ashok Kumar Byanju Shrestha, Mayor of Dhulikhel Municipality, Ms. Bhawana Sharma, Executive Director of ENPHO, Mr. Muskan Shrestha, Sanitation Advocacy Specialist of MuAN, and Mr. Pramod Kumar Shrestha, Chairperson of Ward-5, Dhulikhel Municipality, alongside local residents of Shreekhandapur. The establishment of the plant, a long-held vision of the municipality, marks a significant achievement in Nepal's sanitation efforts, celebrated on this symbolic day.



This vision was realized through the dedicated efforts of Dhulikhel Municipality, the Environment and Public Health Organization (ENPHO), the Municipal Association of Nepal (MuAN), UCLG ASPAC, and the Bill and Melinda Gates Foundation (BMGF) as part of the Municipalities Network Advocacy on Sanitation in South Asia (MuNASS) project. The municipality independently financed the construction of the treatment plant, with technical support from ENPHO for its design and construction. This groundbreaking co-

treatment facility in Nepal has a treatment capacity of 50 cubic meters per day for wastewater and 3 cubic meters per day for faecal sludge. Strategically located along the banks of the Punya Mata River, the plant is connected to the local sewer network, facilitating the efficient transport and treatment of wastewater from the surrounding community.

The treatment process at the plant comprises several components, starting with a Bar Screen that removes inorganic solid particles such as plastics and pads. Sludge treatment is handled by a Biogas Digester and a Septic Tank, while liquid treatment progresses through an Anaerobic Baffle Reactor, Horizontal Flow Constructed Wetland, and Polishing Pond. Additionally, the facility is equipped with an Automatic Sensor and a Submersible Pump to manage the flow of treated wastewater from the final outlet chamber.

Mayor Ashok Kumar Byanju Shrestha expressed his enthusiasm for the new treatment plant, announcing plans to transform it into an educational hub. With the nearby Kathmandu University, students will have excellent opportunities for research and practical learning at the facility. Mr. Byanju also emphasized the importance of the plant's long-term sustainability, with the municipality committed to allocating an annual budget for routine operation and maintenance. To enhance the site's aesthetic appeal, the municipality plans to implement gardening activities, including the planting of various flowers, which were initiated as part of the World Environment Day celebrations.

# **b)** Improving Faecal Sludge Management (FSM) in Waling Municipality, Nepal (Source: *MuAN*)

**The Problem:** In 2019, a Shit Flow Diagram (SFD) survey revealed that Waling Municipality faced serious risks of waterborne diseases and groundwater pollution due to poor Faecal Sludge Management (FSM). While the municipality lacked a formal sewerage system, 2% of the population discharged toilet waste directly into stormwater drains. The predominant use of lined tanks with impermeable walls and open bottoms posed significant groundwater contamination risks, particularly for 90% of containments connected to soak pits and 94% connected to open drains. Even though the municipality had been declared ODF, 1% of the population still practiced open defecation in forests, rivers, or open land areas, further threatening water safety.

The main source of drinking water was surface water, increasing the potential contamination from mismanaged faecal sludge (FS). Most households rarely emptied their large containment tanks, and the geographical terrain of Waling allowed high infiltration, exacerbating contamination. Private desludging services were limited and operated in an unregulated manner, often dumping untreated FS onto farmland. The absence of a formal FSM policy, a regulatory framework, or designated units meant that FSM activities were neither prioritized nor funded by the municipality, putting the community's health at risk.

**The solution:** Under the MuNASS I project, the SFD findings were presented to Waling's municipal council, which sparked an immediate response. The council, led by then-Mayor Mr. Dilip Pratap Khand, took decisive action, endorsing a municipal FSM policy and developing an action plan. Key changes included making septic tanks mandatory during the building permit process and promoting anaerobic biogas digesters to farmers.

Waling Municipality reimagined its existing solid waste management site as a Municipal Sanitation Centre, combining solid waste and FS management in a public, accessible space. The construction of a Faecal Sludge Treatment Plant (FSTP) with a daily treatment capacity of 6 m<sup>3</sup> was funded entirely by the municipality's budget, with technical assistance from ENPHO (MuNASS I's technical partner). The municipality also introduced mechanical desludging services alongside private operators, meeting growing demand from households and institutions.

The Sanitation Centre treats 2 m<sup>3</sup> of FS per day, producing sludge cake and treated water. The sludge is distributed to local farmers as fertilizer, while the water is used for landscaping at the Sanitation Centre. The Centre has become a multifunctional space, serving as a recreational site for the public and a learning hub for visitors, including students and representatives from other municipalities.

**Lessons Learned:** The SFD served as a powerful catalyst for Waling Municipality, highlighting the urgent need for FSM improvements. Strong leadership from the municipal council and clear, actionable data led to the development and implementation of an FSM policy, transforming Waling into a model for FSM practices in Nepal. The creation of the Sanitation Centre demonstrates that FSTPs can gain social acceptance by integrating them into public spaces rather than treating them as isolated, technical sites. By turning the FSTP into a recreational and educational hub, Waling has not only addressed its FSM challenges but also fostered community engagement and awareness. Today, Waling Municipality is seen as a pioneer in FSM, setting an example for other municipalities in Nepal. With continued monitoring of desludging practices and proactive planning, Waling is well on its way to sustaining safe sanitation for all its residents.

# c) Transforming Water and Sanitation Services Governance: The Journey of Success in Bheriganga Municipality (Source: MoWS, JSR 2023)

The WASH Alliance Nepal sub-programme in Bheriganga Municipality successfully strengthened water and sanitation governance, driven by several key factors:

- Development of the WASH Plan: This plan outlined the current water and sanitation situation, identified underserved areas, set investment priorities, and ensured the effective allocation of resources. It enabled the municipality to secure additional budget allocations from federal and provincial governments, as well as from organizations working in the WASH sector.
- Integration of NWASH-MIS: The integration of the NWASH-MIS, a web-based GIS-enabled system, facilitated data collection for the WASH Plan. The reports generated through this system supported evidence-based planning and informed decision-making at all levels of government, as well as by WASH users' committees.
- Establishment of a Dedicated WASH Unit: The creation of a WASH Unit within the municipality office was crucial for implementing the WASH Plan. Initially, the municipality lacked a WASH focal person, but efforts were made to appoint and train a technically proficient WASH focal person with clearly defined roles and responsibilities. The long-term goal is to establish a permanent WASH Unit within the municipality.
- WASH Financing Mechanism: To address the challenge of financing the WASH sector, the municipality established a Water and Sanitation Management Board, supported by a revolving WASH fund. This fund allows water systems to access resources for maintenance, repairs, and expansion without interest, ensuring equitable access. The municipality plans to grow the fund through additional investments in the future, even beyond the program period.

Despite these successes, following key priorities still need to be addressed moving forward:

- Ensuring the full implementation of the WASH Plan, along with regular data updates to reflect the current situation, requires sufficient funding support from the federal government.
- For the continuity of the WASH Unit within the municipality, it is crucial for the local government to take ownership of the unit. The responsibility for establishing and maintaining the WASH Unit, initially undertaken by the SUSWA project, must now be transferred to the municipality, with staff members becoming part of the local government payroll to ensure its sustainability.
- Expanding the Water and Sanitation Fund from its early stages into a comprehensive fund that benefits all water supply systems is also essential. The WASH Unit must manage the use, monitoring, and repayment of the funds, adhering to the defined terms and conditions to ensure transparency and accountability.

The success in strengthening WASH governance in Bheriganga Municipality highlights the significance of strategic planning, data integration, capacity building, and innovative financing mechanisms in delivering safe and sustainable water and sanitation services. The journey is ongoing, with an emphasis on sustainability and continuous improvement.

# d) Integrating AI into the asset management of rural water supply schemes in Nepal (Source: MoWS, JSR 2023)

Rara Labs, with financial support from the Frontier Technology Hub funded by FCDO, conducted a study from January to March 2023 to assess the feasibility of using AI in managing WASH assets within rural water supply schemes in Nepal. The study was based on the hypothesis that AI could enhance the analysis of infrastructure conditions and improve the quality of data in the NWASH-MIS, leading to better decision-making, such as accurately estimating budget requirements for maintaining and repairing water supply schemes.

The study found that it is technically feasible to develop an AI solution capable of processing images in the NWASH portal, identifying assets, and detecting faults (e.g., breakages and corrosion) that are not currently logged in the system's structured data. Testing successfully developed a model capable of identifying and classifying various assets, including taps, pipelines, tap stands, and metered connections. Additionally, the model was able to detect faults, such as broken pipes and corrosion, in WASH assets from the images.

When compared to existing manual validation processes, the AI tool was found to be more efficient and accurate in identifying anomalies in WASH asset photographs. While manual validation of data took 30 minutes, the AI completed the same task in just one minute. Furthermore, the AI's accuracy in detecting objects was equivalent to that of manual processes, and it was more precise in identifying anomalies.

The study recommends further development and testing of the AI solution. Future efforts should focus on refining algorithms, optimizing processes, and determining how to best integrate the AI model into the NWASH portal, potentially expanding its capabilities to detect additional types of faults beyond corrosion and breakages.

### e) Empowering Local Governments for Sustainable WASH Development in Karnali Province (Source: MoWS, JSR 2023)

The Sustainable WASH for All (SUSWA) project, launched in Nepal's Karnali Province in November 2021, is a collaborative initiative supported by the Government of Nepal, the Government of Finland, and the European Union. Local governments (LGs) are required to contribute a minimum of 22% of the total project budget, as outlined in their annual work plans (AWP). These contributions, along with funding from various sources, are directed to the LGs' bank accounts for implementing WASH-related activities. LGs allocate their matching funds across three key project outcome areas: WASH infrastructure, WASH governance, and sanitation and hygiene initiatives. In the project's first year, eight fast-track LGs in upper Karnali committed an average of NPR 6.8 million each to SUSWA, and this amount increased by 31.4% to an average of NPR 8.8 million in the second year, reflecting the LGs' growing commitment to expanding WASH activities. Additionally, 13 new LGs included in the project's second year demonstrated their commitment by allocating an average of NPR 10.9 million, a 59% increase compared to the first year. Altogether, the LGs contributed a total of NPR 207 million across both years, showcasing their dedication to improving WASH services in their communities.

The SUSWA project has empowered local governments (LGs) to create tailored WASH plans that address the specific needs of their communities. Fifteen LGs received additional support in coordination with the Provincial Government and the NWASH team, demonstrating their commitment to contributing matching funds. The LGs' dedication is evident in their willingness to

allocate an average of 28% of their budgets, ranging from 23% to 39%, to secure additional program funding from development partners to meet WASH requirements. At the recent Joint Sector Review workshop in September 2023, Ms. Urmila Bishwokarma, Honourable Minister of the Ministry of Water Resource and Energy Development, underscored the importance of LGs maintaining or increasing their budget allocations for matching funds. She highlighted that many development partners depend on these allocations when deciding investment budgets for LGs. This reinforces the strong commitment of LGs to sustain and expand WASH initiatives, ensuring long-term progress in the region.

# f) Empowering Communities in Madhesh: Local Initiatives to Ensure the Quality of Water (Source: MoWS, JSR 2023)

In Nepal's Madhesh Province, access to safe drinking water has long been a challenge, with much of the population relying on shallow tube wells and hand-pump-equipped dug wells due to the lack of a piped water supply. Unfortunately, these sources are prone to contamination, often caused by poor maintenance, insufficient drainage infrastructure, and waterlogging during the monsoon. Compounding the issue was limited public awareness regarding the quality of the water being consumed. In response, Sabal Nepal and WHH conducted water quality tests, revealing that 27% of the samples contained E. coli bacteria.

A previous baseline survey also showed that 81% of community members drank untreated water, leading to frequent waterborne diseases. Although awareness campaigns improved the situation, the absence of local water quality testing facilities remained a significant hurdle. To address this, the Government of Nepal urged local governments to establish Mini Water Quality Testing Laboratories, with support from development partners such as WHH, Sabal Nepal, and MCDC. As a result, three municipalities have now launched these labs, enabling regular water quality monitoring and raising awareness among both authorities and the public. Health care workers were trained to conduct water quality tests, and municipalities worked with federal and provincial governments to implement systematic water testing mechanisms.

Siraha Municipality, Dakneshwari Municipality, and Bishnupur Rural Municipality in Nepal have made notable strides in addressing water quality challenges. Aware of the critical need for safe drinking water, these municipalities have established Mini Water Quality Testing Labs, capable of testing thirteen key water quality parameters. With comprehensive training and collaborative efforts in securing funding, lab facilities, and equipment, they have taken on the responsibility of managing these labs. They are now actively implementing standard operating procedures and are in the process of developing water surveillance guidelines and policies. Their vision goes beyond basic water testing, aiming to establish a comprehensive water quality monitoring system that includes schools, healthcare facilities, government offices, and households. To realize this goal, they are working closely with federal and provincial governments to ensure the enforcement of necessary policies and procedures, demonstrating a proactive approach to improving both water quality and public health in their communities.

## Annex 2: Kathmandu Declaration of Key Recommendations for Advancing the WASH Sector in Nepal 2023

### Kathmandu Declaration of Key Recommendations for Advancing the WASH Sector in Nepal

#### September 2023

Committing to, the principles of universal, equitable, inclusive, and sustainable access to safe Water, Sanitation, and Hygiene (WASH) services for ALL in communities, institutions, and public places to meet the national targets for WASH which are in line with SDG goals and targets,

Declaring our unwavering dedication to significant contribution of WASH in promoting public health, environmental sustainability, and social development,

Adopting the value of coordination, collaboration, and uniting for widening the sector partnership to address the bottlenecks and enact transformative changes in the sector,

Agreeing upon the comprehensive framework of key recommendations and actionable points drawn from the Third Joint Sector Review Conclave conducted on 26 and 27 September 2023

We, the undersigned representatives and stakeholders have agreed to:

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Tiresh Prasad Kina Joint Secretary

- 1. Update and operationalize the Sector Development Plan (SDP) aligning with the Constitution of Nepal, National WASH Policy 2023, and Water Supply and Sanitation Act 2022 and key recommendations of the third JSR 2023.
- Catalyze Political Commitment and enhance Mutual Accountability Mechanisms among stakeholders to accelerate actions towards achieving universal, equitable, sustainable WASH services meeting SDG targets.
- Realign institutional and governance set up for WASH system strengthening with appropriate intergovernmental coordination mechanism to backstop the service providers, including WUSCs, for improved service reliability and operational management efficiency.
- 4. Undertake actions for Mapping, Facilitating, Licensing, Regulating, and Standardizing Water and Sanitation Services across the sanitation value chain for both onsite and offsite sanitation services.
- Operationalize institutions established for the regulation of WASH services as mandated in the Water Supply and Sanitation Act at all levels and build appropriate capacities of regulatory institutions.
- 6. Work towards achieving access to safely managed water supply services adopting a programmatic and system thinking approach ensuring people live in water and hygiene safe communities where no one is left behind.

Enhance capacity of local governments and other service providers in water quality monitoring and service compliance with national drinking water quality standard. surveillance and en

- 8. Adopt municipality wide inclusive sanitation approach for implementing a national sanitation and hygiene mission and accelerate actions to capture, transport, treat and safely dispose domestic wastewater; safely manage Faecal Sludge and Solid-waste considering circular economy principles to contribute to clean health of water bodies and the environment.
- 9. Prepare information briefs and strategic negotiators for education and advocacy in targeted intersectoral dialogues/coordination/collaboration for better sector positioning.
- 10. Establish systemic support services and a Federal-level setup to aid Provincial and Local governments in creating resilient assets, improving service delivery and enhancing regulation.
- 11. Prepare and Operationalize Capacity Development Master Plan of three tiers of the governments for universal, equitable, inclusive, and sustainable service delivery.
- 12. Establish the WASH Plan as the foundational framework for planning, programming, and executing all local-level WASH-related initiatives from three tiers of government.
- Strengthen, Optimize and Scale-up NWASH MIS; establish connections with other Sectoral MIS for informed actions.
- 14. Strengthen SEIS for efficient, collaborative, and inclusive WASH Sector Progress by operationalizing the business plan and establish linkage with academia and research institutions for R&D and learnings.
- 15. Leverage private sector expertise and investments and create an enabling environment for public private partnerships to enhance service delivery by creating opportunities for their meaningful engagement in sector advancement including use transformative technologies in infrastructure and services.
- 16. Prepare and Operationalize WASH Financial Strategy, clearly presenting a strong economic case to secure investments for achieving the SDG targets.
- 17. Develop Climate Resilient WASH service delivery frameworks, Climate Rationale for WASH, capacity building training module, technical guidelines and standards to support all three tiers of government and sector stakeholders aligning WASH investment with Green, Resilient and Inclusive Development (GRID) for inclusive, Climate and Disaster resilient WASH plans and programs.
- 18. Mainstream Gender Equality and Social Inclusion (GESI) in WASH sector to ensure equitable access, meaningful participation and empowered decision-making including for ensuring Occupational Health and Safety for frontline sanitation workers.

 Improve inter sectoral collaboration among three tiers of government and strengthen partnerships with MUAN, NARMEN, FEDWASUN, Sanitation Advocacy Organizations/Associations and Some Sectoral Collaborations and S

Secretary

Joint

Binu Ballacharya Kunwarplanning

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other CSOs for harmonization and informed advocacy through use of appropriate IEC materials and leveraging mass media.

20. Promote cross-sectoral/intersectoral collaboration and cooperation for implementation and delivery of WASH services both in communities and institutions (WinS, HCF, Public Places); implement programs for the protection of water sources, recharge of under-ground water, developing early warning systems on WASH sector and their watersheds through Integrated Water Resource Management (IWRM).

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## Annex 3: Federal WASH Sector Program/Projects 2023/2024(in Hundred Thousand NPR)

| Program/Projects   | Total   | Domestic<br>(cash) | External |                                     |
|--|---------|--------------------|----------|-------------------------------------|
| Ministry of Water Supply   | 5,855   | 3455               | 2,400    | Support - Policy                    |
| Melamchi Water Supply Project                                      | 5,083   | 5,083              | -        | Large Newtork -Urban                |
| Kathmandu Valley Bulk Water Transmission Project (2nd)             | 12,943  | 4943               | 8,000    | Large Newtork -Urban                |
| Department of Water Supply and Sewerage Management                 | 1,059   | 986                | 73       | Support - Adm & Mgmt/<br>Consulting |
| Human Resource Development Program                                 | 377     | 347                | 30       | Suppor - Capacity building          |
| National Management Information Project                            | 389     | 389                | -        | Support - MIS/Monitoring            |
| Water Service Extension and Rehabilitation Program                 | 3,343   | 3,343              | -        | Basic - Rural /Rehab                |
| Water Quality Improvement Program                                  | 4,731   | 4,731              | -        | Large Network - Urban               |
| Climate Resiliant Large Water Supply Project                       | 20,497  | 20,497             | -        | Large Network - Rural               |
| Sewerage Construction and Treatment Program                        | 10,751  | 10,751             | -        | Large Newtork -Urban                |
| Water Supply and Sanitation Co Financing Program                   | 12,594  | 12,594             | -        | Large Network - Uban                |
| Urban Water Supply and Sanitation (Sector) Project                 | 28,424  | 6,506              | 21,918   | Large Network - Urban               |
| Central Drinking Water Project                                     | 17,648  | 17,648             | -        | Large Network - Rural               |
| Integrated Water Supply and Sewerage Management Project            | 3,554   | 3,554              | -        | Large Network - Urban<br>(proposed) |
| Covid-19 Response Project  | 3,293   | 254                | 3,039    | Capacity Building                   |
| Sustainable Sanitation Project                                     | 21      | 21                 | -        | Basic - Rural                       |
| Nepal Water Governance and Infrastructure Promotion Project        | 3,868   | 679                | 3,189    | Large Network - Rural/Urban         |
| Town Development Fund _ Water Supply Sector (TDF)                  | 6,000   | 1,620              | 4,380    | Large Network- Urban                |
| Water Supply Augmentation Program (NWSC)                           | 4,760   | 4,760              | -        | Large Network- Urban                |
| Water Supply and Sewerage Program (NWSC)                           | 21,980  | 2,980              | 19,000   | Large Network- Urban                |
| Kathmandu Valley Water Supply Management Board                     | 10,325  | 10,325             | -        | Large Network- Urban                |
| Sewerage Treatment Centre (KUKL)                                   | 500     | 500                | -        | Large Network- Urban                |
| Kathmandu Valley Water Supply Improvement Project (PID)            | 22,385  | 12,355             | 10,030   | Large Network- Urban                |
| Kathmandu Valley Sewerage Management Project (PID)                 | 17,635  | 4,028              | 13,607   | Large Network- Urban                |
| Kathmandu Valley Water Supply Improvement Project (Second) - (PID) | 18,492  | 2,130              | 16,362   | Large Network- Urban                |
| Total Federal (A)  | 236,507 | 134,479            | 102,028  | -                                   |
| Total federal conditional grant to provincial governments (B)      | 37,752  | 37,752             |          |                                     |
| Koshi  | 5,810   | 5,810              |          | Basic - RuralUrban                  |
| Madhesh  | 5,605   | 5,605              |          | Basic - RuralUrban                  |
| Bagmati  | 5,762   | 5,762              |          | Basic - RuralUrban                  |
| Gandaki  | 4,952   | 4,952              |          | Basic - RuralUrban                  |
| Lumbini  | 7,006   | 7,006              |          | Basic - RuralUrban                  |
| Karnali  | 3,425   | 3,425              |          | Basic - RuralUrban                  |
| Sudur Paschim  | 5,192   | 5,192              |          | Basic - RuralUrban                  |
| Federal Fiscal Transfer to local governments ( C )                 | 13,296  | -                  | 13,296   | Basic - RuralUrban                  |
| Grant Total ( A + B + C )  | 287,555 | 172,231            | 115,324  |                                     |

Source: Water Aid, 2024.

Annex 4 WASH Expenditure against Budget Heads Under the MoWS 2022/2023 (in Million NPR)

| Program/Project (Budget   | Actual Budget |         |       | Expenditure |         |       | Expenditure (%) |         |       | Devlopment |
|---|---------------|---------|-------|-------------|---------|-------|-----------------|---------|-------|------------|
| heads)  | Recurrent     | Capital | Total | Recurrent   | Capital | Total | Recurrent       | Capital | Total | Partner    |
| Ministry of Water Supply  | 95            | 5       | 100   | 68          | 3       | 71    | 72              | 63      | 71    |            |
| Melamchi Water Supply Project                                   | 78            | 800     | 878   | 61          | 521     | 582   | 79              | 65      | 66    |            |
| Kathmandu Valley Bulk Water<br>Transmission Project (Second)    | 0             | 1605    | 1605  | 0           | 119     | 119   | -               | 7       | 7     |            |
| Department of Water Supply<br>and Sewerage Management           | 70            | 61      | 130   | 53          | 27      | 80    | 76              | 45      | 62    |            |
| Human Resource Development<br>Program                           | 34            | 10      | 44    | 18          | 3       | 21    | 53              | 31      | 49    |            |
| Federal Water Supply and<br>and Sewerage Management<br>Program  | 274           | 32      | 306   | 232         | 19      | 252   | 85              | 60      | 82    |            |
| National Information<br>Management and Monitoring<br>Program    | 59            | 6       | 65    | 5           | 2       | 7     | 9               | 30      | 11    |            |
| Water Service Extension and<br>Rehabilitation Program           | 6             | 3157    | 3163  | 4           | 2603    | 2607  | 65              | 82      | 82    |            |
| Water Quality improvement<br>Program                            | 15            | 650     | 665   | 9           | 491     | 500   | 61              | 75      | 75    |            |
| Climate Resiliant Large Water<br>Supply Project                 | 42            | 3434    | 3475  | 36          | 3224    | 3259  | 86              | 94      | 94    |            |
| Sewer Construction and<br>Treatment Program                     | 23            | 1147    | 1170  | 15          | 1004    | 1019  | 67              | 87      | 87    |            |
| Water Supply and Sanitation<br>Cofinancing Program              | 42            | 2112    | 2154  | 37          | 1638    | 1676  | 88              | 78      | 78    |            |
| Urban Water Supply and<br>Sanitation (Sector) Project           | 145           | 3705    | 3850  | 96          | 2328    | 2423  | 66              | 63      | 63    | ADB        |
| Central Water Supply Project                                    | 12            | 3513    | 3524  | 9           | 3274    | 3283  | 75              | 93      | 93    |            |
| Integrated Water Supply and<br>Sewerage Managemen Project       | 11            | 154     | 165   | 8           | 145     | 152   | 72              | 94      | 92    |            |
| Covie 19 Response Program                                       | 7             | 250     | 257   | 5           | 236     | 241   | 71              | 94      | 94    | JFPR       |
| Sustainable Sanitation Project                                  | 0             | 300     | 300   | 0           | 155     | 155   | 0               | 52      | 52    | Finland    |
| Water Supply Governance and<br>Infrastructure Promotion Project | 18            | 370     | 388   | 7           | 12      | 18    | 38              | 3       | 5     | IDA        |
| Rural Water Supply and<br>Sanitation Fund                       | 13            | 0       | 13    | 10          | 0       | 10    | 79              | -       | 79    |            |
| Kathmandu Valley Sewerage<br>Management Project                 |               |         | 1928  |             |         | 1016  |                 |         | 53    |            |
| Kathmandu Valley Water Supply<br>Improvement Project            |               |         | 2817  |             |         | 1959  |                 |         | 70    |            |
| Total   | 943           | 21310   | 26997 | 673         | 15802   | 19450 | 71              | 74      | 72    |            |

Red color is to indicate absorption capacity below 60% Amber color is to indicate absorption capacity between 60 to 80 Percent Green color is to indicate absorptio capacity above 80%

Source: Water Aid, 2024.

| Funding        | 2016   | 5/17  | 2017  | /18  | 2018  | 8/19 | 201   | 9/20  | 202   | 0/21  | 202   | 1/22  | 202   | 2/23  | 202   | 3/24  |
|----------------|--------|-------|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Institution    | Total  | %     | Total | %    | Total | %    | Total | %     | Total | %     | Total | %     | Total | %     | Total | %     |
| Fed. Gov       | 15.90  | 46.00 | 16.10 | 50.0 | 18.10 | 50.8 | 26.8  | 61.7  | 33.4  | 77.40 | 27.4  | 61.99 | 27.43 | 71.90 | 17.22 | 59.89 |
| Donor/DP       | 18.57  | 54.00 | 17.28 | 50.0 | 17.15 | 48.2 | 16.7  | 38.5  | 9.7   | 22.60 | 16.8  | 38.01 | 10.7  | 28.10 | 11.53 | 40.11 |
| UNICEF         | 0.10   | 0.40  | 0.16  | 0.5  | 0.11  | 0.3  | 0.02  | 0.03  | 0.01  | 0.02  | 0.01  | 0.02  | 0.003 | 0.01  | 0.01  | 0.04  |
| IDA            | 5.60   | 16.00 | 1.95  | 6.0  | 2.15  | 6.0  | 1.89  | 4.34  | 0.99  | 2.30  |       |       | 0.353 | 0.92  | 0.32  | 1.11  |
| OFID           |        |       |       |      |       |      | 0.66  | 1.52  | 0.30  | 0.70  | 0.36  | 0.80  | 0.207 | 0.54  | 0.05  | 0.18  |
| ADB            | 11.30  | 33.00 | 14.46 | 42.0 | 13.60 | 38.2 | 12.90 | 29.68 | 7.19  | 16.68 | 12.92 | 29.19 | 8.288 | 21.72 | 7.38  | 25.66 |
| Finland        | 0.50   | 2.00  | 0.66  | 2.0  |       |      |       |       |       |       | 0.18  | 0.40  | 0.240 | 0.63  | 0.00  | 0.00  |
| Helvetas       | 0.05   | 0.10  | 0.03  | 0.1  |       |      |       |       |       |       |       |       |       |       |       |       |
| UN-Habitat     | 0.01   | 0.02  | 0.01  | 0.0  |       |      |       |       |       |       |       |       |       |       |       |       |
| WHO            | 0.00   | 0.01  | 0.01  | 0.0  |       |      |       |       |       |       |       |       |       |       |       |       |
| EU             | 0.01   | 0.03  |       |      |       |      |       |       |       |       |       |       |       |       |       |       |
| JICA           | 1.00   | 3.00  |       |      | 1.30  | 3.7  | 1.25  | 2.88  | 1.25  | 2.90  | 1.25  | 2.83  | 1.400 | 3.67  | 1.90  | 6.61  |
| IMF/ECF        |        |       |       |      |       |      |       |       |       |       | 2.00  | 4.52  |       | 0.00  |       |       |
| JFPR           |        |       |       |      |       |      |       |       |       |       | 0.11  | 0.24  | 0.230 | 0.61  | 0.30  | 1.06  |
| USAID          |        |       |       |      |       |      |       |       |       |       |       |       |       |       | 0.24  | 0.83  |
| Other<br>donor |        |       |       |      |       |      |       |       |       |       |       |       |       |       | 1.33  | 4.62  |
| Total          | 34.472 | 100   | 34.5  | 100  | 35.6  | 100  | 43.46 | 100   | 43.10 | 100   | 44.25 | 100   | 38.15 | 100   | 28.76 | 100   |

Annex 5: Federal WASH Budget by Development Partners: 2016/017-2023/024 (in Billion NPR)

Source: Water Aid, 2024.

## Annex 6: List of Participants in the Provincial and National Consultations

| S.N | Participants Name       | Organization/ Address          | Position                    | Phone No   |
|-----|-------------------------|--------------------------------|-----------------------------|------------|
| 1   | Bhim Prasad Dhungana    | MuAN                           | President                   | 9851007101 |
| 2   | Dil Prasad Rai          | Belbari Municipality           | Province Coordinator, Mayor | 9852046509 |
| 3   | Kalanidhi Devkota       | MuAN                           | MuAN ED                     |            |
| 4   | Kailash Kumar Ale       | Bhojpur Municipality           | Mayor                       | 9852052490 |
| 5   | Devendre B Malla        | Barahchhetra Municipality      | CEO                         | 9852065555 |
| 6   | Kaluman Lama            | Chaudandigadi Municipality     | Mayor                       | 9852835166 |
| 7   | Ashok Karki             | Belaka Municipality            | Mayor                       | 9852829011 |
| 8   | Jamuna Karki Subedi     | Myanglung Municipality         | Deputy Mayor                | 9842346041 |
| 9   | Jamuna Magar (Karki)    | Laligurans Municipality        | Deputy Mayor                | 9862655742 |
| 10  | Nitu Thapa Koirala      | Belbari Municipality           | Deputy Mayor                | 9852034135 |
| 11  | Jalbarsa Rajbansi       | Gauradaha Municipality         | Deputy Mayor                | 9862007248 |
| 12  | Binita Kumari Mehta     | Inaruwa Municipality           | Deputy Mayor                | 9852088781 |
| 13  | Sangita Chaudhary       | Itahari Municipality           | Deputy Mayor                | 9852074991 |
| 14  | Ganga Prasad Kharel     | Urlabari Municipality          | Mayor                       | 9851092328 |
| 15  | Rupesh Khadka           | Letang Municipality            | Secretary                   | 9813515771 |
| 16  | Krishna Kumar Tamang    | Chainpur Municipality          | Mayor                       | 9842106730 |
| 17  | Bhupendra Lawati        | Letang Municipality            | Mayor                       | 9842086684 |
| 18  | Mohan Tumbapo           | Patharisanischare Municipality | Mayor                       | 9842533444 |
| 19  | Manju Kumari Karki      | Mahalxmi Municipality,         | Deputy Mayor                | 9852070124 |
| 20  | Sumuna Shrestha         | Panchakhapan Municipality      | Deputy Mayor                | 9842074454 |
| 21  | Pabitra Mahatara Prasai | Birtamod Municipality          | Mayor                       |            |
| 22  | Bhima Devi Ojha         | Phungling Municipality         | Deputy Mayor                | 9852660208 |
| 23  | Ramesh Raut             | Halesituwachung Municiaplity   | Deputy Mayor                | 9851002354 |
| 24  | Pramila Rai             | Halesituwachung Municipality   | Deputy Mayor                | 9842173438 |
| 25  | Kedar Guragain          | Sundarharaicha Municipality    |                             | 9852016900 |
| 26  | Rajendra Shrestha       | ENPHO                          | Program Director            |            |
| 27  | Buddha Bajracharya      | ENPHO                          | Program Coordinator         | 9849132020 |
| 28  | Kumar Khadka            | MuAN                           | VSR Lead Consultant         | 9851070740 |
| 29  | Khagendra P. Khatiwada  | PMLC Dharan                    | Focal Person                | 9852056979 |

### Provincial VSR Consultation, 28th April 2024, Sunday, Itahari, Koshi Province

### Provincial VSR Consultation, 17th May 2024, Friday, Pokhara, Gandaki Province

| S.N | Participants Name      | Organization/ Address    | Position       | Phone No   |
|-----|------------------------|--------------------------|----------------|------------|
| 1   | Ramesh Kumar Pandey    | Madhyanepal Municipality | Mayor          | 9856014111 |
| 2   | Swasthani Rijal        | Kushma Municipality      | Deputy Mayor   | 9841406333 |
| 3   | Basanta Kumar Shrestha | Baglung Municipality     | Mayor          | 9857620066 |
| 4   | Kalanidhi Devkota      | MuAN                     | ED             | 9851057321 |
| 5   | Bishnu Prasad Sharma   | Baglung Municipality     |                |            |
| 6   | Krishna Prasad Koirala | Lamjung                  |                |            |
| 7   | Madan Bhakta Adhikari  | Nawalpur                 |                |            |
| 8   | Ram Chandra Bhandari   | Madhyanepal              | Nagar Prabakta | 9856055418 |
| 9   | Jyoti Lamichhane       | Beni Municipality        | Deputy Mayor   | 9857651672 |

| 10 | Dadhi Raj Subedi        | Bhimad Municipality        | Mayor                   | 9856004001  |
|----|-------------------------|----------------------------|-------------------------|-------------|
| 11 | Shobna Kumari Chhetri   | Phalewas Municipality      | Deputy Mayor            | 9857621442  |
| 12 | Nava Raj Gautam         | Shuklagandaki Municipality | Public Health Inspector | 9856075604  |
| 13 | Jeevan Kaji Bajracharya | Bhimad Municipality        | Sub Engineer            | 9840096336  |
| 14 | Isha Rana               | Chapakot Municipality      | Deputy Mayor            | 9856070541  |
| 15 | Saroj Parajuli          | Bheerkot Municipality      | Engineer                | 9849408008  |
| 16 | Bhagwathi Regmi Aryal   | Bheerkot Municipality      | Deputy Mayor            | 9856055513  |
| 17 | Bibek Kumar Khatri      | Pokhara Metropolitan       | Engineer                | 9846279119  |
| 18 | Ashok Dware             | Pokhara Metropolitan       | IT Officer              | 9856044712  |
| 19 | Kshitij Aryal           | MuAN                       | Finance officer         | 9801117362  |
| 20 | Muskan Shrestha         | MuAN                       | Sanitation Adv.Of       | 9851057321  |
| 21 | Uma Gotame              | Bhanu Municipality         | Deputy Mayo r           | 9856079300  |
| 22 | Khadga B. Gurung        | Rainas Municipality        |                         | 9856045177  |
| 23 | Jagam Shrestha          | ENPHO                      | Senior Research Off.    | 9841691138  |
| 24 | Roshan                  | Gaindakot Municipality     | Secretary               | 9855051413  |
| 25 | Kumar Khadka            | MuAN                       | VSR Lead Consultant     | 9851070740  |
| 26 | Dinesh Shrestha         | ADCCN                      | Admin & IT              | 9841331415  |
| 27 | Bharat Bhattarai        | ADCCN                      | ED                      | 9851279974  |
| 28 | Purushottam Gautam      | Baglung Municipality       | Officer                 | 9874636926  |
| 29 | Pratigya Neupane        | NARMIN                     | Program Coordinator     | 9841493432  |
| 30 | Surya Kumar Khadka      | S00B Solution              | Program Coordinator     | 98414323624 |
| 31 | Rabi Wenju              | MuAN                       | Program Coordinator     | 9841753570  |
| 32 | Roshani Shrestha        | MuAN                       | Admin & Info            | 9849499744  |
| 33 | Madhusudan Rijal        | MuAN                       | Capacity Dev.Officer    | 9841700686  |
| 34 | Jyoti Sharma            | MuAN                       | DRRM Specialist         | 9845249888  |
| 35 | Anjil Adhikari          | OXFAM                      | WASH &Water lead        | 9841784026  |
| 36 | Kshitij Aryal           | MuAN                       | Finance Officer         | 9801117382  |
| 37 | Prajan Hada             | SOPHEN                     | EM                      | 9851166554  |
| 38 | Gokul Thapa Magar       | Neelkantha Municipality    | Office driver           | 9861316641  |
| 39 | Milan Tamang            | MuAN                       | Office driver           | 9841820204  |
| 40 | Chakra Mahata           | Bheemdutta Municiplity     | Secretary               | 9858754000  |
| 41 | Muskan Shrestha         | MuAN                       | SAO                     |             |

### National VSR Consultation and Validation Workshop, 17th May 2024, Friday, Pokhara, Gandaki Province

| S.N | Participants Name    | Organization/ Address             | Position           | Phone No   |
|-----|----------------------|-----------------------------------|--------------------|------------|
| 1   | Bhim Prasad Dhungana | MuAN (Neelkantha<br>Municipality) | President          | 9851007101 |
| 2   | Narulal Chaudhary    | MuAN (Ghorahi Sub Metro)          | General Secretary  | 9857815000 |
| 3   | Bimala Rai           | MuAN (Halesi Tuwachung)           | Treasurer          | 9842974571 |
| 4   | Prakash Bhandari     | MuAN (Sharada Municipality)       | Secretariat Member | 9851130582 |
| 5   | Kalpana Katuwal      | MuAN (Barhathawa<br>Municipality) | Secretariat Member | 9844392619 |
| 6   | Parbati Tiwari       | MuAN (Devchuli Municipality)      | Member             | 9857040742 |
| 7   | Bimala Aryal         | Sunwal Municipality               | Mayor              | 9857048102 |
| 8   | Bandana Pandey       | Palungtar Municipality            | Deputy Mayor       | 9856074448 |
| 9   | Padam Bogati         | Bhimdutta Municipality            | Mayor              | 9858751645 |

| 10 | Purna Prasad Acharya   | Kohalpur Municipality          | Mayor                | 9851200600  |
|----|------------------------|--------------------------------|----------------------|-------------|
| 11 | Masali Maya Thokar     | Gorkha Municipality            | Deputy Mayor         | 9846070363  |
| 12 | Binod Shah             | Kalaiya Sub Metropolitan City  | Mayor                | 9855022170  |
| 13 | Khildhwoj Panthi       | Resunga Municipality           | Mayor                | 9857061923  |
| 14 | Birendra Bhatta        | Godawari Municipality, Kailali | Mayor                | 9851125072  |
| 15 | Sunita Dangol          | Kathmadu Metropolitan City     | Deputy Mayor         | 9851279899  |
| 16 | Dilliraj Joshi         | Amargadi, Dadeldhura           | Mayor                | 9841314294  |
| 17 | Mitra Jirel            | Jiri Municipality              | Mayor                | 9860087388  |
| 18 | Padam Bahadur Bohora   | Mangalsen Municipality         | Mayor                | 9868523053  |
| 19 | Maheshwari Rai         | Triyuga Municipality           | Deputy Mayor         | 9842838178  |
| 20 | Pushpa Badi            | Chaurjahari Municipality       | Mayor                | 9866208509  |
| 21 | Kabita Tiwari Gaihre   | Waling Municipality            | Deputy Mayor         | 9856013002  |
| 22 | Chandra Prakash Gharti | Bheri Municipality             | Mayor                | 9851135595  |
| 23 | Basanta Kumar Shrestha | Baglung Municipality           | Mayor                | 9857620066  |
| 24 | Keshav Kumar Shrestha  | Buddhabhumi Municipality       | Mayor                | 9857050290  |
| 25 | Shyam Prasad Yadav     | Gadhimai Municipality          | Mayor                | 9855040748  |
| 26 | Buddha Bajracharya     | ENPHO                          | Program Coordinator  | 9849132020  |
| 27 | Kamala KC              | British Embassy, Kathmandu     | WASH Advisor         | 9851173410  |
| 28 | Prabhat Shrestha       | Ministry of Water Supply       | SDE                  | 9851244520  |
| 29 | Dr. Rajit Ojha         | Ministry of Water Supply       | Joint Secretary      | 9851144920  |
| 30 | Dandi Ram Bishwokarma  | UNICEF                         | WASH Specialist      | 9851107905  |
| 31 | Dinesh Shrestha        | ADCCN                          | Admin & IT           | 9841331415  |
| 32 | Bharat Bhattarai       | ADCCN                          | ED                   | 9851279974  |
| 33 | Purushottam Gautam     | Baglung Municipality           | Officer              | 9874636926  |
| 34 | Pratigya Neupane       | NARMIN                         | Program Coordinator  | 9841493432  |
| 35 | Surya Kumar Khadka     | S00B Solution                  | Program Coordinator  | 98414323624 |
| 36 | Rabi Wenju             | MuAN                           | Program Coordinator  | 9841753570  |
| 37 | Roshani Shrestha       | MuAN                           | Admin & Info         | 9849499744  |
| 38 | Madhusudan Rijal       | MuAN                           | Capacity Dev.Officer | 9841700686  |
| 39 | Jyoti Sharma           | MuAN                           | DRRM Specialist      | 9845249888  |
| 40 | Anjil Adhikari         | OXFAM                          | WASH &Water lead     | 9841784026  |
| 41 | Kshitij Aryal          | MuAN                           | Finance Officer      | 9801117382  |
| 42 | Prajan Hada            | SOPHEN                         | EM                   | 9851166554  |
| 43 | Gokul Thapa Magar      | Neelkantha Municipality        | Office driver        | 9861316641  |
| 44 | Milan Tamang           | MuAN                           | Office driver        | 9841820204  |
| 45 | Chakra Mahata          | Bheemdutta Municiplity         | Secretary            | 9858754000  |
| 46 | Muskan Shrestha        | MuAN                           | SAO                  |             |
| 47 | Kalanidhi Devkota      | MuAN                           | Executive Director   | 9851057320  |
| 48 | Lalit Mani Acharya     | MuAN                           | Account Officer      | 9841756765  |
| 49 | Manoj Magar            | MuAN                           | Office Support       | 9769322905  |
| 50 | Ruplal Tamang          | MuAN                           | Office Support       | 9803664370  |
| 51 | Kumar Khadka           | MuAN                           | VSR Lead Consultant  | 9851070740  |

## Annex 7: List of KII Participants

| S.N | Name                               | Organization/Address  | Position                             |
|-----|------------------------------------|---|--------------------------------------|
| 1   | Ms. Mina Lama                      | Hetauda Sub-Metropolitan City,<br>Makwanpur   | Mayor                                |
| 2   | Mr. Pralhad Sapkota                | Ratnagar Municiaplity, Chitwan  | Mayor                                |
| 3   | Dr. Ranjit Ojha                    | Ministry of Water Supply, Department of<br>Water Supply and Sewerage<br>Management, Kathmandu | Joint Secretary, Chief of NWASH-MIS, |
| 4   | Prof. Dr. Nar Bikram<br>Thapa      | Bagmati Province Policy and Planning Commission   | Vice Chair                           |
| 5   | Dr. Shri Kanta Sharma<br>Khatiwada | Gandaki Province Policy and Planning<br>Commission  | Vice Chair                           |
| 6   | Mr. Govinda Bahadur<br>Karki       | Bagmati Province Government, Office of the Chief Minister and Counicl of Ministers            | Chief Secretary                      |
| 7   | Mr. Khubiram Adhikari              | Social Development Ministry, Bagmati<br>Province Government                                   |                                      |