

WATER SUPPLY, SANITATION AND HYGIENE (WASH)

Second Joint Sector Review Sector Status Report 2014



Government of Nepal
Ministry of Urban Development
Water Supply & Environment Division
Sector Efficiency Improvement Unit (SEIU)

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Foreword

Nepal is moving forward with a target of universal coverage of water and sanitation by 2017. Guided by the National Sanitation and Hygiene Master Plan (NSHMP) – 2011, sanitation campaigns are operational across the country with encouraging achievements, especially due to local ownership and participation.

Impressive though this progress is in view of how low it was only a decade ago, the grim reality is that there are still many villages in the remote areas and towns with growing urban populations that do not have basic drinking water and sanitation services.

There are challenges in the way towards national targets. Sustainability and functionality of water schemes and sanitation systems have increasingly been a source of concern. Climate change-induced adverse effects are resulting in floods and drought. Socially, issues related to gender parity and modes of service delivery to the marginalized, who live on the fringes of towns and villages and can sometimes be culturally and geographically inaccessible, remain a challenge. The number of those living in urban areas is increasing thereby putting pressure to finding technical, managerial and social solutions that can provide reliable water supply, effective sewer lines and clean physical environment.

Challenges remain on the policy front as well. The needs (a) to design holistic sector policies that, among others, delineate responsibilities for rural and urban water, sanitation and hygiene services, (b) to create and maintain robust institutional setups that can coordinate and harmonize among the sector players to minimize duplications of effort, and (c) to develop common financial policies and proper monitoring systems so that the vocabulary for costs and results is shared by all sector players remain paramount.

In this context, active participation by all the sector players including government organizations, development partners, I/NGOs and community and users' groups -- in the JSR-II process has been encouraging. In the meetings that led up to and during JSR-II, the sector's initiatives and shortcomings were discussed and evaluated, and recommendations were prepared. Going forward, these recommendations will provide a roadmap to the sector for all the future initiatives for progress.

Sector Efficiency Improvement Unit (SEIU) of the Ministry of Urban Development (MoUD) will carry forward the actions on the recommendations formulated by the thematic groups. It will continue to deepen its engagement with the sector players with an eye toward creating a sector-wide approach through one national WASH plan.

On the demand side, civil society institutions and FEDWASUN need to be vocal about the needs and the rights of community members who they serve. On the supply side, development partners and INGOs need to provide financial and technical support, while working steadfastly to harmonize their rural and urban WASH thinkings, strategies, and ideas with the government's future plans. This is important when the common agenda of all sector players are directed to serve the people of Nepal.

JSR-II helped the sector to converge to a set of recommendations, on which there is clear agreement. In and of itself, this is a remarkable achievement. To take the road ahead and meet the national goal of 2017, it is now important to make proper action plans that address the challenges and measure the results.

This text will remain the main guiding document till JSR-III in 2016.

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Acronyms

BASP	Bagmati Area Sewerage Project
BRBIP	Bagmati River Basin Improvement Project
DDC	District Development Committee
DoLIDAR	Department of Local Infrastructure and Agricultural Road
DRR	Disaster Risk Reduction
DUDBC	Department Urban development and Building Construction
DWSS	Department of Water Supply and Sewerage
HPCIDBC	High Powered Committee for Integrated Development of the Bagmati Civilization
IUDP	Integrated Urban Development Program
JSR	Joint Sector review
KUKL	Kathmandu Upatyaka Khanepani Limited
LAPA	Local Adaptation Plan of Action
LSGA	Local Self Governance Act
MAF	MDG Acceleration Framework
MDG	Millennium Development Goal
MoEST	Ministry of Environment Science and Technology
MoFALD	Ministry of Federal Affairs and Local Development
MoUD	Ministry of Urban Development
MWSDB	Melamchi Water Supply Development Board
MWSP	Melamchi Water Supply Project
N/R/D/M/V-WASH-CC	National/Regional/District/Municipal/Village WASH Coordination Committee
NAPA	National Adaptation Plan of Action
NDWQS	National Drinking Water Quality Standards
NHSP	National Health Sector Plan
NMIP	National Management Information Project (DWSS)
ODF	Open Defecation Free
PID	Project Implementation Directorate
RWSS	Rural Water Supply and Sanitation
SEIU	Sector Efficiency and Improvement Unit
SHMP	Sanitation and Hygiene Master Plan
SSTWSSP	Second Small Town Water Supply and Sanitation Project
STIUEIP	Secondary Town Integrated Urban Environmental Improvement Project
SWAp	Sector Wide Approach
TWG	Thematic Working Group
VDC	Village Development Committee
WASH	Water, Sanitation and Hygiene
WinS	WASH in School
WSP	Water Safety Plan

1. BACKGROUND

The genesis of the second Joint Sector Review (JSR-II) was a joint planning meeting on 21 February 2014 which culminated in Joint Sector conference (31 March and 1 April 2014). (Table1) The main purpose of the JSR-II was to assess Water, Sanitation and Hygiene (WASH) sector's progress and performance in Nepal. Joint Review process was focused on sector *Harmonization and One WASH Plan* as the national slogan to draw everyone's attention to drive forward the agenda of "Universal Access of Water and Sanitation by 2017 in Nepal."

This meeting was hosted by the Ministry of Urban Development and attended by about fifty agencies that represented the government, development partners, international and national nongovernmental organizations (NGOs), civil society institutions and users' federations. The meeting decided on the activities and the timeline for the processes that led up to the JSR. It further approved of eight Thematic Working Groups (TWGs) and five Learning Visit Teams (LVTs).

The JSR conference was attended by 200 WASH sector professionals, 20 % of whom were women, and 30 % of whom had attended the JSR-I in 2011.

Table 1-1 JSR II Process Timeline

1. Joint Sector Planning Meeting (21 Feb)
2. Formation of Thematic Working Groups and group-wise brainstorming meeting: (26 & 27 Feb)
3. Joint Learning Visits: (3-9 Mar)
4. Learning Visit Sharing Meeting (14 Mar)
5. TWG Sharing Meeting (18 Mar)
6. Second Joint Sector Review Conference (31 Mar & 1 Apr)
7. Final review meeting (May)

To do the preparations, members from various agencies were proportionally assigned to the eight TWGs. They met on 26 and 28 February to study documents and to catalogue instances of progress and difficulties encountered in the field and in policies in their particular thematic areas. On 18 March, the eight TWGs shared their draft position papers with one another in a mini-conference. Enriching floor discussions helped the teams finalize their recommendations and the action plans, which were to be presented at the JSR-II. Earlier, on 14 March, an exchange meeting between the TWG teams and the Learning Visit Teams helped the latter to finalize a checklist of relevant information to collect from the field when they went on learning trips.

With guidelines and a checklist, the five Learning Visit Teams started their travel from 3 March and returned to Kathmandu on 9 March. They visited four districts in both the Terai and the Hills. They visited a number of water and sanitation projects and discussed WASH issues with Village/ Municipal/ District/ Regional WASH Coordination Committees, local users' committees, and women and children. Each Learning Visit Team organized a regional workshop, to which it invited regional WASH stakeholders to comment on its findings. These findings were further revised to reflect regional priorities on WASH.

In the national context, the challenges of the sector are clear: There needs to be a revision of policies to align them with current needs. The sector needs additional funds and investments if it is to ensure not

only universal coverage but also long-term sustainability. A coordinated WASH Plan, with one monitoring system, needs to be developed. Issues of sustainability and functionality cannot be given short shrift anymore, for they affect the performance of the sector. Sanitation movement, already going good in rural settings, needs to be accelerated in urban settings in view of the timeline that has been put forward to meet the national universal coverage.

Likewise, water quality improvements need water quality monitoring and surveillance systems. Similarly, the practice of embedding gender equity and social inclusion issues in the design and the implementation of WASH programs has become a must. Experiences have shown that existing systems are threatened by disasters and possible impact of climate change. Districts and communities need to know and develop their own disaster mitigation plans.

In light of the above-mentioned national issues, WASH-JSR II recommendations, emanating from what has actually worked or not worked in the field and thus rooted in reality, show a clear way forward for the sector.

This technical report can be best viewed as a compendium: (a) of summary papers developed out of the resolutions passed by JSR-II on the eight themes; and, (b) of the highlights of the findings of five Learning Visit Teams, inclusive of relevant case studies. Overall, this report issues an action plan for the Sector Efficiency Improvement Unit (SEIU) to get the momentum of the JSR-II going, and to make use of the agreed-upon processes, findings and recommendations to keep the TWGs working for the agreed-upon results until the next JSR in 2016.

2. RESOLUTION

The JSR II conference was organized by Ministry of Urban Development on 31 March and 1 April 2014 at Godavari. Dr. Narayan Khadka, Honourable Minister of Urban Development, was the chief guest. Mr Kishore Thapa, Secretary of MoUD was the chair in the opening session.

The key objectives of the conference were to assess the sectoral strengths, identify sectoral shortcomings, and frame appropriate strategies to move the sector in a more harmonized manner. The JSR II focused on eight themes: institutional framework and capacity building; sector financing; functionality and sustainability; monitoring and evaluation; sanitation and hygiene; water quality; gender equity and social inclusion; disaster risk reduction and climate change. To review each of these topics, eight thematic groups were formed. Series of brainstorming sessions and meetings were held to identify core issues, review policy, capture learning and compliance, and recommend appropriate strategic actions to accelerate the progress to meet national targets. Five Learning Visit Teams (LVT) were also formed to visit the five development regions to capture challenges, gaps, opportunities and innovations. A total of 55 participants took part in the learning visits.

The conference was attended by 200 participants, with representatives from government, development partners, INGOs and civil societies from the centre and five development regions. At least 30% of the participants had attended the JSR I in 2011.

- We recognize the enabling environment created by JSR- I in harmonizing the sector to develop a joint working culture and foster mutual trust and cooperation among stakeholders. We also recognize that JSRI created an enabling environment for gearing up the sanitation social movement, increased sanitation coverage significantly and made assurances to meet the national target.
- We recognize that there is a huge resource and capacity gap on reaching the unreached for access to water supply coverage. In this context, we pause to recognize the Melamchi Water Supply Project as a national pride project, and collectively wish for its completion before Baisakh 2073 (April 2016). We are further committed to reducing non-functionality of water systems and delivering reliable higher level water service. There is a need of appropriate strategies for sustainable management of Open Defecation Free (ODF) zones and promoting total sanitation and hygiene.
- We envision that all Nepalese people enjoy adequate and safe drinking water and sanitation facilities for gaining improved hygiene behaviors, healthy life and clean houses, villages and cities in Nepal with nationwide campaign of 'No WASH-No House', 'No WASH-No school' and 'No WASH-No office'.

In this journey, we are committed to follow the envisaged path, to consider field realities in service delivery, and to comply with existing policies, plans, directives, acts, SACOSAN V declarations, pertinent sectoral discourses and research findings. Government institutions, Development Partners and International/Non- Government organization and all concerned stakeholders who agree to allocate financial resources, provide technical support and harmonize intervention, philosophy and ideas in line with government sectoral policies, plans and strategies.

- We agree to improve WASH governance in all programs and service delivery at all levels to ensure accountability, transparency and equity.

- We have strong realization that waste must be transformed into energy and agricultural inputs for better livelihood and environmental sustainability. As such, we are committed to establish proper mechanisms and a supportive policy environment conducive to explore and introduce appropriate technologies so that waste produced at household, institutions and public places are recycled and utilized optimally with economic value.

We -- the representatives from the WASH sector related Ministries, Government Departments, Development Partners and Civil Society Organizations - express our solidarity and commitments to render services and facilities in equitable manner to materialize the vision of the JSR-II as well as of the national goal of universal access to water and sanitation facilities by 2017 by executing the following declaration points:

A. Institutional Framework and Capacity Building:

- Transform existing NSHSC and NSHCC to NWASHSC and NWASHCC, respectively, with full WASH accountability;
- Establish legal identity of WASH Coordination Committees (WASH-CCs) at all levels by synchronizing with Local Self Governance Act, 2055 and upcoming Water Supply, Sewerage and Sanitation Act;
- Formulate a common WASH Operation Directive for harmonized intervention in rural and urban sub sectors;
- Promote WUSCs and their federation as a legitimate and capable organization by maintaining strong linkages with WASH-CCs for ensuring transparent, accountable and effective service delivery;
- Develop CHRDU as a Center of Excellence for WASH-related capacity building intervention and standardize benchmarks, capacity development modules/packages of the wider WASH sector.

B. Sector Financing:

- Formulate WASH sector financing strategy as an integral component of the WASH Sector Development Plan which enables implementation of district and sub-district WASH plans with due focus on unreached and unserved population;
- Allocate 5 - 20 percent budget for functionality component from the total WASH budget through Annual Development Plan;
- Seek additional financial resources to improve safe water facilities to the selected district headquarters, urban areas and emerging towns as per Nepal Drinking Water Standard, 2005;
- Develop policy provision to obtain grants and loans from development/ commercial/financing banks & institutions for improving service level as outlined in the co-financing directive of the WASH sector.

C. Monitoring and Evaluation:

- Strengthen and strongly implement web-based monitoring and evaluation system for the entire sector. Promote result-based fast track methods of collection and generation of sectoral data and information under the leadership of WASHCCs;
- Assess periodic performance of the WASH sector as per agreed sector monitoring indicators;
- Reinforce WASH sector M & E issues with the Minimum Conditions and Performance Measures (MCPM) of Ministry of Federal Affairs and Local Development (MoFALD) and regular monitoring frameworks of health and education sector to evaluate the performance accordingly.

D. Functionality and Sustainability:

- Critically review and revise existing “Coverage and Functionality Survey Guideline” and collect, compile, disseminate and utilize M & E information for future planning purpose under the strong leadership and guidance of DWASHCC;
- Mandatorily implement minimum water tariff system to recover at least operational costs for rural utility/operators with special attention to GESI aspects;
- Introduce appropriate/alternative technological options and multiple use of water for livelihood;
- Empower and strengthen utility operators/WUSCs and introduce business plans with tripartite agreement among WUSCs, V/MWASHCC (local bodies) and support agencies in line with the Water Supply Service Operation Directive, 2012;
- Encourage and promote rehabilitation and reconstruction of existing water supply and sanitation projects, including formulation of specific guidelines with an aim to improve higher services, and discourage investment in the name of new projects.

E. Sanitation and Hygiene:

- Prohibit open defecation through legal provision in the upcoming WASH Act. Introduce and enforce local norms, rules and regulations through a local authority;
- Promote and sustain ODF and hygiene behavior through consistently implementing post-ODF/total sanitation interventions;
- Prepare an evidence-based comprehensive, “The State of Sanitation”, in order to systematically showcase social sanitation movement and to promote knowledge management;
- Mainstream health, education and other institutions and professionals, academia, political leaders, WSUCs, youth and women, media, child clubs and civil society networks to accelerate ongoing sanitation social movement;
- Formulate a complete urban sanitation strategic framework to complement the Clean City Program.

F. Water Quality:

- Intensify implementation of National Drinking Water Quality Standards, 2005;
- Mainstream and scale up Water Safety Plan as an integral component of water supply and sanitation projects;
- Introduce and implement water quality improvement interventions in outbreak-prone districts with priority, and effectively utilize available regional WQ testing labs;
- Collect water quality data from water service providers, and share them with surveillance agencies.

G. Gender Equity and Social Inclusion:

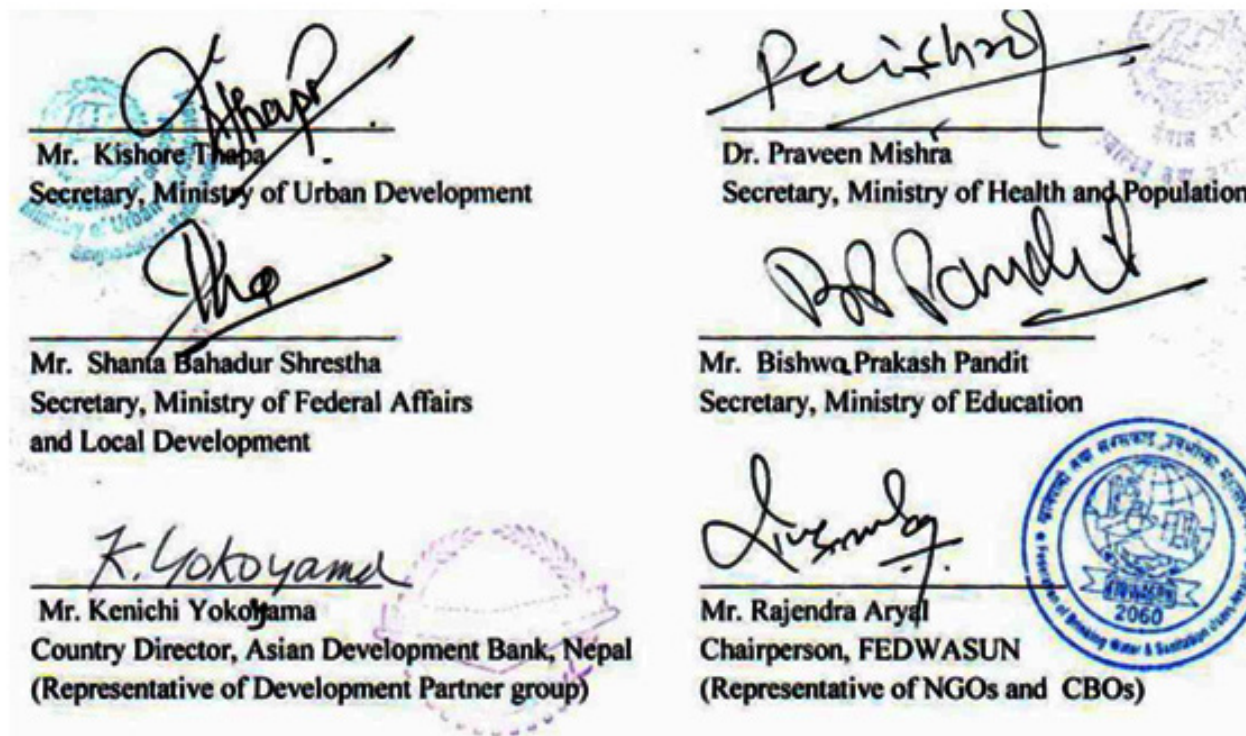
- Implement GESI Operational Guideline 2013 (MoUD) of the WASH sector and allocate adequate budget;
- Promote GESI responsive technological options, promotional packages and service delivery mechanisms.

H. Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA):

- Mainstream CCA/DRR in upcoming Water Supply, Sewerage and Sanitation Policy and Act;
- Introduce CC and DR-resilient actions as integral components in ongoing WASH interventions;
- Allocate up to 5% budget of the WASH sector for CCA and ORR for disaster mitigation and timely reinstatement of projects affected by disasters.

All participants of the JSR JI agree to implement the actions outlined above.

The Detailed Action Plans for deliverables will be completed by the end of April 2014 and shared to the Sector Stakeholder Groups.



3. SECTOR STATUS AND TREND

The main sources of water supply and sanitation coverage data are DHS, Census and National Management Information Project of DWSS (NMIP). Though there is not much consistency in the data among sources and on timeline, the coverage data as per nationally recognized survey have been summarized in the table 3-1

Table 3-1 Water Supply Coverage Trend (% of Population)

Source	Year	Water Supply				Sanitation		
		Pipe	Urban	Rural	Total	Total	Flush	Sewer
DHS96	1996	32.3	92.7	66.8	69.8	22	2	1
CEN01	2001	53.1	95.9	82.7	84.5	43	24	5
DHS01	2001	36.1	95.3	74.2	77.1	30	14	5
DHS06	2006	40.7	90.0	80.3	81.8	41	32	4
NMIP08	2008	46.8	90.0	78.6	80.5	46	27	3
CEN11	2011	47.5	88.4	86.1	86.5	59	46	8
DHS11	2011	47.2	94.8	91.0	91.7	67	56	8
NMIP10	2010	47.7			80.4	43.0		
NMIP12	2012	48.5			79.6	53.7	0	0
NMIP14	2014	49.3			84.0	70.3	0	0

3.1 Coverage

Coverage of water supply: Coverage of the water supply system has been estimated to be 84.0 percentages (NMIP 2014), including 49.3% piped water system, 29.9 % tubewell system and 4.8 other protected sources like RWH (0.2%), springs (3.5%) and well (1.1%).

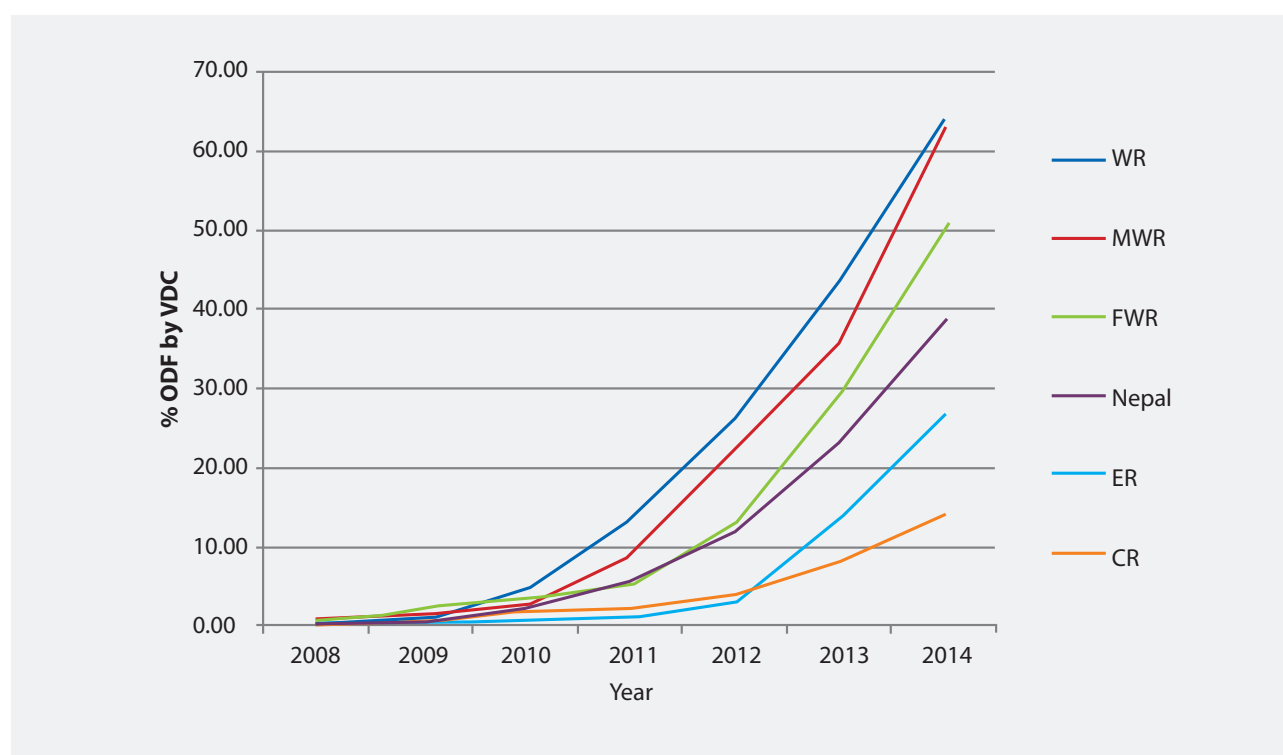
There are various national survey data on water supply coverage. Among them Census, DHS and NMIP are considered relatively more reliable. Data among various surveys are not very consistent. NMIP survey was first conducted in 2008 based on ward-wise visit and focus group discussion with people and water users' committees. Data was updated in 2010, 2012 and 2014 based on the updates provided by district offices of the Department of Water Supply and Sewerage (DWSS). Distribution of coverage over regions and eco regions are uniform with exception of the western development region, where coverage is relatively higher. None of the districts have coverage below 70%, except Manang and Kapilbastu. Some districts in the western region have reported 100 % coverage by water supply. MDG target (73%) has been met. JMP analysis-based regression analysis of national data estimates coverage by 2015 as 89%.

Coverage of sanitation: Coverage by sanitation based on ODF HH has been estimated to be 70.3 %, of which 58% is offset flush toilets. The CEN11 and DHS11 indicated that 8% HH connect to sewer systems. Flush toilets or VIP toilet or pit toilets with slab and lid or EcoSan toilets are considered improved toilets. As of March 2014, coverage in the central and eastern regions are relatively less than the other three regions in the west. The coverage is below 60% in the Terai, whereas it is more than 70% in the mountain and more than 80% in the hills. Lower coverage in the eastern Terai is attributed to language barrier, lack of coordination and synergy among partners, low input in comparison to dense population, lack of

appropriate triggering and promotion of local leadership. Since 2014, special actions have been taken for promotion of sanitation in the Terai areas, which has gained momentum.

As per the National Sanitation and Hygiene Master Plan (NSHMP) VDCs, Municipalities and Districts are declared ODF when all HH have their own toilets and defecation in the open spaces is avoided. As of December 2014, 1533 VDCs, 63 Municipalities and 22 Districts have been declared ODF. The MDG target (53%) as per JMP will not be met because the JMP analysis indicates only 38% coverage by the end of 2015. As per ODF VDC, the order of movement reveals WR, MWR, ER and CR. ODF movement is speeding in the western part of the Nepal in comparison to the central and eastern parts. Even in these regions remarkable pace can be noticed. See result of ODF movement in different regions and years since 2008 in Figure 3-1.

Figure 3-1 ODF VDC (%) by regions since 2008



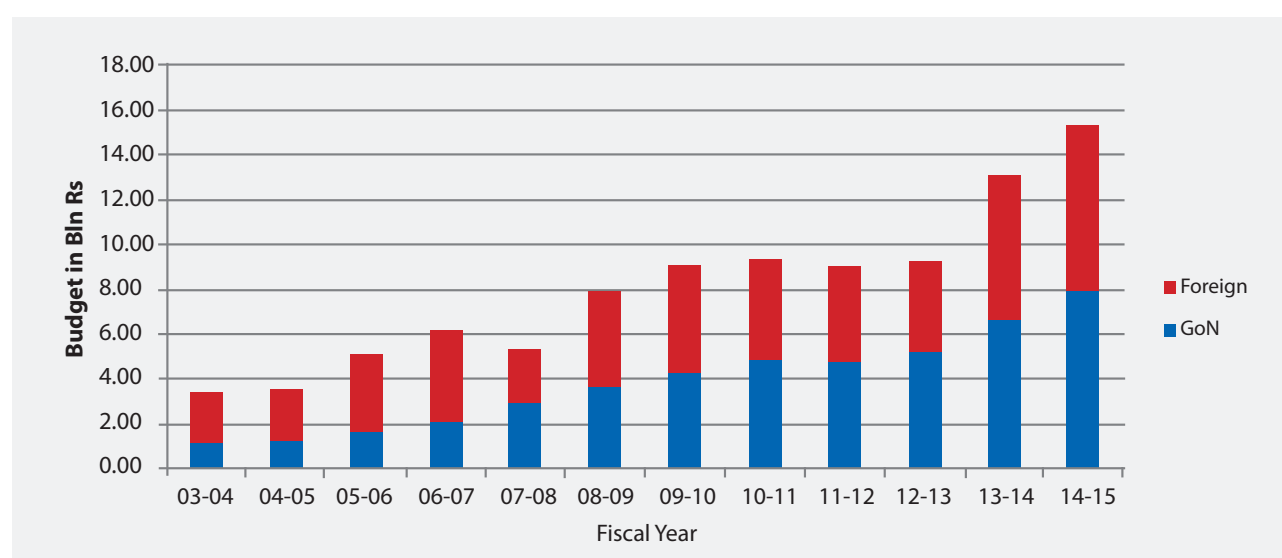
3.2 Funding

Development of water supply and sanitation system is a priority program of the Government of Nepal. The government has a regular water supply and sanitation program. The government is funding water and sanitation sector through MOUD, MOFALD. The main government agency dedicated to water supply and sanitation program is DWSS. Department of Local Infrastructural Development and Agricultural Road (DoLIDAR), which is under MOFALD and has its units in all 75 districts to work as a technical unit of WSS also involve in water and sanitation program as part (25%) of its rural development program. Development partners, INGOs and NGOs are working with one of the ministries to channelize their financial and technical supports. Some NGOs also work directly with communities based on an agreement with the Social Welfare Council. Local bodies like District Development Committees (DDCs), Village Development Committees (VDCs) and Municipalities also utilize part of its resources (local and development fund received from central government) for water and sanitation programs.

Budget allocation of the government through local bodies like DDC/MU/VDC is not counted in the following table. Similarly, off-budget sources of NGOs are also not counted. It is assumed that the budget of about one billion may have been spent in the water and sanitation sector as off-budget funding. The budget trend of the government has been summarized in table 3-2 and demonstrated by graphs. The average expenditure of the allocated budget for last three year is 75%.

Table 3-2 Budget and Utilization trend for Water and Sanitation Sector. (Billion NRs)

Year/Budget type	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15
GON	1.1	1.2	1.7	2.1	2.9	3.6	4.3	4.8	4.8	5.2	6.7	7.9
Foreign	2.3	2.4	3.4	4.1	2.4	4.3	4.8	4.5	4.2	4.0	6.3	7.4
Total Budget	3.5	3.6	5.2	6.2	5.3	8.0	9.0	9.3	9.0	9.3	13.1	15.3
Used %	0.75	0.55	0.53	0.66	0.88	0.89	0.71	0.66	0.68	0.76	0.81	N/A



The government budget for FY 2014-15 is about 15.3 Billion NRs including 5.3 Billion NRs (40%) for the Kathmandu valley (Redbook 14-15). The government has a policy to fund part of the water supply and sanitation cost through community contribution. For water supply there is no contribution for Kathmandu valley and large towns, but there is 30% in small-towns and 20% in the rural water supply. Similarly for sanitation infrastructure, there is no contribution sought in the Kathmandu valley and large towns with an exception of 15% in small towns and 20 % in the rural sanitation. Construction of household toilets is the responsibility of the people, but some subsidies are provided for the poor and people in difficulties through local bodies as a promotion budget.

Based on the trend of last three years, the budget of water sanitation sector is 2.5% of the total national budget. Similarly, the budget of health is 5% and of education is 15% of the national budget, respectively. The current budget is about 15 Billion NRs. and the trend of expenditure based on last three years' data is 75%.

Sector funding requirement has been analyzed based on the funding required for unreached, functionality and meeting need of municipalities in ten years, and summarized in Table 3-3. An annual funding of 17 Bln for water supply including 6 Bln for upgrading urban water supply is needed. Similarly, for sanitation annual funding of about 3 Bln is required.

Table 3-3 Funding requirement for ten years

S.N	Description of Activities	Target Population 2024 (%)	Target population of midyear (Mln)	Unit cost (000 Rs.)	Total cost (Bln. Rs)	Community / Local Body contribution (%)	Required fund (Bln. Rs)	Fund/yr for 10 years (Bln. Rs)
1	New water supply system for 15 % unreached	15	4.47	10000	45	20	36	3.6
2	Upgrading 33% of Terai Tubewells (30%)	10	2.98	6000	18	20	14	1.4
3	Upgrading 25% of water supply system in the Municipalities (40%)	20	5.95	15000	89	30	63	6.3
4	Water safety plan and minor repair (36%)	30	9.00	500	5	50	2	0.2
5	Improving functionality of system needing major repair (8)	8.0	2.38	1000	2	20	2	0.2
6	Upgrading system needing rehab and reconstruction (24)	24	7.00	8000	56	20	45	4.5
7	Water treatment plant for 20% of pipe system (50)	10	2.98	3000	9	20	7	0.7
Total water supply Sanitation					224		169	17
8	ODF campaign for 30 % population	30	8.93	200	2	50	1	0.1
9	Total sanitation for 60% population	60	1.78	200	4	50	2	0.2
10	Urban sanitation for 40% population	40	1.19	5000	60	50	30	3.0
Total sanitation					65		32	3.25
Total water Sanitation					289		201	20.1

Assumptions:

Base year: 2014, Program years: 10 Years, and Midyear: 2019

Unit Rate: Average of current running projects of DWSS

50 % Pipe system, 30% Tubewell, 15% Unreached and 5% protected spring, well and RWH

Minor repair 36, Major 8%, Rehab/Reconstruction 24%

33% of the tubewells will be improved, 33 remain same and 33% go through urban improvement

20% or pipe system needs WTP

3.3 Sustainability

A sustainable water and sanitation system must be economically viable, socially acceptable and technically and institutionally appropriate. Water supply system in Nepal is managed by the water users and sanitation committees both in the rural and semi-urban areas. Systems in the large town are managed either by the NWSC or management board in line with Water Supply Management Board Act 2006. Water supply system in the Kathmandu valley is managed by the Kathmandu Valley Management Board and operated by KUKL.

The way the water supply project has been managed in small-towns is relatively more sustainable in comparison to the systems in large towns and rural communities. The tariff collected is sufficient to operate and maintain the systems. The progressive tariff system is helping to give value to water and addressing the needs of the urban poor.

There are about 41000 pipe water supply systems operated by WUSC in the rural areas covering 46.9 % of the population. According to NMIP survey based on focus group discussion with users committees and users' communities, these systems are in need of improvement in varying degrees. Of these systems, only 68.2% are capable of providing water in the whole year to all taps, 25.4% well-functioning, 36.1% in need of minor repair within the capacity of users committee, 9.2 % in need of major repair beyond capacity of users committees, 19.8% in need of rehabilitation to meet present demand, 19.8 need reconstruction and 0.9% cannot be recovered. About 31.5% systems have maintenance tools on the site, 37.9% have been formally registered and only 4.5 % have maintenance funds. There has been some improvement in the number of properly functioning systems since 2010. In 2010 it was reported to be 17.9% only.

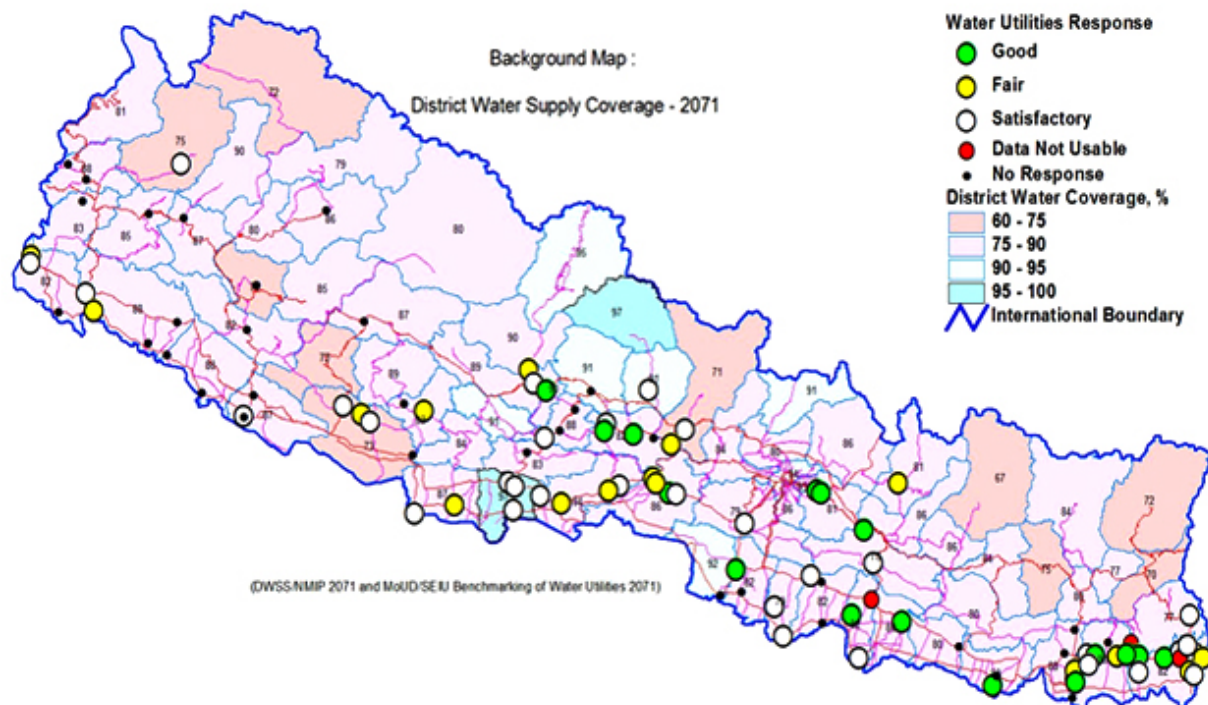
Assuming that systems which are functioning need Rs. 500 per person for water safety plan, minor repairs also need Rs. 500 per person. Then major repairs need Rs 1000 per person, and rehab and reconstruction need Rs 5000. Thus the financial burden per person for bringing back to safe and functional system is 3.4, 3.6, 3.6, 4.0, 3.7 times the functional system, respectively, from the Eastern region to Far-Western region, and the average is 3.7. The total financial burden is 23.2 BRs.

A World Bank study (2013) on different modality options based on a survey of 201 randomly selected schemes of DWSS, DoLIDAR/DDC, RWSSFDB, NGO indicated that 71% of system aged 5-15 years are functional in terms of tap functioning, and 65 % schemes are in good condition or in need of minor repairs. In terms of service level (QARQ) 30 to 40 % of the schemes provided good service. The average service level is 2 (1-good, 4-very poor). The study indicated that the DDC-VDC schemes that received minimal agency support and those that can be described as Do-It-Yourself schemes are not performing substantially worse than fully-supported schemes implemented under other modalities. Ownership, local management and technical capacity, learning-by-doing and post-construction access to funding and repair services are crucial success factors. There is no one Champion modality. Combining strengths of different modalities will in general be beneficial.

SEIU initiated Benchmarking and Performance Assessment (BM/PA) of Water Service Providers (WSP) program in early 2013. The program aims to develop capacity for monitoring functionality and performance of WSP as an instrument for improving the service delivery and performance of the urban water supply sector. The first round of orientation workshops for the water service providers (WSPs) was conducted in February and March 2013 to commence the collection and analysis of performance data from WSPs. Out of 50 WSPs taking part in BM process, data from only 32 WSPs had been collected, verified and validated in consultation with the WSPs, and published in the first Data Book of 2013-14. Since then, SEIU is connected with some 107 water service providers from all over the country. MB of about 63 piped water supply providers out of those 107 will be published in the second data book. Coverage of districts with water Supply project and response of WSP has been presented in the Figure 3-2.

Figure 3-2 Location of Water Service Providers (WSPs) in the Benchmarking Process

Location of Water Utilities involved in the Benchmarking Process



4. POLICY ENVIRONMENT

WASH sector is linked with Health, Education and Environment sector. Key policy documents related to WASH have been analyzed and summarized below.

WASH Policies:

The main Act related to water supply system development and water use in Nepal is Water Resource Act 1992, which gives priority to water resources for drinking water. Drinking Water Supply Regulations 1998 has been developed based on this Act, which defines processes for getting a license for using water source and organizing users. Water Resource Strategy 2002 provides directions towards environmental friendly water resource development. Design guidelines (12 volumes) for water supply system revised in 2002 provides guidelines for design, development and operation of water system involving user community. The Nepal Water Plan developed in 2005 provides target for both basic and improved service levels of water and sanitation. The target is to have access of basic water supply and sanitation for all by the year 2017. Rural water supply policy and strategy provided the basis for development and management of water supply system in the rural and semi-urban areas by users committee. Urban Water Supply Policy 2009 addressed the issues which are not addressed by the rural water supply policy. National Drinking Water Quality Standard and Directives 2005 established national standard for drinking water and ways to achieve it. Three-year periodic plans also provide strategy and plan incorporating the latest issues in the sectors. WASH sector coordinated by SEIU/MOUD is formulating Umbrella Act and its Rules, Policy and sector Development Plan (SDP) in line with one policy, one plan and one monitoring system according to the decision of JSR II. The design guideline is in need of revision to incorporate the current needs and National Drinking Water Quality Standard (NDWQS) is also in the process of revision to address the current situation in line with WSP concept. Sanitation and Hygiene Master Plan provided clear guidelines for nationwide ODF movement and total sanitation. The master plan is also in need of revision to highlight total sanitation and issues of the urban sanitation.

Environmental Policies:

National Adaptation Plan of Action (NAPA) was developed in 2010 and National Environmental Policy in 2011. Similarly Local Adaptation Plan of Action (LAPA) was developed in 2011, which provided systematic proofs for developing adaptation plan at the local level. The environmental policy requires that development sectors integrate climate resilient adaptation plans into sector policies and practices. The revised policy indicated that all documents speak about environmental concern mainly to minimize potential environmental damages caused by the development of the water supply system. But none of the policy documents speak about climate change. Documents currently under formulation and to be formulated in the future are expected to address climate change issues.

Health Policies:

The new policy (2014) has been developed as an improvement to health policy of 1991 for ensuring quality health services to all people of Nepal without any discrimination. The policy also includes one component to ensure right to people to live in a clean environment through effective control of environmental pollutions. The policy has formulated a strategy to take leadership in regulation of pollution, including that through WASH pathways and adverse effect of climate change for health protection and promotion. The Second National Health Sector Plan (NHSP-II) (2011-2015) has been developed as a continuation of NHSP-I (2004-10) and prepared with the vision to improve health and nutritional status of the Nepali population, especially the poor and excluded people. It has the objective to improve the health system to achieve universal coverage of essential health services including the

control of communicable diseases. NHSP-II has added oral health for school and sanitation and hygiene for community as one of the health promotion activities.

As an agency responsible for Water Quality Surveillance (WQS) the Ministry of Health (MoH) has formulated WQS guidelines. The guidelines require the MoH and its agencies in the district to carry out WQS of water supply systems based on auditing of WSP documents and direct assessment of water qualities. The Ministry is in the process of piloting the system from the western region and developing its internal capacity.

Education policy:

An Environmental Management Framework for School Sector Reform Plan (SSRP) 2009 is related to school site selection and planning, including climatic factors, ensuring supply of safe drinking water, proper sanitation (hygiene, latrine and waste management at school), and appropriate classroom conditions (e.g. light, ventilation, temperature, noise). The DOE and School Management Committee (SMC) are responsible for implementation. The plan requires at least three (minimum one for girls) toilets for primary school, five (minimum 2 for girls) for upper primary schools with provision for water and cleaning facilities.

The concept of child-friendly school (2010) developed by DOE has mentioned standard for WASH facilities as one of the indicators. This included separate toilets for girls and boys at the minimum rate of one for 50 (expected 20) students with facilities for hand washing and management for cleaning. Similarly, the guidelines show the requirement of drinking water facilities within the school with the expected extension of facilities in classrooms. School Improvement Plan (2014) requires that schools need to include adequate facilities for water supply and sanitation as part of its school improvement plan (SIP). The Ministry of Education is developing WASH in School (WinS) as external environment of the school.

UNICEF has developed a three-star approach for water, sanitation and hygiene facilities in the school. The Ministry of Education needs to define the levels of a Three Star Approach to WASH-in-Schools as follows: a **No Star School** is defined as a school with incomplete water, sanitation and hygiene facilities and needs to make necessary changes to progress from being a 'no star school' to a 'one star school' that meets minimum standards for a health and hygiene promoting school. Once a school has earned its first star, it can progressively make improvements to meet the benchmarks for a second star, and a third star, by improving WASH facilities and ensuring compliance with essential WASH practices. The country needs to have its national standard for three-star approaches.

One Star Schools(*): Meets three criteria, one each from hygiene, sanitation and drinking water.(1) All children participate daily in 'group hand-washing with soap' sessions, ideally before the school meal/snack. (2) The school has gender-segregated toilets that are functional, clean and used by all children. (3) Every child has and correctly uses a personal drinking-water bottle.

Two Star Schools (*):In addition to the One Star criteria listed above, the school ensures that (1) children wash their hand with soap after using the toilet.(2) improved sanitation and menstrual hygiene facilities are available.(3) drinking water is available at school.

Three Star Schools (*): to earn a third star, a school must meet all criteria needed to earn the first and second star, and ensure the following: meet national standard for WASH in School, meet national norms of WASH facilities including design, numbers by school size and accessibility for children with disabilities, and institutionalize hygiene education.

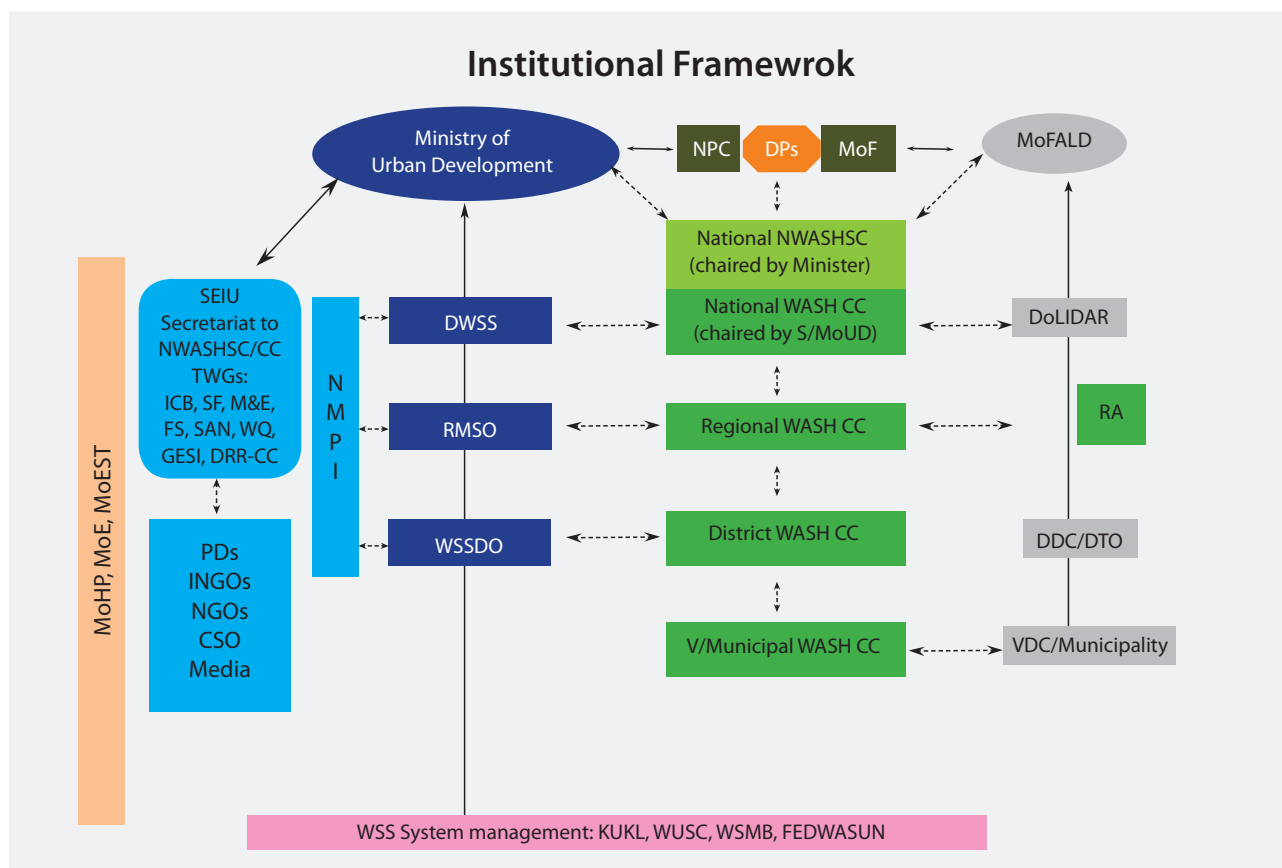
Nepal has participated in a regional conference organized by UNICEF in Lao PDR in November 2014 for SA and EA regions and agreed to adopt three-star approaches. The Ministry of Education has not yet developed minimum standards for WASH facilities directly.

5. STAKEHOLDERS MAP

The Ministry of Urban Development (MoUD) comprising two departments (DUDBC and DWSS) is the lead ministry for the WASH sector. DWSS has its divisions/subdivisions in all 75 districts and regional monitoring and supervision offices in the five development regions. The Ministry of the Federal Affairs and Local Development (MOFALD) which has a technical department (DoLIDAR) also looks after water supply and sanitation in the districts as a technical unit of the DDC. There is a steering committee (NASHSC) chaired by the Minister for Urban Development. Similarly, there is a coordination committee at the centre level (NASHCC), regional level (RWASHCC), district level (DWASHCC) and municipalities and village level (V/M WASHCC). These coordination committees are chaired by the Secretary (MoUD) in the center, Regional Administrator in the development regions, DDC chair in the districts, Mayor or VDC chair at the Municipality and Village. The coordination structure was mainly formed for sanitation activities in line with SHMP which has been converted as a WASH coordination committee by JSR-II (2014). Key members in the coordination committee are key ministries working in the WASH like MOUD, MOFALD, MOE, MOHP and MOEST. Other members are DPs, I/NGOs, civil societies, CBOs, WUSCs, FEDWASUN, etc. based on relevance in the respective areas. WASH CC is being effective for coordination and planning of WASH program, mainly sanitation program in the respective area. DWASH CC is being very effective for ongoing ODF movement nationwide. RMSOs/Divisions/Subdivisions of DWSS are member secretaries of the respective CCs.

The development partners, INGOs and NGOs are working at various levels and districts as per MOU with the government, and as part of the government program either with MOUD or MOFALD. Some NGOs are also working directly in the districts based on the agreement with Social Welfare Council. In the sector, partners are categorized as development partners (DPs), INGOs, NGOs and Civil Societies. FedWASUN is especially recognized as federation of WUSC nationwide.

Figure 5-1 Institutional arrangement of WASH sector in line with the recommendation of JSR-II



The key development partners are ADB, WB, Finnish, JICA, DFID, WHO, UNICEF and UN Habitat. ADB is funding for Melamchi diversion, especially distribution network and wastewater management in the Kathmandu valley and third small-towns WSSP through MOUD/DWSS. DFID is funding through WHO and UNICEF. Finnish government is funding UNICEF and two RWSS projects in the Western region (RWSSP-WN) and Far-Western region (RV-WRMP) with DoLIDAR/DDC. WHO is supporting WSP and CC with MOUD/DWSS and WQS with MOHP. UNICEF is supporting DWSS as well as local bodies at various regions and districts through its regional (field) offices. UN Habitat is supporting ODF campaign using GSF and also some urban cities under Asian city program. JICA is supporting for Melamchi Water Treatment Plant Construction, capacity building in Kathmandu and some large and small towns. JICA Support also includes the improvement of systems for WQ and service level. Development partners in Nepal have established a coordination group which is currently coordinated by Finnish Embassy preceded by ADB.

Similarly, key INGOs are Care Nepal, Gorkha Welfare, Helvetas, LWF, OXFAM, PLAN, Practical Action, Save the Children, SNV and WaterAid. WaterAid Nepal is expected to coordinate INGOs working in the WASH sector of Nepal. SNV is working mainly in sustainability in Mid-Western region in coordination with MOUD. Helvetas is working in the Mid-Western region in coordination with DWSS. WaterAid is working with local partner organizations (NGOs) mainly for advocacy, capacity building and developing water supply system for the rural and urban poor. GWF is engaged in western Nepal for improving water supply system for community of Ex-British Gorkha Army. OXFAM is a leading INGO working for emergency relief works. Save the Children is contributing in the ODF movement. PLAN is supporting water sanitation for the school community and also supporting the ODF movement.

The key NGOs and CBOs working at national or central levels are: CODEF, ENPHO, GUTHI, KIRDARC, Lumanti, Maitree, NEWAH, NRCS, NWA, RCNN, SEVAK, UEMS, The SEWA Nepal and FeDWASUN. Most of these NGOs are working with the fund provided by one or more development partners and INGOs working in Nepal. Some NGOs are also funded by INGOs not working in Nepal. FeDWASUN is a federation of WUSCs managing the water supply systems over Nepal. As of now, about 4000 WUSCs from 56 districts have joined the federation. Besides these, there are many NGOs and CBOs working at regional and district levels with national NGOs and INGOs or local bodies. The SEWA Nepal has developed Darechowk (Chitwan District) as EcoSan resource centre and is promoting EcoSan in Nepal and abroad. Once the WASH NGO forum used to exist, which is not active now. NGOs are coordinated by Lumanti and NWA.

WASH sector is fragmented at the central level. There are many responsible agencies in the WASH sector. But at the district level there is some kind of coordination namely D-WASH-CC. The lead Department DWSS has created focal division for climate change.

6. MEGA PROJECTS

Bagmati Action Plan: MOUD/HPCIDBC

HPCIDBC has taken initiative for the preparation of the Bagmati Action Plan, together with National Trust for Nature Conservation. Successful implementation of the Action Plan will bring change in the management paradigm in restoration and conservation of the Bagmati River and its tributaries. The total cost for the BAP is approximately NRs. 14 billion. In addition to current components like Bagmati Area Sewerage Project (BASP), Bagmati River Basin Improvement Project (BRBIP) other components of projects will be implemented in line with BAP. The success of the projects depends on assurance of funding from the government and the support of partners.

Melamchi: MOUD/MWSMB

The Melamchi Water Supply Project (MWSP) is considered to be the most viable long-term alternative to ease the chronic water shortage situation within the Kathmandu Valley. MWSP consists of (1) construction of Melamchi Diversion Scheme to carry out about 170 MLD of raw water from the Melamchi River into Kathmandu Valley through a 26.5 km tunnel, (2) construction of about 43 km of access roads and upgrading of about 29 km of road to assist the construction of the project facilities and their maintenance, (3) Construction of a water treatment plant with an initial capacity of at least 170 MLD expandable to about 510 MLD to treat the Melamchi River Water.

The supply of water will be augmented by adding about a further 170 MLD each from the Yangri and Larke rivers, which lie in the upstream proximity of Melamchi and are being investigated as future supply sources. The project was initiated in 2001 and the main diversion tunnel was initiated in 2008 with revised cost of \$249.4 m. The project is funded by GON (30%) and donors (70%). The major donors are ADB, JBIC/JICA, OPEC and NDF. Road construction has been completed, water Treatment plant is under construction and 12 Km tunnel has been completed.

Kathmandu Valley Water Supply and Sanitation Project: MOUD/KVWSMB/KUKL/PID

This project was separated from Melamchi water supply project in 2008. The Project Implementation Directorate (PID), under the Kathmandu Upatyaka Khanepani Limited Board of Directors, is the implementing agency. The Project comprises construction of distribution networks, augmentation of surface and ground water sources, Water quality improvement, wastewater management and Improvement of Service Management system of KUKL. The initial cost of this project is \$ 68 m, which will be expanded as required.

Second and Third Small Town Water Supply and Sanitation Project: MoUD/DWSS

This project targets the development of safe, accessible, and adequate water supply and sanitation facilities in about 20 small towns. The project will also help develop an efficient, effective, and accountable urban water supply and sanitation sector by establishing and implementing policies and service standards, and enhancing sector coordination and strengthening governance and capacity for project management and operation.

The investment cost is estimated at \$71.7 million of which 62.9% of the total cost will be provided by ADB under special grant.

Third small town and sanitation water supply projects has been also launched (PPTA), which will be developed in 2015.

The Ministry of Urban Development (MoUD) will be the executing agency, with responsibility for sub-project execution delegated to its Department of Water Supply and Sewerage (DWSS). A sector efficiency improvement unit (SEIU) in the MoUD will take the lead in advancing the sector development.

Secondary Town Integrated Urban Environmental Improvement Project (STIUEIP)

The project was started in 2010 and will end in 2015. It is implemented by DUDBC of MoUD. The total cost of it is \$ 106 m, of which 56% is financed by ADB.

The Project will implement urban environmental improvement, on an integrated basis, in the areas including sewerage and drainage, solid waste, and urban roads and lanes. The project will be based in the Biratnagar, Birgunj and Butwal municipalities. In addition, a water supply development sub-project will be implemented in the Kavre valley. At the same time, community development programs including awareness-raising on health and hygiene and 3R (reduce, reuse, and recycle), and investment in small-scale community facilities will be carried out. The Project will also strengthen capacity of municipalities and the central Government for project management and operation.

Integrated Urban Development Program: MoUD/DUDBC

This project will provide the population in the municipalities of Dharan, Janakpur, Nepalgunj, and Siddharthanagar with better access to municipal infrastructures and services in a socially inclusive manner. In accordance with the priorities of each municipality, integrated urban environmental improvements, including drainage systems, solid waste management facilities, and urban roads, will be implemented in Janakpur, Nepalgunj and Siddharthanagar municipalities. A water supply development subproject will be implemented in Dharan.. The project will also undertake community development programs (CDP), focusing primarily on poverty pockets in the municipalities and communities that may not benefit directly from major infrastructure improvement subprojects. Gender equality and social inclusion (GESI) will be mainstreamed in all subprojects in the municipalities, and the capacity to address GESI in the Ministry of Urban Development (MoUD) will be strengthened by establishing an appropriate institutional structure and mechanism for GESI mainstreaming.

The project was started in 2011 and will end in 2015. It is implemented by DUDBC of MoUD. The cost is \$ 85 m, of which 53% is financed by ADB.

7. THEMATIC POSITION

A joint planning meeting organized by inviting all SSG members at the start of JSR process decided to form eight thematic working groups with an aim to address various issues in the sector. Subsequently, eight Thematic Areas (groups) have been listed in the table 7-1.

Table 6-1: Eight Thematic Areas (Groups)

JSR II Thematic Working Groups(TWGs)

- (1) Institutional Framework and Capacity Building (ICB)
- (2) Sector Finance (SF)
- (3) Monitoring and Evaluation (M&E)
- (4) Functionality and Sustainability (FS)
- (5) Sanitation and Hygiene (SAN)
- (6) Water Quality (WQ)
- (7) Gender Equality and Social Inclusion (GESI)
- (8) Disaster Risk reduction and Climate Change (DRR and CC)

The eight groups were formed with leaders from the Government, Co-leaders from one of the partner organizations and member-secretary from related section of the lead ministry (MOUD) and department (DWSS) and other members of SSG Member agencies. Leaders and Co-leaders were responsible for the formation of groups and taking group activities forward. A two-hour Brainstorming session was organized for each group for understanding team, exploring issues and dividing roles with further plans for team actions. TWG also developed a checklist for LVT in their respective areas.

The Learning Visit team shared their findings in a sharing meeting participated by all TWGs, LVTs and working groups. The team, upon returning from the field, quickly prepared a presentation for sharing learning experiences mainly for TWG. It presented regional WASH situation, visit highlights and findings in eight thematic areas in line with the checklist provided prior to the visit. The TWGs developed regional analysis of their theme based on this sharing and also expanded their situation analysis.

The TWGs shared their work in a sharing meeting. They sat for several rounds of meetings, worked through task divisions and developed a draft position paper. The position paper included Introduction, policy analysis, situation analysis, recommendations and Action plan. The team presented their findings with a focus on the situation and recommendations and got feedback from the SSG.

The JSR II process culminated in the two-day conference. The TWGs worked on recommendations and action plans in separate groups and presented final recommendations and action plans. Representatives of the stakeholder groups showed commitment to applying recommendations and resolutions. The thematic position, recommendations and action plans are the works of the same thematic groups. Members in the TWGs are from SSG member agencies. One agency has participated in the various TWGs without duplication of the same person in more than one group.

7.1 Institutional Framework and Capacity Building

Introduction

An Institutional framework defines how decisions are taken, programs formulated, implemented and monitored. Effectiveness of WASH sector for fulfilling sector needs depends on good institution and its capacity. The scope of the institutional framework is quite demanding in the sense that WASH is a vibrant sector in which many agencies and projects operate. While the sector initially concentrated on developing water supply services, in recent years the importance of proper sanitation is recognized and a total sanitation movement currently creating even more Open-Defecation Free (ODF) VDCs, municipalities and districts. Demographic changes and economic development are making many towns into urban settings, while earlier small-scale trading centers are now rapidly growing into emerging towns.



The changing society and the aspirations of the people require the government to revise and update its policies and strategies that will make the Sector more sustainable through water source protection, regular O & M and asset management, and discharge of treated waste water.

While Nepal has achieved good coverage of people having access to basic water supply services and sanitation coverage is increasing as a movement, there remain a good number of households and hamlets in rural areas and clusters in the periphery of towns that go without service. To serve the unserved, effective outreach programs are needed, which would take into account the socio-economic conditions, be sensitive to discrimination and foster inclusion, provide support to vulnerable households, elderly and the chronically ill, and provide alternative technical solutions such as rainwater harvesting, fog water collection, eco and dry sanitation when regular solutions are not feasible.

The Water Supply and Sanitation sector is guided by a series of policies, plan, guidelines, strategies, acts and regulations. There are however several gaps in terms of holistic policies, sector harmonization, responsibility delineation and regulation

One WASH Development plan has been initiated with one act, one policy, one implementation modality and one monitoring, reporting and information system.

Situational analysis

The Ministry of Urban Development is the leading WASH sector Ministry, covering service delivery in the country including the Kathmandu Valley, the major cities, municipalities and emerging towns as well as rural settlements having population above 1000 people. The Ministry of Federal Affairs and Local Development plays a complementary role and takes care of settlements below 1000 inhabitants. The Ministry of Education, the Ministry of Health and Population and the Ministry of Science, Technology and Environment complement the Sector through investment and regulatory functions.

Substantial support to the sector is provided by development banks and donor agencies. A good number of INGOs are active in support of a wide range of activities in the sector such as developing district WASH planning and management capacity, testing good practice in functionality enhancement and water conservation through local water use management planning. The development partners, INGOs, national NGOs and CSOs, together with the private sector complement the capacity of the Government at the national level (DWSS, DUDBC, DoLIDAR), regional level (DWSS/RMSO), and district level (WSSDO and DTO) in

providing WASH delivery services at the VDC and municipal levels. The engagement of the private sector needs strengthening, especially for rural WASH. At the district level and below, capacity building and promotion are needed to encourage small contractors, hardware shops and artisans to engage in upgrading and repair of existing water supply schemes, post-ODF and post-construction support.

The sector objective is to “create a transparent, accountable, service-oriented and responsive WASH Sector”. To achieve this, the Sector aims to move towards a Sector-wide Approach (SWAp) in which the resources and capacities of all agencies can be utilized in an effective manner, addressing critical issues in equity, functionality and sustainability, using a medium-term investment planning instrument. It is recognized that the center of gravity of the Sector has been placed at the district level. It is here that planning, mapping of requirements, design, execution and monitoring need to be centered. The capacity for post-construction support, for post-ODF and assistance for upgrading, expansion or serious repair will also need to be placed here. Regional and national capacities will need to be mandated with supervision, capacity building and training, and regulation as appropriate.

This will require strengthening the District WASHCC and formalize by acknowledging its mandate through the Government Gazette and clarifying and promoting its set of tasks within the WASH sector in the district. With financial and technical support of JICA and in coordination with CHRDU, the SEIU of MOUD completed a comprehensive study on training needs assessment in March 2014. Based on the gap analysis, the study has identified pertinent target groups and training modules at various levels from the center to the communities. A sector-wide capacity building plan based on institutional, organizational, operational and technical requirements for future performance and capacity of all key stakeholders in the sector will be developed, and aligned with the long-term vision and goals of the WASH sector in Nepal. The necessary conditions will be created for CHRDU to move into this challenging, but critical sector support will function.

Recommendations:

1. The National WASH steering committee oversees and guides sector development and implementation. It is supported by the National WASH Coordination committee. The GoN needs to recognize the set-up and division of tasks through notification in the Government Gazette.
2. SEIU will play an important role as the Secretariat to the NWASH Steering Committee and the NWASH Coordination Committee. SEIU will also create environment for the institutionalization of a sector-wide Approach and complete national WASH Plan.
3. Sector coordination and planning to move towards a Sector-wide Approach are important tasks of the lead sector Ministry. In support of sector coordination and to keep all stakeholders engaged and informed, an annual cycle of interaction is proposed.
4. The Ministry of Urban Development undertakes planning and coordination of development tasks like water supply, sanitation and urban development. In that respect, it may be better to reflect these focal areas in the name of the Ministry and rename it as “Ministry of Water, Sanitation and Urban Development”.
5. The recently conducted Training Needs Assessment (TNA) clearly identifies substantial training and capacity building needs in the WASH. A plan will need to be formulated on the basis of the TNA to provide CHRDU with the capacity to become a well-known and appreciated center of excellence in the WASH sector.

Progress: The National WASH Policy and Act is under formulation which will provision WASH-CC. The Sector Development Plan is in a development phase, which will consider the SWAp concept. SEIU is updating its business plan. CHRDU has been renamed as NWASSCC and strategic actions developed for further development as center of excellence in the WASH sector.

7.2 Sector Finance

Introduction:

WASH is linked to health, social dignity and the genesis of development interventions. It is also linked to the right to live in a clean and safe environment that promotes healthy living. But water and sanitation facilities cost money and the realization of such values is only possible through an appropriate financing policy that helps allocate funds for WASH services.



Conducting a data analysis on WASH sector financing was difficult. This was because there was little or no updated information. Still, for the JSR-II, a broad picture on the Sector financing mechanisms has been drawn. This was based on the information available. In summary, sector finance was assessed in terms of resources needed to meet the national targets for universal coverage of water and sanitation.

Even then, some information is missing. For instance, on the issue of local bodies allocating 20 % of the budget for sanitation and 20% for functionality of WASH services, information about the actual amount allocated and spent was not received. From a document review it was also not clear whether the programs were indeed making such allocations as required by the policy.

For the last four years, the rate of community fund mobilization for Small Town and for rural WASH has greatly increased. This is one reason why the sector financing gap may not be as big as expected. Yet, to meet the target of universal coverage, and to account for the resources required for rehabilitation, reconstruction and expansion of the services, it goes without saying that substantial financing would be required.

There is, however, a need for a common financing policy for WASH activities. While convergence is seen in some areas such as co-financing for small towns and community contribution for rural water, there is still no clarity in terms of specifics in many areas of WASH activities when it comes to the implementation of sector policies.

Situational analysis:

A review of the budget and the expenditure from 2009 to 2013 shows that the actual expenditure in the sector has remained more or less constant.

Apart from the core sector government agencies, other ministries and departments also spend considerable amount on water supply and sanitation. For example, in the last four years, the Department of Education allocated NRs. 2.4 billion for the construction of 11,500 girl-friendly toilets, and NRs. 3.2 billion for the external environment improvement of 14,800 community schools.

According to the estimation by the DOE, NRs. 6.6 billion is required per year to construct girl-friendly toilets in community schools to meet the nationally accepted ratio of one toilet for 50 students by 2017. An analysis of the trend of the last four years shows that the Department has allocated an average of only NRs. 450 million per year.

To meet the universal coverage of basic water and sanitation by 2017, an additional outlay of NRs 11.2 billion per annum is required for district-level programs. As such, the total cost required for 2014 to 2017 is NRs. 44.5 billion or NRs. 14.8 billion per year. These amounts do not cover the costs and the expenses for upstream and meso-level work such as putting in reforms, institutional strengthening, system support and capacity building activities.

The current trend is only NRs. 3.6 billion per year, a severe shortfall. This shortfall does not include funds required for higher level of water supply services, funds needed for the rehabilitation and the repair of existing water and sanitation systems, and funds needed for reforms, institutional strengthening, system support needs and capacity building needs. In this context, according to a World Bank study on "Reducing Poverty by Closing South Asia's Infrastructure Gap", Nepal needs to invest at least 1.5% of its GDP to meet the water supply and sanitation demands.

If the same assumption of per capita cost is used to derive the coverage estimates, based on the expenditure made till 2014 in the water supply and sanitation sector, the coverage then would be 90 % in water supply and 79 % in sanitation. This shows that on the one hand, the finances coming to the sector are significant, and should have resulted in higher coverage rates while, on the other hand, existing funding and expenditures are not sufficient to meet specific target activities. This poses a constraint on the achievement of sector targets.

The learning visit teams identified some key issues such as the lengthy time it takes to complete water supply systems. This delay is primarily due to an inadequate allocation of budget, insufficient maintenance funds, mainly in community taps; variances in connection charges and tariff rates, non-recording of non-revenue water, and no penalty for irregularities. All these have direct relationship with the efficient use of resources in the sector.

Nevertheless, an increasing demand for and a willingness to pay for private connections create an opportunity to generate more funds to improve the service level of the sector.. Local bodies could be lobbied to allocate 20 % of the budget for sanitation, and another 20 % for functionality. This would help raise additional funds for the sector.

Recommendations:

1. Map the resource available at the district level and allocate funds for district level programs. Resource mapping of the funds available at the district are necessary to resolve the "mystery of non-budgetary funds". In order to do this, make DWASH CC/ VWASH CC the sole planning agency at the DDC/VDC level. In order to achieve the universal sanitation, additional NRs. 8.4 billion per year needs to be spent at the district level as per the district/ village plan.
2. Common policy for financing WASH activities. Develop the common financing policies for all areas of WASH -- new construction, rehabilitation, reconstruction and expansion, higher level water supply, and sanitation service structures such as sewerage, and for unserved population in hard-to-reach locations.
3. Investment for Sanitation. A separate budget line for sanitation (including waste water and solid waste) is recommended. Also, all agencies need to clearly indicate the separation of budget for sanitation in all the programs. There should be a common policy/ approach in practice to trigger ODF and a benchmarking of "costs" for activities related to ODF, and beyond ODF.
4. Ensure policy compliance on allocating funds. Without this the functionality and sustainability of the sector's investments cannot be ensured. All agencies need to conform policy provision to allocate 20% budget for functionality and 20% for sanitation, in addition to 40% earmarked for upgrading and improving service level given that the basic coverage figures have crossed 80%.
5. System/ Process Improvement. The overall financing system in the sector needs to be improved to make sector financing efficient. Developing a reporting format with details -- disaggregated data on water supply, sanitation and capacity building, and linking it with the Line Ministry Budget System (LMBS). Similarly, it should be ensured that there is no resource gap or resources overlap.

Progress: ToR prepared for developing sector financing strategy

7.3 Monitoring and Evaluation

Introduction:

Drinking water and sanitation are the most essential facilities for human beings for their survival, growth and development. Access to safe and sustainable water supply and sanitation is a prerequisite for overall social and economic development of any community or a country.

Appropriate M & E system is essential for sector development and performance monitoring and for effectiveness of planning and implementation. Appropriate indicators, monitoring with dedicated system and information system are the keys for functional M & E. Various sector agencies have conducted surveys and studies on water supply and sanitation situation in Nepal over the last 20 years. However, these surveys were limited in nature/scope with limited samples, methods, procedures. The findings, therefore, have been quite variable, making it difficult to access trends over time as well as to provide reliable information on progress for the entire country.

A nationwide survey on coverage and functionality was initiated by DWSS with ADB and UNICEF support in 2007, which resulted in the first M & E document of the sector which provides a clear picture of the country's water and sanitation status. The report was produced in 2010 and disseminated widely to the sector stakeholders.

The WASH Sector in Nepal is currently in transitional phase and stepping up slowly. Planning, implementation and operation of the WSS systems are agency-specific, and M & E is mostly confined to the project level rather than at the level of sector or program performance. A single joint M & E (process as well as result/outcome-based) system is not well established. Sector agencies are generally using their own M & E system.

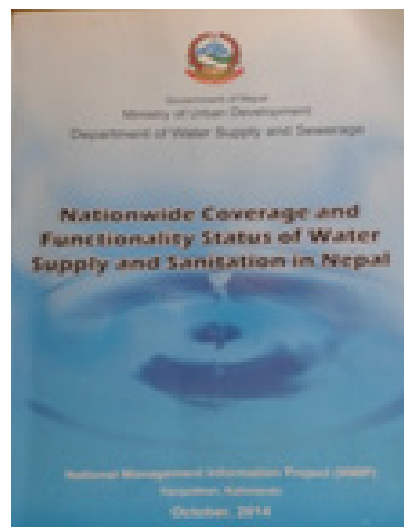
However, process monitoring is also equally important for capturing the events followed during planning, designing, implementing and operating the system to maintain the appropriateness of system design, technology used and quality of work done.

Some documents including National Monitoring & Evaluation Guideline 2013 of the National Planning Commission (NPC) mention M & E to be linked with the sector performance. The guideline published by the NPC with the objective of improving and systematizing the monitoring and evaluation process is mainly focused on result-based M & E. Process monitoring, which is considered equally important for maintaining quality of structures, reliability and sustainability of the water supply and sanitation system, is not considered.

Situational analysis:

Sector Policy Documents (Sanitation Policy, RWSS policy, Sanitation Master Plan) emphasize on the necessity of effective monitoring and evaluation of program interventions. The M & E requirement will be highlighted in the overarching umbrella act which MoUD/SEIU is presently developing on the basis of the functionality of the existing policies.

The 2011 JSR formulated nine Clear, Reliable, Economic, Adequate and Measurable (CREAM) Indicators on 'access to water supply, water quality, water quantity, functionality, per capita investment, equity, sanitation coverage, gender and community-based management'. It appears that their application has been practiced to some extent. However, there is a need of reviewing and fine-tuning to make them more clear and realistic.



In order to tackle the lack of valid statistics of water supply and sanitation facilities, the DWSS launched a nationwide survey on coverage and functionality of service through National Management of Information Project (NMIP) of DWSS in 2007. The main objective of the survey was to collect and publish sector update on “coverage and functionality” information in the Management Information system (MIS). This was the first nationwide survey that covered all of Nepal’s 36,038 wards in 58 municipalities and 3,815 Village Development Committees (VDCs), and the report was published in 2010. Likewise, NMIP section of DWSS most recently completed updating of coverage and functionality status of water and sanitation services based on the data collected in 2011/2012. The data showed that water supply coverage has fallen somewhat from 81.3 percent to 80.4 percent, whereas sanitation coverage increased from 43 percent to 55.76 percent.

In order to improve sector performance and efficiency, the MPPW established the Rural Water Supply and Sanitation (RWSS) M & E Unit under the Planning, Monitoring and Evaluation Division in 2009/10. The major objective of the M & E Unit was to monitor overall sector performance, establish a realistic picture of the sector for future investment and disseminate best practices in the delivery of cost-effective and sustainable rural water supply and sanitation services. The M & E infrastructure is in place but it is not yet functioning and able to produce a solid sector report due to the lack of manpower.

During the JSR, M & E sub-theme was created and maintained under crosscutting thematic working groups. The groups made intensive discussion and reviewed nine CREAM indicators and recommended them for gradual adoption in sector performance monitoring on a regular basis.

The JSR-I was mainly focused on performance monitoring and agreed upon development and use of NMIP as the primary sector data source.

Recommendations:

1. Review, harmonize and make functional the existing WASH web-based MIS/DSS system established at MoUD and DWSS, and use it for evidence-based planning and resource allocation mechanism;
2. Agree and implement common sector indicators (attached) both for the urban and rural sub-sectors;
3. Carry out coverage and functionality survey in consultation with CBS and sectoral agencies collaboration under the D-WASH-CC leadership as outlined in the revised procedures;
4. Develop a sector calendar of planning, monitoring and reviewing (in line with Participatory Planning Process as per Local Self-Governance Act-LSGA) that is fully followed and applied by all sector stakeholders up to the district level;
5. The M/V/D/R-WASH-CC secretariat nominates a responsible and accountable human resource for regular sector monitoring and evaluation, documentation, reporting and dissemination system.

7.4 Functionality and Sustainability

Introduction:



Functionality and Sustainability of Water Supply and Sanitation system can be realized in terms of continuity of intended services at affordable costs. Institutional, technical and financial capacity of the users' committee with clear vision for target and results supported by indicators are vital for sustainability. Operators need to know the standard operating procedures, preventive maintenance approaches and tariff should be set considering all costs, and the government needs to support considering economic, environmental and social factors of the community. The NMIP data indicates that Water Supply

System in Nepal is mostly in need of improvement mainly due to negligence and technical and financial capacity of the users committees.

Although the number and frequency of efforts made were observed by individual districts, NGO/INGOs, donors, civil society organizations, etc. to improve the functional status of the schemes, no significant changes on the functional status of schemes were observed. The 18 % functional status of schemes out of 38,000 schemes (NMIP, 2011) built throughout the country was not observed going up although some good efforts were noticed happening in the districts, particularly those of MWR.

During the last three years major changes in policies and strategies guiding the WASH sector have not taken place. It appears that compliance with existing policies and strategies is a larger constraint to Functionality of Water Supply Services than the quality of the policies and strategies themselves. If policies and strategies had been better complied with and adhered to by key stakeholders involved, the number of dysfunctional and poorly functioning schemes would have been considerably lower.

The roles and responsibilities of key stakeholders are well-defined and described in existing policies. What appears to be generally lacking is leadership, courage to make decisions, clear delegation of responsibilities and result-focused management. One significant problem has not been solved yet: the institutional separation of responsibilities for schemes serving less than 1000 water users and those serving more than 1000 water users.

Situational analysis:

Similar to the situation analyzed by the TWG Functionality in preparation of the First Joint Sector Review in May 2011, more than half of the approximately 41,000 existing water supply schemes in the country continue to partly or totally malfunction. This leaves a considerable part of the population without access to the most basic drinking water supply services in terms of quantity, reliability, accessibility and quality, of which the women and vulnerable groups are bearing the consequences.

So far as the TWG team could assess within the limited time available, overall performance of water supply service providers (regulators, donors/funders, implementers, operators and users) has not significantly improved.

The various factors and causes leading to the dismal state of water supply schemes are fully described in the Functionality Position Paper of December 2010. They are mostly systemic in nature, often related to flaws and weaknesses in governance, participation, accountability and transparency. The situation analysis of 2010/2011 (including contributing factors, issues and a set of recommendations) is still valid.

It is strongly recommended to first address the systemic causes of under-performance of water supply services providers, prior to investing in major repair and rehabilitation of failing schemes.

Without taking effective measures to solve systemic flaws in the provision of water supply services, newly repaired and rehabilitated schemes would soon become dysfunctional again.

Simultaneously, it is crucial to prevent the same problems happening at new schemes, by ensuring compliance with rules, regulations and guidelines regarding decision making, participatory planning, designing, construction, supervision, local capacity building and quality assurance.

Naturally, poor functionality of water supply and insufficient and unsafe drinking water poses risks in sustaining results in improved sanitation and hygiene, in terms of keeping toilets clean and hand washing practices, thereby undermining potential health benefits.

SNV Nepal has started WASH mapping exercises in few districts of MWR, which provides the information of individual schemes. A functional plan can therefore be made based on evidences and budget allocation as possible to improve the functional status of those schemes. However, the situation does not ameliorate thereafter either unless an institutional set up is made in the districts itself to look after all those schemes when they need help and support particularly in technical, social and financial aspects. This causes the failure of WUSCs. Therefore, SNV has helped in the establishment of the post-construction support unit in those districts to provide the 'institutional support home' to WUSCs.

In the similar way, HELVETAS Nepal has initiated many good practices in the district to improve the functional status, whereas FEDWASUN has expanded its network to 56 of 75 districts and strengthened the capacity of WUSCs.

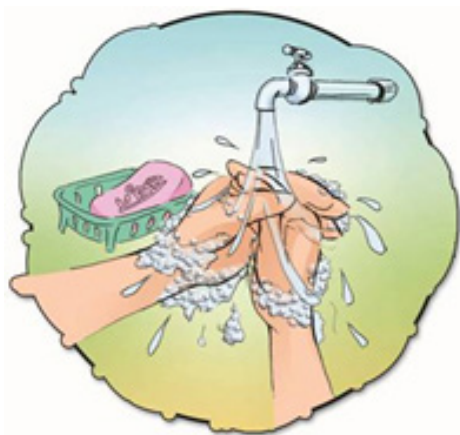
Recommendations:

1. Ensure that the basics are in place. Provide clarity on standards and regulations. Ensure compliance with regulations and standards. Build minimum capacities. Enforce authority in case of poor performance;
2. Formulate District WASH plan integrating district sanitation plan with district functionality plan (scheme improvement plan);
3. Establish Post-Construction Support (PCS) Unit in all districts of Nepal to establish it as an institutional home for all the actors;
4. Develop criteria for decision (DC) making on investments for making non-functional schemes functional based on the district functionality (scheme improvement) plan in the districts/region;
5. Formulate and implement FS guideline to use 20% of WASH funding for improving the functional status of existing schemes;
6. Provide alternative technological options, and promote house connections.

Progress: Some districts made initiation to formulate district WASH Plan. Benchmarking of piped water supply providers has been continued. A total of 107 water supply providers joined the process and the second databook consisting of 63 WSPs will released in 2015.

7.5 Sanitation and Hygiene

Introduction:



Sanitation is the basis of life. Safe life is only possible in improved sanitation. But too many people lack this basic human need. Lack of access to proper sanitation has a major effect on people's health. Poor health constrains development and poverty alleviation. Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes.

The purpose of the position paper is to outline the trend of sanitation coverage, disparities, the ongoing sanitation movement, school sanitation and urban sanitation and summarize the key issues and best innovations in the sanitation and hygiene sector in Nepal. The other purpose of the position paper is also to give quick policy review with identification of gaps. This position paper

has also summarized the critical observations and learnings done by thematic working group members during learning visits in all the five development regions.

Nepal has set the target of universal access to sanitation by 2017. The GoN has a plan of achieving 80% improved sanitation coverage by 2015 and 100% by 2017. Sanitation coverage in Nepal has increased significantly between 2000 and 2014. Access to national sanitation coverage has increased significantly from 30% to 70% over the period of 14 years. Although there has been good achievement in the sanitation and hygiene situation due to massive scaling up of Open Defecation Free (ODF) campaigns in the country, the main challenge remains to maintain and accelerate the present trend of achievement nationwide, across districts, ecological belts, rural and urban communities and all segments of people. However, an encouraging environment has been created on the front of localization of the Sanitation and Hygiene Master Plan 2011, launching of national and district sanitation conferences for wider advocacy and publicity, strengthening different level coordination committees and expanding ODF initiatives.

The key policies on rural sanitation are "Rural Water Supply and Sanitation National Policy, Strategies and Strategic Action Plan-2004, Sanitation and Hygiene Master Plan-2011, Millennium Development Goal (MDG) Acceleration Framework (MAF): Improving Access to Sanitation-2013. Majority of local bodies and WASH Coordination Committees (WASH-CCs) at the district and VDCs/municipalities have limited information about the sectoral policies. Despite different policies, strategies and action plans in place, there is a need to further enhance its regulatory role in the sector and check the agencies' adherence and compliance to national policies and strategies. Weaker regulation obviously provides room for negligence in meeting up the requirements of these national policies and strategies in implementation of the sanitation and hygiene projects.

Situational analysis:

In 2011, the JSR I had made five resolutions on sanitation and hygiene. Among the JSR I resolutions, the development of Master Plan played the pivotal roles to mobilize all the development partners, local bodies, civil societies and others to enable 25% of the people to live in ODF environment after the JSR I. The ODF strategies were developed by most of the districts, VDCs and municipalities. The Total Sanitation (post ODF) strategies are being developed in most of the districts and municipalities which were declared ODF.

The 5th South Asian Conference on Sanitation (SACOSAN V) held in Nepal in 2013 has sought commitments of the member countries in mainstreaming all segments of society, formulation and implementation of adequately resourced national and sub-national plans and maintenance of sustainable

sanitation and hygiene services and facilities in rural and urban areas. Nepal has developed a detailed action plan to meet the commitments during the SACOSAN V requiring commitment with adequate budget, human resource and institutional setup and coordination by the government, development partners, civil societies and NGOs.

While Nepal has made a good progress in improving sanitation coverage in the recent years, it looks difficult to achieve 80% target by 2015 if the present trend continues. Besides, there lie big disparities in access to sanitation among different social groups and geographical regions, rural and urban setups. There are still eight densely populated districts in the central Terai where sanitation coverage is less than 30 per cent – far below the national average.

The specific urban-related sanitation issues are lack of appropriate technology to address the urban poor needs including slums and squatters. Similarly, inadequate public toilet facilities and their operation and maintenance is another emerging issue. Due to haphazard disposal of untreated faecal sludge and solid and liquid waste management issues, achieving ODF status in urban areas is still a key challenge. Another crucial challenge is the lack of local level rules and norms for sustaining ODF in addition to poor monitoring and enforcement mechanism.

Sector triggering, sanitation marketing strategies, cross-boarder sanitation, sanitation conference at the national, regional, district and VDC levels, sanitation model district approach, aligning for action, SLTS, and PPP are some of the most innovative interventions in Nepal in the recent years. The learning visit teams that made visit of five development regions captured a number of key sectoral learning. The most important ones are that only sanitation planning available but planning for water supply development is largely lacking in all the districts; social norms and rules are effective in ODF movement but less/not effective norms and rules for post ODF campaign; urban solid, liquid and industrial waste management are challenged by limiting only to ODF campaign; post ODF strategies and plans are lacking in ODF districts and VDCs, etc. In the mid and far western regions, mostly women cannot use latrines during their menstrual period (Chaupadi). This has weakened ODF status of their villages.

Recommendations:

1. Establish ODF practice as social norms focusing on low coverage districts;
2. Foster multi-sectoral collaboration to strengthen stakeholders' involvement in WASH sector with priority to health sector;
3. Institutionalize WASHCCs with focus on Urban Sanitation & Hygiene and formulate Sanitation/WASH strategic plan;
4. Reinforce WASH in Schools (WinS) focusing on life-skill based software components and by mobilizing children as change agents;
5. Strengthen proper documentation and knowledge management;
6. Strengthen and intensify Post ODF (Total Sanitation) Campaigns from the beginning;
7. Build capacity of local stakeholders/WASHCCs and institutionalize formulation of the Sanitation/WASH strategic plan.

Progress: ODF practice has been taken as social norm at the district level. Preparation is ongoing to organize post ODF conference and develop national guideline.

7.6 Water Quality

Introduction:

Access to safe drinking water is important as a health and development issue at national, regional, and local levels. The large burden of diarrhoeal diseases continues to drain important resources from developing countries. Approximately 88% of diarrheal deaths worldwide are attributable to unsafe water, inadequate sanitation, or insufficient hygiene. These cases result in 1.9 million deaths each year, majority of which are preventable, mostly among children under the age of five. After pneumonia, diarrhoea is the second leading cause of death among children under five. Drinking water contaminated by the bacterial, viral, or protozoan pathogens is one transmission route for diarrhoeal diseases. Hence access to safe drinking water has become essential to health, a basic human rights and a component of effective policy for health promotion.



In the last decade, access to drinking water has significantly increased in Nepal. However, the quality of the supplied water and sustainability of the system are still a big challenge. The water is not always safe even when it is supplied through systematic piped water systems. Many of the improved or treated / safe water may be contaminated during transmission or distribution. This is the main reason why incidences of diarrheal diseases have not decreased significantly even though accessibility to improved water supply coverage increased. Studies also show contamination at the household level due to improper handling and storage of drinking water. As per the information provided by Department of Water Supply and Sewerage (DWSS), only 12-15 % of people have access to treated water. However, the status of the existing water treatment plants has not been studied in detail. Some studies done in urban systems showed that most of the treatment plants are in poorly maintained condition; the treated water is not of the desired level. Besides, the operational data are not properly recorded and disseminated. The treated water quality deteriorates more in the rainy season and does not appear to be suitable for drinking.

Water Safety Plans (WSP), WQ surveillance system, Regular WQ monitoring facilities and support for treatment system and WQ improvement are the key elements for WQ improvement and maintaining continuous safety of the system. Awareness at people's level and capacity of users' committees are essential. Position papers analyzed the situation prepared recommendations and action plan for implementation.

Situational analysis:

In the National Drinking Water Quality Standards (NDWQS) and the implementation directive all service providers should meet the national standard and deliver water through urban water supply projects and small town projects exceeding 10,000 population, within five years (i.e, by the end of 2010). This time period has already been passed, but no progress or even monitoring mechanism has been established to review the compliance of the standard. Furthermore, the NDWQS has directed to improve the water quality of all new and existing urban water supply projects with a population less than 10,000 having high risk of water/ sanitation diseases. In addition, the Standard also indicated that service providers of all projects providing water supply in district headquarters should develop the water quality improvement program (WQIM) for ensuring safe water. Formulation of WQ Surveillance Guideline is under preparation by the MoHP, but no significance progress has been achieved yet.

After the endorsement of the NDWQS 2006, initiation towards the improvement of water quality can be seen. However, it is not very encouraging. Since then the GoN, DWSS, has supported construction of 65 water treatment plants. Currently 57 water quality improvement projects are under construction by the DWSS. Additionally, the completed and ongoing small-town water supply and sanitation projects have envisaged providing water conforming to WHO Water Quality Guidelines using various treatment technologies and methods, as deemed necessary. Unless the treated water is monitored regularly, no one can say whether the treated water is safe enough to use or not.

As stated in Nepal Demographic Health Survey (NDHS-2011), 82.2 %, households are using water without any kind of treatment. The households, who are using treatment, filter (ceramic/sand) and boiling are the mostly used methods of point of use treatment methods. If one compares the percentage of treated water using households in rural area with the urban, it is very low. For example, 6.5 % rural households use boiled water in comparison to 20.9 % urban, and only 6.3% rural households use filters in comparison to 34.3 % of the urban use.

In recent years, consumption of packaged / bottled drinking water or tanker water in Kathmandu and many other urban cities has increased. As reported by the Department of Food Technology and Quality Control (DFTQC), on an average 15 % of the samples of the bottled/ jar water don't comply the existing government standard. The quality of container, use of unsafe raw material, longer storage time, treatment methods, use of additives, chemical constituents and microbial activity are the major identified causes of poor quality of processed drinking water. But, no one has reported the use pattern and the quality of water supplied by tankers.

Although commitments were shown by DWSS since 2012, embedment of the WSP in project cycle is not materialized yet. As DWSS committed, all new and rehab projects should integrate WSP as part of the project implementation. Only some rehab projects tried WSP, but no any exciting result could be achieved. However, there is a very good advocacy of WSP among partners. GoN is allocating regular budget for WSPs application. UNICEF is also supporting DWSS to implement WSP in a number of urban and rural projects for the last couple of years. Many DPs, NGO, INGOs like FINIDA Supported Projects (RWSSP-WN & RVWRMP), Water Aid, ENPHO and NEWAH have started the application of the Nepal model of WSP.

Recommendations:

1. Incorporate Water safety plan in the WASH Act and the NDWQS for the water quality improvement plan;
2. Allocate certain percentage of the project budget for a comprehensive awareness program on the importance of water quality and its impact on health and well-being of the population;
3. Designate WQ section of the DWSS as water quality information centre aligning with the existing NMIP, and promote reward system to the best utility for maintaining safe water meeting the standard;
4. Develop/finalize WQ surveillance procedure guidance document and initiate a systematic surveillance program for enforcing WSP providing feedback to the service providers and authorities;
5. Regularly monitor the arsenic contaminated areas, and update the water use pattern of the affected people to better understand arsenic dynamic in the ground water and the performance of existing mitigation options;
6. Provide emphasis to improve the water quality of the existing water supply schemes by allocating adequate resources to promote the treatment facilities as required to control the outbreaks of the diseases and the trend of yearly repetition;
7. Upgrade the functionality of all the regional WQ laboratories as per the assessment report to provide water quality testing access to WUSCs in the districts;
8. Establish functional water quality unit at the district level with the existing manpower, build its capacity gradually for scaling up district-based laboratories and ensure easy access to WUSCs for improvement of water quality and monitoring system;

Progress: WSP has been incorporated in national WASH policy and Act, which is under formulation. WQ standard and directives are in the process of revision (ToR agreed in TWG) incorporating WSP and WQ surveillance. WQ laboratories are strengthened with staff.

7.7 Gender Equality and Social Inclusion

Introduction:

The issue of gender inequality and social exclusion (GESI) is one of the key development challenges for Nepal, and it highly matters in WASH sector interventions both in urban and rural areas. The country's existing social and economic disparities stemming from patriarchal and geographic and regional differences, and a hierarchical caste-based social structure have affected the equitable access and use of infrastructure services, facilities and resources by the disadvantaged and marginalized groups, particularly women, poor and excluded (WPE) groups. The socio-cultural and regional differences have created barriers to these groups to access services and participate in decision making processes. The inclusion issues in WASH services are generally related to women, dalits, indigenous people, physically challenged people, economically backward people, children, people with HIV/AIDS, and disadvantaged people living in remote areas.



Exclusion-based barriers in relation to WASH sector intervention need to be addressed while moving towards more inclusive approach to service delivery. The Rural Water Supply and Sanitation Policy 2004, and the Urban Water Policy 2009 include provision for 50% women representation in WUSCs, and emphasize the participation of women and marginalized caste and ethnic groups in decision making processes. But the policies and plans are not clear on how the poor and landless can access to WASH services. There has been improvement in policies and plans for social inclusion, but they still require review in order to address unattended issues of exclusion. Therefore, the policy reform and the plans for its effective implementation is necessary to ensure equity in WASH services and to meet national targets and international commitments of the government.

The WASH sector master plan which is under preparation provides an opportunity to have better inclusive measures for women, the poor and the excluded. The master plan itself would be the effective means to address the issues of inclusion. The large number of stakeholders involved in the sector also need to adapt a harmonized approach for gender and social inclusion, and a mechanism for monitoring and disaggregated data collection is a must. In this regard, the WASH sector guidelines under GESI Operational Guidelines of MoUD 2013 will be a useful tool for all. The guideline would be a leading document for making gender and social inclusion a pragmatic approach in WASH sector, and if made mandatory to apply by all the stakeholders.

Situational analysis:

Though 81% population in Nepal have access to drinking water (NLSS 2011), the socio-cultural discrimination still persists in accessing water supply. The data show disparities in access to sanitation among different social and economic groups, ecological and development regions, and rural and urban setups. The sanitation coverage is lowest among Madhesi dalits (5%) and terai janajatis (19%). The poor from slums and squatters in semi-urban and urban areas do not have access to safe drinking water while

they also do not get adequate sanitation facilities. The children's right to water, sanitation, and hygiene mainly in schools has also remained a major challenge in Nepal. Although the slow progress has been made to safeguard the health and hygiene of school children, almost one- third of community schools in the country lack WASH facilities. Only 80% of the community schools (out of 29335) have toilets, and of these, only 65% of the schools have separate toilets for girls (GoN, 2011b).

In addition, some socio-cultural practices against girls and women exacerbate negative impacts on them by denying access to water and sanitation facilities. Such as the practice of Chhaupadi in western Nepal, which is a tradition to keep girls and women away from home during menstruation and not allowing them to use toilets at home and touch water taps. This practice has posed challenges in achieving ODF goal of the government in this region and has long-term health impacts on girls and women. Untouchability practiced against dalit community is a form of caste discrimination that prevents dalit to access water in the community. It prevails mainly in the rural areas of the country where dalits are still not allowed to collect water from the same tap used by the so-called upper- caste groups. Women's representation in WUSCs is improving as general members as well as key executive members, but their meaningful participation in decisions remains a challenge. There are, however, many evidences of women's active role in water scheme management, which needs to be sustained through women's capacity building to take leadership positions. The other technical issues are related to remoteness, hardship and affordability of services, and design standards of water taps and toilets to be friendly to women, children and the disabled.

Most of the organizations involved in WASH sector have applied GESI approaches in their programs and shown best practices. Their program focuses children, women, physically challenged, dalits, senior citizens, PLHIV/AIDS, and other excluded groups. The awareness raising, empowerment and livelihood support activities associated with WASH programs have been found instrumental in sustaining access to services by the poor, women and marginalized. It has to be made a mandatory component. Similarly, the subsidy support to the poor and marginalized in toilet construction and water connection has been an effective model. MoUD's recently adopted GESI Operational guideline 2013 has helped create an environment for harmonization of GESI approaches in the WASH sector. This calls for a collective effort by all stakeholders in strengthening GESI mainstreaming in WASH sector program planning, design and implementation.

Recommendations:

1. The MoUD GESI operational guideline 2013 is a leading document to institutionalize GESI mainstreaming in WASH sector. It is suggested to use it to harmonize GESI mainstreaming process in the sector.
2. Coordination among organizations on GESI is required to promote and institutionalize GESI mainstreaming in the sector. The Community Mobilization Section within DWSS should take lead role to coordinate and enhance Knowledge management through regular consultations and thematic group meetings.
3. Review of existing sector policies should be carried out to make them better inclusive and to discourage discriminatory socio-cultural practices against women and marginalized groups.
4. Skilled human resources for GESI in WASH sector are necessary to facilitate the GESI within MoUD, and related agencies and organizations. Team of master trainers and training packages should be developed at different levels and organizations, and their knowledge and skills should be utilized.
5. GESI disaggregated data system with MIS is highly recommended at MoUD and other agencies. Outcome assessment and report publication should be supported.
6. Gender Responsive Budgeting process should be made effective. Annual sectoral fiscal budget should be allocated for GESI.

Progress: Some activities are going on in line with using GESI guideline developed by MoUD. Some studies have been carried out in line with GESI status.

7.8 Disaster Risk Reduction and Climate Change

Introduction:

Nepal is among the top 5 countries vulnerable to impact of climate change (Climate Change Vulnerability Index 2011). It has been highlighted as having the potentially dangerous consequences of climate change on its fragile environments and economy. Water will inevitably be the medium through which the effects of climate change will impact other sectors such as health, food security and nutrition, energy and education directly undermining the development gains in these sectors. More than 60% of the climate-induced disasters are said to be caused by water – either with very little water, more water, and wrong type



of water or wrong timing of water (NAPA 2011). In Nepal, it is suggested that more than 1.9 million people are highly climate vulnerable and 10 million are increasingly at risk from climate change. The number is likely to increase significantly in the future. Nepal also falls under the high earthquake intensity belt. With earthquake measuring to 8 richter scale in cities like Kathmandu, 95% of the water supply could be disrupted due to breakage of pipes and structures, sanitation will be a major concern due to seepage of latrines, drainage and septic tanks threatening health of the population, especially those vulnerable like children, women and old citizens. This degradation and damage of WASH facilities will create conditions that can result into major risks such as outbreak of water borne diseases. Therefore, the aim of integrating Disaster Risk Management in WASH is to reduce the impact of hazards on WASH services, ensure rapid service recovery after disaster and provide WASH facilities to guarantee minimal impact on society.

Initial steps towards addressing disasters and climate change into Nepal's national planning have taken between 1982 and 2013. Based on the review of existing policies and thorough discussions, the thematic groups have made following observations. This is to emphasize that there are enough policies in and outside the WASH sector to initiate implementation in the country no matter what issues arise in the process of its effective implementation.

Situational analysis:

Every year Nepal faces water-induced disasters such as flood, landslides, flashfloods followed by outbreaks of waterborne diseases affecting large population and WASH infrastructures. In 2013 only the WASH sector faced a major challenge to address 204 water supply schemes, which were fully or partially damaged by floods costing Rs 14, 32, 72,000 (MoUD, 2013). Similarly, the sector actors responded to WASH needs of 15000 households that were directly affected by flood through various interventions (hygiene kits, water purification tablets, hygiene promotion, mass media campaign etc.) (WASH Cluster Update 2013). While sanitation movement was speeding up in the country, the 2013 flood also affected three VDCs in Dang and Kanchanpur that were already declared ODF. This case further challenged the regular development program and gave a clear indication of the need to have risk sensitive WASH plans and programs for its sustainability and resilient community

Looking at the climate of investment made so far brings concerns on the minimal priority given to WASH sector. According to a study conducted by Oxfam on Climate Change Adaptation financing in Nepal, out of USD 237 million spent on CCA during 2009-2012, about 12.9% went to Water and Energy. However, with major contribution on energy and water resources, there is still not clarity on how much is really spent on interventions related to WASH service delivery. Looking also at the WASH sector investment, CC/DRR is under-funded with minimal consideration on preparedness, response with late recovery supports and very

little investment on DRR. Similarly, there are very limited interventions in NAPA under the components on Public Health and infrastructure, which is also a clear indication of minimal priority on the public health issues such as WASH.

Until 2011, the Government's efforts were focused on post-disaster response and recovery with minimal consideration on preparedness and minimal or no interventions in disaster risk reduction, which includes prevention, mitigation and adaptation initiative. Similarly, the climate change has been very much talked about issue but hardly implemented at the ground. This is simply because of the lack of clear guidance on modalities of implementation. Currently the DWSS has Climate Change and Rain Water Harvesting section, DRM section and Rehabilitation section working to address the issues of Climate Change and Disaster Risks. With Cluster transition in place since 2013, MoUD is now leading the WASH Cluster for emergency preparedness and response, where there are about 20 Government and Non-Government agencies contributing towards it augmenting the sector further. Aside from these achievements, the sector has also benefitted from key activities of the multi-sector initiatives such as development of District Disaster Risk Management Plans (DDRMP) led by DDC with all sectors, with 4 districts already initiating the development of DDRMP. The Kathmandu Valley Water Supply Management Board (KVWSMB) initiated an inventory of ground and surface water of KTM valley which would further be used to identify water sources that maybe needed during emergencies. The year 2013 was also significant for the sector when MoUD formulated a Climate Change steering Committee with the aim to bring all the stockholders in one place for a coordinated effort to make resilient WASH development interventions.

Recommendations:

1. Taking initiatives for updating existing sector policies with reference to CCA/DRR. WASH related policies are formulated long back and CC/DRR issues came later on. Therefore, CC/DDR is not well reflected in previous WASH policies. It is now required to update WASH policies incorporating CC and DRR issues.
2. Development of CC strategy and DRM guidelines for the WASH sector with the formation of WASH Climate Change Coordination Committee in leadership of MoUD. Development of Climate Change adaptation strategy and DRM guidelines through participation by all sector actors.
3. Initiation of detailed assessment on the impact of CC on WASH. There is a general perception that CC has been affecting the WASH service delivery. However, there is gross lack of solid evidences and documentation. A detailed assessment is thus required so that it can be integrated in planning and designing of WASH service delivery.
4. Capacity building of Local bodies and Coordination. It is also reported by LVTs that local bodies, user groups and key working groups like the WASHCCs are not aware/concerned about CC/DRR and its possible implications in WASH sector. Local-level capacity building on CC/DRR is now indispensable for its local adaptation.
5. Allocation of 10% (Min) of WASH development program budget on CCA/DRR. Such mandatory provision will ensure immediate support in need of preparedness and response together with integration process.

Progress: Review of existing WASH Policy in view of climate change. Formulation of DRM guideline initiated.

8. LEARNING VISIT REPORT

Five Learning Visit Teams (LVT) were formed with Chief of RMSO and Member- secretary of RWASHCC and one of the partners agencies as co-lead and officials from MOUD/DWSS as coordinators/facilitators. The purpose of LVT was to bring regional prospective for JSR II. The team visited to respective regions covering about four districts (Hills and Terai) visited rural and urban WS projects, V/M/D/R WASH CC and finally participated in a regional workshop. The LVTs prepared learning visit report including visit process, highlights, thematic findings and way forwards for the region. The list of the leaders and co-leaders for the five regions has been presented in table 8-1

Table 8-1 **Leader and Co-Leader of Learning Visit Team**

SN	Field Visit Group	Leader	Co-Leader	Facilitator
1	Eastern Region	ERMSO	UNICEF: Arinita Maskey	DWSS: Keshab Raj Bista
2	Central Region	CRMSO	UNHABITAT: Bhushan Tuladhar	SEIU: Prayash Ghimire
3	Western Region	WRMSO	RWSS-WN: Sanna Leena Rautanen	DWSS: Prem Nidhi KC
4	Mid-Western Region	MWRSMO	Helvetas: Madan Bhatta	MOUD: Kedar Prajapati
5	Far Western Region	FWRMSO	RVWRMP: Kari Leppanen	DWSS: Padam Kunwar

8.1 Learning Visit: Eastern Region

Team: Pratap Sharma Poudel (ERMSO), Arinita Maskey (UNICEF) Keshab Raj Bista (DWSS), Hari Prasad Sharma (WTFB), Ram Chandra Sah (DWSS/ ESS), Tika Adhikari (RWSSFUNDB), Rakesh Gohit (NWSC), Ram Prasad Chaulagai (FEDWASUN), Sanjeev Shrestha (Plan), Ram Prakash Singh (CARE), Sunila Ghimire (ADB), Bishow Raj Bhatta (UNICEF), Ryuji Ogata (JICA)

Introduction:

The Team comprised 13 members from various Government and Non-Government agencies (visited 5 districts (Dhankutta, Terhathum, Morang, Sunsari and Saptari) of Eastern Region. It aimed to observe the progress as well as the current situation of the various thematic areas defined by JSR.

The Team's observation reveals that the focus of the region is more on Sanitation than Water Supply. Water Users Committees are strong and leading the sanitation campaign in many cases but they lack linkage with V/D WASH CC. It is also found that there are no dedicated focal persons from agencies and their investment on WASH is still not clear. The annual budget has remained the same for a long time in many districts. Joint monitoring system is not established in many places. Functionality is further affected by source disputes and maintenance funds. Sanitation strategy is not in place in some districts and many VDCs. It is also found that there is no dedicated plan for WQ improvement. Women still hesitate to speak in the meetings. A major problem observed is drying up of sources.



The Team's activities have been summarized in table 8-2.

Table 8-2 LVT activity for Eastern Region

Districts	Activities
Morang	DWASHCC meeting; Field visit to Haraicha Water Supply Project/ WUC; RWASHCC meeting
Dhankuta	Meeting with MWASHCC ; Dhankuta WUC and Hile WUC; Community interaction in Hile ; Public Toilet observation; Landfill site observation SWM; meeting with VWASHCC Bhirgaun
Terathum	Meeting with LDO and local leaders/civil societies; Visit to Shreedale Water Supply Scheme/WUC; Meeting with VWASHCC and WUC Jirikihimti; Meeting with VWASHCC/Community leaders/civil societies- Ambung VDC
Sunsari	Interaction with slum communities in Saunebasti; Meeting with Executive Officer of Dharan Municipality; Observation at Itahari Small Town Water Supply and Sanitation Project
Saptari	Meeting with WUC Ma Kankalini Water Supply Project, Bhardawa VDC and NWSC Meeting with DWASHCC; Meeting with Dharampur WUC

Visit Highlights

D-WASH-CC Morang

Morang has DWASHCC which is active, meets regularly and involves members of various sectors. It has Sanitation Strategy developed by DWASHCC but it is focused on sanitation and ODF targets. Unlike Sanitation Strategy, there is no plan /strategy for water supply, water quality and other areas of WASH. Sanitation coordination is good but not in water and other areas, which may be due to limited knowledge of the bigger picture. Joint monitoring is practiced but in limited ways. Recording and reporting needs to be strengthened. Urban SWM and LWM are more challenged by being limited with ODF . the slum area has problems on how to build toilets in slums as there is no plan and ownership of land. Women in the lower belt of Morang still do not come forward.



Shreedale Water Supply Scheme, Terhathum

Shreedale Water Supply System was initiated in 2038 BS and completed in 2042 BS. It has been providing water to ward number 1 to 9 in Myanglung VDC. But there is conflict on use of water with Myanglung and Shreedale village, which is affecting the service delivery. It has a slow sand filtration system to treat 100,000 litres of water. However, this was never used since the start of the project thus questioning the plan, investment and functionality of the system itself.



Public Toilet of Dhankuta Municipality

Public toilets in Dhakuta Bus station are unique facilities. This public toilet was constructed in 2067 BS in a conscious effort to make the bus station free from open toilet system. While searching for this private sector, the Taxi Association was found to be an ideal partner. The total construction cost included contribution of Rs. 38,60,000 by the Municipality and Rs 40,000 by Taxi association.



The additional feature of this toilet was the biogas plant that was technically supported by BSP and United. This toilet consists of separate chambers for males and females with additional facilities of bathing space, changing room, sanitary napkin disposal bins and a store room. This toilet has been maintained by one person who collects Rs 2 and Rs 5 for urination and defecation. The person pays Rs.9000 per month to the Municipality and Rs.3000 to Taxi Association. The person earns about Rs 1000 per day. The person with his saving has also bought a washing machine and now provides laundry service as well charging Rs 20 per cloth.

Ma Kankalini Water Supply Project , Saptari

It is an active community in providing water. Women technical support service provides seed money for livelihood and capacity enhancement. Sanitation Revolving fund has helped to attain better sanitation status in the village. Toilet coverage was 5% 2 years ago, which is now 75%. Since it has just started, concerns of sustainability is high as there is still need for proper management plan including O & M funds. Training is needed for user committee and technical people for pump operations and maintenance.



Thematic Findings:

Institutional Framework and Capacity Building: DWASHCCs of the districts are active and regularly meeting with involvement of various sector members. DWASHCC has developed Sanitation Strategy focused on sanitation and ODF target. But this strategy does not cover or have plan for related issues like water supply. The MWASHCC seems to be comparatively inactive in many of the districts.

Finance: The financial contribution towards WASH is mixed in different districts. One of the key observations is that there is a good allocation of funds on sanitation by various districts. In case of water supply services there are good examples of well-defined tariffs such as of Dhankuta Water Supply Scheme and Itahari Water Supply Project, where they have good financial mechanism like tariff collection, debt services, and pro-poor consideration for connection charges.

Monitoring and Evaluation: The overall monitoring and evaluation of the various interventions made in the region seems to be limited. There seems to be vertical types of monitoring without indicators, and are considered less effective to achieve target goal for further improvement. There is very limited cohesion and collaboration for improved database on monitoring and evaluation.

Functionality and Sustainability: The functionality of the system is very much linked with the operation and maintenance fund and staff designation for such task by the users' committee. Some of the best practices could be seen in schemes like Haraicha Water Supply User Committee, where they have implemented WASH MIP project and Water Safety Plan that is helping the entire community to have full service from the system.

Sanitation and Hygiene: The Eastern region is moving towards greater sanitation achievements contributing toward the national sanitation goals. Most of DWASHCCs now have Sanitation Plan/ Strategy developed and sanitation coordination is good. But such planning is not there for water services, which may be due to limited knowledge of the bigger picture.

Water Quality: Water Quality is still a least prioritized intervention when supplying water. Even for the Water User Committee, which is providing water to people, the excuse has been no complaint by the consumers. This is because quantity of water has always been a focus for them though it is understood that most of the water becomes turbid during rainy season and there are cases of waterborne diseases in the communities.

Gender and Social Inclusion: Based on the interaction at various levels of institutions, there seems to be greater consideration and involvement of women and socially excluded communities in official posts of the various WASHCCs. However, it was also felt during the interactions whether these positions are being kept for formality only.

Disaster Risk Reduction and Climate Change: There is very little knowledge and action in the context of DRR and climate change. The Region is also facing lower discharge of water from spring sources as the sources are drying up.

8.2 Learning Visit : Central Region

Team: Nawal Kishore Mishra (RMSO), Bhushan Tuladhar (UN-Habitat), Nanda Banjade (RMSO), Bhushan Bhattarai (DOLIDAR), Ramesh Kumar Sharma (RWSSFDB), Bijay Shrestha (KUKL), Bal B. Thakurathi (KVWSMB), Rajendra Aryal (FEDWASUN), Bodh Narayan Shrestha (UNICEF), Nuria Lefcourt (UNICEF), Shirish Singh (Practical Action Nepal), Prayash Ghimire (SEIU)

Introduction

A team of 12 persons consisting of the representatives of major stakeholders visited seven districts (Dhading, Chitwan, Makwanpur, Parsa, Bara, Sarlahi and Kathmandu) of the Central Region from 3 to 10 March 2014 to learn about the WASH practices in the region and to listen to the voices and concerns of local stakeholders. Over this period, the team visited 15 different sites and participated in 25 different meetings.

Similar to the Eastern Region, the team observed that the focus is on sanitation rather than on water supply. Their finding shows that there is inadequate funding for WASH. There is demand for private connection. In addition, the tariff collected also varies from place to place. Overall, the aspect of financial management is very weak except for some places. There is no record of systematic monitoring and recording. Private taps are functional but public taps have problems with functionality. It is surprising that HSMP is still unknown to many people. A major challenge in this region is construction and management of public toilets. An effective system for WQ improvement and POU knowledge is lacking. GESI aspects should also be taken into consideration as women do not participate in WUSC and there is no trend for disabled toilet. However, there is support available to ultra poor.

The Team's activities have been summarized in table 8-3.

Table 8-3 LVT activity for Central Region

Districts	Activities
Dhading	Visit Phogatpur WSS system in Thakre VDC; Observe Birta Besi WS project in Murali Bhanjyang VDC; Meeting with Dhusa V-WASH-CC; DWASHCC Meeting in Dhading
Chitwan	Meeting Jagatpur Kerung WUSC; Visit Bagbazar, informal community with total sanitation; Met M-WASH-CC in Bharatpur; Met Bharatpur Water Supply Management Board; Visited Bharatpur Wastewater Treatment Plant; Visited Piple VDC, Chitwan
Makawanpur	Observed Hetauda's wastewater treatment plant; Observed Hetauda's municipal waste compost plant; Meeting with Hetauda Municipality
Parsa	V-WASH-CC meeting and site visit to Dhobini village in Parsa; D-WASH-CC meeting in Parsa; M-WASH-CC meeting in Kalaiya
Sarlahi	Meet Karmaiya WSS User Committee; Community meeting in Gair Village, Sarlahi
Kathmandu	Meeting with KUKL, PID and Melamchi; Regional Consultation Meeting in Kathmandu

Visit Highlights

Water Supply Arubastar Darimtaar Dhading

This small community of 56 households has implemented an improved water supply system, with yard connection in each house. Extra water and wastewater is also used for vegetable farming. The tariff rate is kept low but it is enough to sustain the system. Many houses also have biogas plants, which together with vegetable farming benefit women.

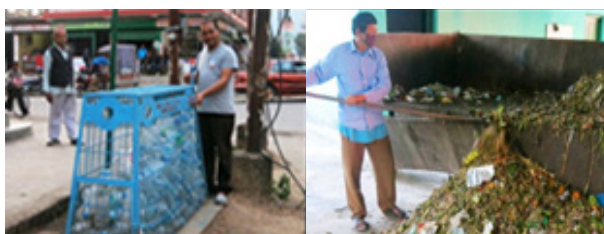
Total Sanitation in Bagbazar informal settlement, Chitwan

The squatter settlement of Bagbazar has demonstrated that even a poor community in informal settlements can move towards total sanitation. All 80 houses in the community have toilets, point of use water treatment systems, improved stoves as well as systems for washing and drying dishes. The community is regularly cleaned and many houses also have improved cowsheds. The local Tole Sudhar Samiti is led by a physically challenged person. The and remaining members are women thus demonstrating the power of differently-abled people and women in improving their community.



Solid waste management in Hetauda

While many cities struggle to manage their waste, Hetauda has introduced innovations, such as source separated collection, in partnership with private sector, compost plant for organic waste management, and separate medical waste collection and management system. Although the city still has to improve its overall performance, it seems to be on the right track.



D-WASH-CC Parsa

With a well-managed and active D-WASH-CC, the sanitation campaign in Parsa is now gaining momentum with active participation of all sectors. All VM-WASH-CCs have been formed and now Ward-WASH-CCs are also being formed. Sanitation is regularly discussed in the meetings of all agency heads and the networks of all agencies along with politicians, the police and media have been mobilized for this purpose. Three VDCs have been declared ODF and two are in the pipelines. These indicate that with good leadership and well-organized D-WASH-CC, sanitation campaign can flourish in the Terai as well.



Thematic Findings

Institution: In general, D-WASH-CCs are doing a good job on sanitation issues. But they also need to focus on issues related to water supply. D-WASH-CCs need better coordination with WSSUCs and M-WASH-CC. In urban areas, Water Supply Boards seem to be providing better services. Some municipalities have also done some innovative work in waste management.

Finance: In most cases, water supply with community taps does not have sufficient funds for operation and maintenance. There seems to be willingness to pay for private connections. Provision of payment in instalments or grants are made available to the poor by the VDCs. But there is a need of more progressive tariff structure to increase revenue and social justice. In sanitation campaigns, there is a need for funding software programs and regular monitoring by D/M/V-WASH-CCs.

M & E: Regular M & E of WASH projects is often inadequate although some WSSUCs and D-WASH-CCs are putting some efforts on this. Overall, there is a need to establish effective M & E systems with clear indicators and methodologies and responsibilities. The M&E findings should be disseminated to all stakeholders.

Functionality: As functionality is better in schemes with private taps and good operation and maintenance systems, FEDWASUN can play an important role in strengthening the WSSUCs. In urban areas, Water Supply Management Boards have been successful in improving functionality, but the functioning of wastewater management systems is a concern.

Sanitation: The sanitation movement is going well except in some districts where D-WASH-CCs are not very active. Many VDCs are still providing blanket subsidies to avoid controversies under the pressure of local politicians. There is a need to focus on post-ODF and urban sanitation, including public toilets, wastewater and solid waste management. There is also a need for hand washing corner in every health and education facilities.

Water Quality: As calcinations, turbidity and microbial contamination are key issues related to water quality, water treatment should be made an essential part of water supply projects. There is a need to raise awareness on water quality, NDWQS, water safety plans and point of use water treatment. Furthermore, water quality tests need to be done regularly and the results should be disseminated to the users.

GESI: In most projects, women are involved but only at the minimum level. Therefore, there is a need to expand the role of women in WASH, particularly in the Terai. Women's participation can be enhanced by incorporating their special needs such as income generation through vegetable farming and biogas. The poor and people from informal settlements can also play an important role in WASH campaigns. Needs of differently-abled people need special consideration, particularly in public buildings.

DRR & CC: Although natural disaster and climate change impacts do not seem to be a major problem, there have been incidents of landslides and floods and drying up of water sources. As most D/M/V-WASH-CCs have not seriously considered these issues, there is a need to raise awareness on DRR and CC in the context of WASH and incorporate these in the WASH plans.

8.3 Learning Visit: Western Region

Team: Manoj Ghimire (WRMSO), Sanna-Leena Rautanen (RWSSP WN) Prem Nidhi K.C. (DWSS), Chandra Bahadur. K.C. (WRMSO), Diwakar Ghimire (DWSS), Antti Rautavaara (UNICEF), Dhruva Karki (Suaahara/ Save the Children), Bhupendra Aryal (RWSSFDB), Mohandatta Bhatta (NWSC), Than Prasad Gaire (FeDWaSUN), Prem Disho (RWSSP-WN) and Thakur Pandit (ICEM).

Introduction

The team comprising 12 persons conducted learning visit in different water supply and sanitation user committees, VWASHCCs and DWASHCCs of Rupandehi, Kapilvastu, Syangja and Parbat districts, and conducted a regional interaction workshop among regional and district level officials of partner agencies and stakeholders.



DWASHCCs were found to be more active after achieving ODF status, but this was not the case for VWASHCCs. However, the institutional and public toilets are not focused or discussed in the DWASHCC. As in the Eastern Region, there is an increased demand for private tap connections. There is no practice for systematic monitoring. Many districts are found to have WASH strategic plans. The main emerging challenges are solid waste management, wastewater treatment and public toilets. There is an increasing trend of developing WSP for WQ improvement. Construction of toilets that are gender- friendly is an area that is lacking. Drying up and decreasing of water sources were reported during the visit same as in the Eastern Region.

The Team's activities have been summarized in table 8-4.

Table 8-4 *LVT activity for Western Region*

Districts	Activity
Rupandehi	Interaction with V-WASH-CC and WSS system; observation in Shankarnagar; Interaction with D-WASH-CC
Kapilvastu	Interaction with DWASHCC; Interaction with WUSC/G and system observation in Kopuwa
Syangja	Interaction with D-WASH-CC and Municipality EO; Observation of Phedikhola WSS and interaction with UG
Parbat	Interaction with DWASHCC ; Interaction with Karkineta WUSC and UG
Pokhara	Regional stakeholders' interaction workshop

Visit Highlights

Meeting with VWASHCC of Shankar Nagar VDC, Rupandehi



The VWASHCC was formed in 2068. The committee promoted a joint agreement among the VDC, DDC with joint commitment to contributing Rs. 1000 from each signatory agency to provide support to the poor and socially excluded families. This support enabled them to be the first ODF VDC in the district. After the ODF, the VDC is planning to construct public toilets in needy areas of the market places and thinking to declare the VDC as plastic free.

The VWASHCC is working closely with water supply user group and providing taps to each household as demand. It has very good management and very good trust with community. The water user committee has saving fund worth Rs. 30 million and they are interested to invest it for establishing another water supply system, which motivated the government to formulate joint investment policy. They are trying to be a model of sustainable management in water service

management in Nepal.

Field Observation and Interaction with Water User Group Kopawa

The Team conducted an observation visit in Kopawa water supply system. The system was newly established with new model of metal reserve tank and metal frame structure. User committee has distributed tap in each household and now facing a problem of increasing demand of water service from its neighbouring families. It has a 9-member user committee comprising 5 male, 4 female and 3 ethnic people. The committee has collected Rs. 100 from its user family as water tariff for a month and collects Rs. 8800 per month as operation and maintenance fund. But they are hardly saving 800 rupees per month after expending the collected fund to the caretakers, which is a very nominal saving and is challenging for sustaining the system.



Interaction with DWASHCC Syangja

The key members of the DWASHCC such as District Education Officer, Women and Children Officer, Local Development Officer, Water Supply and Sanitation Division office in-charge, NGO representatives and Development partners' representatives were present in the interaction meeting. The district has reached 80 percent water access and 100 percent sanitation coverage. Now all VDCs and both municipalities are already declared ODF, but 6 percent households are still using temporary toilets. The district is now working on its upgrading process for the temporary toilets. Now water demand has rapidly increased along with the ongoing sanitation awareness campaigning in the society.





Water system observation visit and user group interaction Karkineta, Parbat: An observation visit and interaction session with drinking water supply user committee in Karkineta VDC, Parbat, was conducted as the last event of community-level interaction at the trip. It is a gravity flow water supply system, which has catered to the inhabitants of the VDC. Earlier, the system was designed with the concept of community water tap provision, but later the supply system was transformed into private tap connection. So far, 290 private taps are connected to the households, to those who were interested and could afford. The remaining beneficiaries are taking facility from 32 community taps.

Thematic Findings

Institution and Capacity Building: D/M/V-WASH-CCs are active and functioning well as expected by the master plan. Joint sector annual plan system has not been started. There is a very good cooperation and program collaboration among development partners. Most of the user committees are dependent and seeking support from government and development partners.

Sector Finance: There is a gradually increase in desire for private tap connection and in paying the tariff. Very low budget is allocated for water functionality. So far there has been no practice of private sector engagement for production and supplying water in semi urban and rural areas despite the realization of the need of such services.

Monitoring and Evaluation: No clear monitoring indicators and monitoring and evaluation were revealed. Joint monitoring system is on practice for ODF process. The upper level coordination committee takes role for monitoring and allowing ODF. There is no practice for WASH information management at VDC. Information management for the purpose of NMIP is in place at the district level but no system for wider stakeholders' sharing and validation exists.

Functionality and Sustainability: Most of the user committees are registered but only few of them are with FedWaSUN. There are no clear-cut WASH indicators for operation in the district and VDCs. The existing practice of prolonged WS projects are itself a problem for sustainability and management. Parbat district has initiated resource mapping.

Water Quality: Major focus of the district is on access to water with no awareness on water quality. Few agencies have initiated water sample testing. Few initiatives on household level water treatment have been taken at the community level. Most of the people have a feeling of reduction trend of water-borne diseases in the community. But no data has been generated for evidence.

Sanitation: DWASHCCs are active with sanitation strategic plan. VWASHCCs are active up to declaring their VDCs as ODF zone and remain passive for sustainable management. There is no clarity on further actions after declaring ODF. There is a tremendous demand for public toilet but there is gap in funding and operational strategy. Two-fold demand is seen in drinking water after ODF campaign. Media played good role in social campaign. There is increasing awareness for solid and liquid waste management in urban areas, but without a concrete plan of action

Gender Equity and Social Inclusion: Some 33% women representation is maintained in water and sanitation user groups. Women leadership is gradually increasing. Dalit and ethnic representation is maintained in UGs. Due priority is given to to make gender-friendly public toilets.

DRR and Climate Change: DRR component has not been captured in district and VDC WASH strategy document. Water sources are gradually decreasing and affecting water services system. Disasters are increasing and affecting water supply systems and their structures. There is need of plantation above water sources and recharge pond construction at top of hills.

Way Forward: Water should be a priority with functionality and safety plan and CC. There is a need of shift from community tap to private connection in service delivery. Strong strategy should be applied with clear guiding frame for sustaining the ODF status and total sanitation. Wider awareness should be ensured with technical options to utilize waste: urine, excreta, solid waste etc.

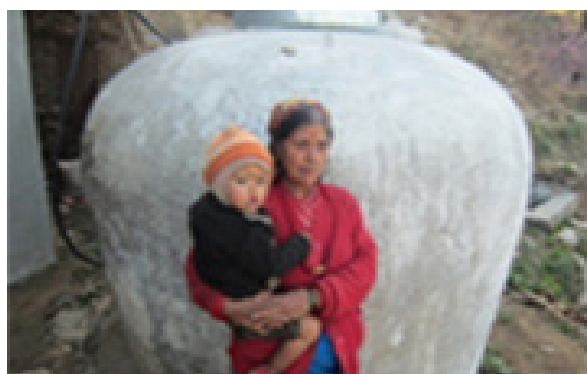
8.4 Learning Visit: Mid Western Region

Team: Binod Kumar Agrawal (RMSO), Madan Raj Bhatta and Rubika Shrestha (HELVETAS), Kedar Prajapati (MoUD), Uttam Regmi (MoUD), Kulmani Devkota (FEDWASUN), Shanker Pathak and Anup Regmi (SNV), Shova Adhikari (UNICEF), Harishchandra Neupane (RWSSFDB), Deependra Chaudhari (NRCS), Nabin Kumar Shahi (KIRDARC), Suman K. Shakya (ENPHO)

Introduction

The Team comprising 11 persons visited Rolpa, Pyuthan, Bardia, Surkhet and Dailekh districts during the period.

DWASH CC and VWASHCC have been formed in all districts and VDCs. Decentralized planning is in place. There is minimal budget available from local bodies. There is demand for new schemes rather than for rehabilitation or maintenance of existing facilities. Integrated monitoring system for water sanitation and hygiene is lacking. There is existence of resource center, but this needs to be strengthened. WQ is tested during construction only and stakeholders are unaware about the regional laboratories. There is no strategy developed for post ODF. Health and education agencies are less active during ODF campaign. Availability of sufficient number of public toilets is an issue. Chaupadi practice in the region (girls not being allowed to use toilets during menstruation period) is hindering the ODF campaign. Water sources are drying.



Rain water harvesting jar, Seri Dailekh

The Team's activities have been summarized in table 8-5.

Table 8-5 LVT Activity for Mid Western Region

Districts	Field visit activities
Rolpa	Visited Kotgaon VDC; Meeting with D-WASH-CC
Pyauthan	Visited Swargadwari VDC
Bardia	Visited Magaragadhi VDC; meeting with D-WASH-CC
Surkhet	Visited Jhupra WSS Scheme & Ward No 11-12; Visited Surkhet Municipality
Dailekh	Visited Nepa VDC; Meeting with D-WASH-CC
Nepalgunj	Organized Regional Workshop

Visit Highlights:

Dhanbang village of Swargadwari VDC, Pyuthan District

The site is famous for a total behavior change (TBC). The best practices and learning observed in the community are:

- The community respects the norms of cleanliness and cleans street twice a week;
- Each HHs has two functional waste pits for degradable and non- degradable waste in their yard;
- The people are using water filter in each HH;
- The community is moving towards integrated long-term development planning including tourism;
- The village could be taken as learning sport for total sanitation.



TBC village at Dhanbang, Swargdwari

D-WASH-CC, Bardia District

The learning visit team organized meeting and integration with D-WASH-CC of Bardia. The best practices and observations of the district are as follows:

- Meaningful coordination among key stakeholders: the DWASHCC meets in regular basis.
- The DWASHCC has districts sanitation strategic plan.
- Almost all VWASHCCs have VDC ODF strategic plan.
- The DWASHCC has developed VDC-wise master triggers who are actively involved in the sanitation campaign.
- Despite being a Terai district, there is a good progress in ODF campaign.
- Community level forums and structures such as Ward citizen Forum, child clubs/ youth clubs/women groups, Red Cross volunteers are mobilized in ODF campaign.
- Lack of Post-ODF strategic plan at district, VDC and Municipality level



D-WASH-CC meeting in Bardia

V-WASH-CC of Nepa VDC, Dailekh

Nepa VDC is one of the VDCs which formulated Water Use Master Plan, a comprehensive WASH development plan in 2011. The major observations and best practices of the VDC are:

- WUMP is a good tool for development of WASH activities in an integrated way. Eg. water supply, sanitation and hygiene etc. It reduces water disputes and improves functionality of schemes.
- After declaration of ODF, the VDC planned to achieve total sanitation and 100 % water supply coverage. The access to improved water supply has been increased from 36 % in 2011 to 61 % in 2013.



Private connection, Nepa VDC Dailekh

- V-WASH-CC is very active, the institutional aspect of V-WASH-CC strengthened by formulation of its regulation (by laws) was approved by VDC council meeting.
- Private connection in rural area , source conservation activities, girls toilet with provision of disposal for sanitary are other good initiatives in the VDC.

Jhupra Brihat Drinking Water Supply Scheme, Surkhet

Observations and good practices of Jhupra Brihat Water Supply Scheme are:

- Jhupra DWS operated by Users, improved governance (participation and accountability) in operation of scheme
- Treatment plant functioning properly. However, not regular but only periodic water quality test was conducted.
- Facing challenge of compound interest rate. About NRs 5.25 crores is paid out of 9 crore loan. But 8 crore is still remaining.



Treatment plant Jhupra DWS, Surkhet

Thematic Findings

Institutional Framework and Capacity building: DWASHCCs and VWASHCCs are established in all districts. In some districts and VDCs, WASH sector coordination can be further improved. DWASH-CC and VWASH-CC Capacity gaps have been observed (technical, leadership and coordination). WASH-CC has focus on ODF only. Few V-WASH-CCs are less active after ODF declaration.

Sector Finance: Local bodies allocate little budget for WASH. There is no revision of water tariff; few schemes face compound interest of loan taken from TDF (Jhupra WS, Surkhet). The 20% budget allocated (JSR1 recommendation) for repair and maintenance is not implemented. There is no involvement of private sector in WASH activities.

Monitoring and Evaluation: M & E systems for water and sanitation are not integrated. There is a lack of periodic Vertical Monitoring & Reporting. Joint monitoring is carried out for sanitation but not for drinking water supply. No follow up and monitoring is done by DWASHCC after ODF campaign. WASH database recording system has been introduced in RMSO Resource Center but is not functioning now.

Functionality and sustainability: They focus on new schemes (little investment on repair and rehabilitation of old schemes). There is a challenge in collecting users fees, managing O & M fund and proper fund use. Trained caretakers migrate other places. However, there is adequate post-construction support. WSUCs have no access to institutional support. Private connection seems effective for the functionality.

Hygiene and Sanitation: Large disparity between rural and urban sanitation coverage is found. Urban sanitation is more challenging. Districts have developed ODF strategies to achieve ODF. However post ODF plans and activities are inadequate. Toilets are insufficient in public places and institutions (e.g. health posts and markets). School toilets are not properly functioning;. Overall, there is a lack of VDC level WASH master plan and strategies.

Water Quality: No regular WQ testing is practiced., Testing is conducted only during construction of WSS project. Regional level WQ unit has been established but not well-known by district stakeholders. People lack awareness regarding safe use of water (from source to mouth), and lack knowledge of NDWQS.

Gender Equity and Social Inclusion: Despite their significant contribution in ODF, women are under-represented in different committees (WSUCs, V-WASH-CC) and have little influence on decision making. Significant disparities exist in access to WASH services (geographically, income wise, and ethnically). Disabled friendly toilets have not been constructed. The practice of 'chaupadi' affects sustained ODF.

DRR/Climate Change: Drinking water and sanitation interventions do not take Disaster Risk Reduction into account. ; DDCs have trained Quick Response Team members on emergency WASH in most disaster prone districts. District DDR plans do not indicate purchase and storing of sufficient essential life saving supplies. There is a lack of attention regarding water sources conservation.

Way forward: Some of the areas for improvement include reformation of NSHMP, formulation of Water Use Master Plan, establishment of WQ monitoring system and data bank with functional regional lab. Adequate post construction support and capacity building is required. There should be a clear focus on GESI friendly WASH services, and appropriate actions should be taken for source conservation to cope with DRR/climate change.

8.5 Learning Visit: Far Western Region

Team: Uma Shankar Joshi (DWSS/FWR), Kari Lapanen (RVWRMP), Padam Kunwar (DWSS), Pragya Shrestha (USAID), Madav Pahari (UNICEF), BB Thapa (SEBAC-Nepal), Yagya Raj Joshi (FEDWASUN), Dibya Khadgi (RWSS Fund Dev. Board), Ananta Bajracharya (Lumanti), Parikshit Shrestha, (RVWRMP), Jagannath Purbe and Purna Jwarchan (DWSS),

Introduction

The Team comprising 12 persons visited Kanchanpur, Bhajang, Doti, Achham and Kailali districts.

The finding shows that coordination committees have limited roles after ODF. As in the Mid Western Region, Chhaupadi system also hinders the continuation of ODF. Furthermore, expectation of subsidies is further obstructing the ODF campaign. Example of third party joint monitoring is observed in Bajhang. Demands are high for new projects in contrast to coverage and there is less demand for sustaining existing services. There are specific needs such as SWM, drainages, which are not prioritized currently for emerging towns. There are problems with Arsenic and Calcinations problem in Bhavarzone. However, no strategic actions have been taken to address this. This region is prone to natural disasters along with public health outbreaks mainly due to WQ and behavioural issues.

Team activities have been summarized in table 8-6.



Table 8-6 LVT activity for Far Western Region

Districts	VDCs/WUC
Kanchanpu	Meeting with DWASHCC; Meeting with V-WASHCC – Suda; Meeting with WUSC and site visit in the community - Musepani
Bhajang	Meeting with DWASHCC; meeting with VWASHCC ; meeting and WUSC in Pouwagadi VDC interaction; visit to Multiple Water System and use
Doti	Interaction meeting with RWASHCC and district representatives in Doti
Achham	Meeting with Jayagad WSS (RWSSFDB) team; DWASHCC meeting; Visit to Siddheshwor WSS (USAID)
Kailali	Meeting in RVWRMP II; Visit to JethikharkaNingladi(RWSSFDB); Meeting with DE, Kailali

Visit Highlights

Women WSUC in Musepani, Kanchanpur initiated to restore water project

The Water Supply Project which was initiated in the year 2052 B.S (1995) suddenly stopped functioning. But, the Water and Sanitation Users Committee (WSUC) formed then which was headed by male did not initiate to revive the project. Muna Paswan, a woman from the community then initiated for the reformation of WSUC with all the women as the members. The former WUSC also agreed and formed a new nine-member Women WUSC with Muna Paswan as the President. With the support from the division office and the effort from the women WSUC, the Musepani Water Project was revised and is now providing easy access to water for 115 households through 17 public tap stands.



RadhaBadhu& Nanda Bohara showing Water Tap in their community

ODF declaration - matter of pride and dignity

Declaration of ODF Zone in the Bajhang district of Far West is not an easy job. Generating awareness to discourage open defecation is still a great challenge in the area. However, the status of sanitation coverage of the district is not bad enough. The data shows that the sanitation coverage of the district is 75 percent. Out of 47 VDCs in the district, 16 are in the status of ODF and 10 more are nearly prepared for the ODF declaration. The action from the local journalists in Bajhang is even more interesting and commendable. The 5 points resolution of district Journalist association boycotting tea and snacks in hotels that do not maintain toilet facilities is the another commendable act which has definitely put pressure for the construction of toilet facilities in the local restaurants and hotel. The stakeholders in the district have considered ODF declaration as the matter of pride and dignity and celebrate as community festival, which itself is the ownership shown by the people.



News clipping of 5 points as resolution of district Journalist association

Helping the poor for noble cause

An exemplary support has been provided to the identified poor of Siddheswor VDC of Achham district by the well-off families from the same VDCs. After the massive sanitation campaign to discourage open defecation practice, 886 families constructed their toilets, while 26 could not manage due to their low economic status. With the material support from internal sources, the remaining 26 poor families completed the toilet which resulted 100 percent of toilet coverage in Siddheswor VDC. "Though every household in the VDC has constructed toilet, it was indeed not easy to convince, especially elderly people, to use the latrine. Massive door to door monitoring along with sanitation awareness in participation of all stakeholders made the VDC an Open Defecation Free Zone." Sharmila recalled the campaign. The VDC was declared an ODF zone on 27 Magh 2069 (9th Feb 2013).



View of a house in a community with toilet in Siddheswar VDC.

Thematic Findings

Institutional framework and capacity Building: Downward and upward information flow between WASH-CCs (VWASHCC-MWASHCC- DWASHCC-RWASHCC-NWASHCC) hasn't started yet. Possibility of duplication of scarce resources has been observed. WASH programs are not properly endorsed and documented and shared in the DDC plan before implementation.

Finance: The water supply projects are not completed in time due to funding gap, and take 4-5 years time to complete. There is low program budget on W/S and Sanitation which does not reach to needed communities. There is low practice on water tariff in completed projects.

Monitoring and Evaluation: The DWASHCC are not aware of WASH Sector Indicators. More focus was given on output not in process monitoring. Third party monitoring process has been introduced by mobilizing civil society organizations and district journalists, which needs scaling up. No established culture of review and monitoring is practiced in majority of districts. Vertical reporting culture is still prominent.

Functionality: No defined indicators and different modalities are followed on their own. The roles of VWASHCC and DWASHCC for sustainability are not clear. The Federation of Water and Sanitation User Committee is not functional in the region. Communities are not trained effectively in importance of sustainability. Disputes exists about water sources while there is shortage of maintenance funds.

Sanitation and Hygiene: Sustainability of ODF status is questioned due to unavailability of water supply facilities and use of latrine during menstruation period. Poor and unhealthy environment exists due to unmanaged waste disposal in urban/emerging towns. There is minimum coverage of public and child and gender-friendly school toilets. Strong commitment is needed from political parties and other stakeholders to accelerate WASH activities limited action in public places.

Water Quality: Water bodies are contaminated due to open defecation practices and cattle grazing. There is low awareness on water quality/safety among population and visible ignorance in service providers. Districts and VDCs lack water quality test kits, while the regional water quality lab mechanism is not effective in use. No water resource mapping with quality has been initiated.

Gender and Social Inclusion: There is low sanitation coverage among dalit communities which has delayed the ODF campaign. Caste discrimination on water tap distribution is still in practice. There is low or no meaningful participation of women in WASH facility management. Chhaupadi is still in practice.

Disaster Risk Management/Climate Change: The area suffers high risk of natural calamities like flooding and erosion due to geographical condition and nature of soil within the region resulting destruction of infrastructures. Poor hand-washing practice with soap and improper use of toilet makes it possible for epidemics like cholera. Water source yield is decreasing day by day.

Way Forwards: Sharing WASH program, allocating fund for really unreached and creating joint monitoring culture are of immediate value. Continuation of independent monitoring, following common modalities and thinking about sustainability would further help in improving the situation. Besides, increasing the construction of public toilets and SWM, Initiation of WQ monitoring, tackling Chhaupadi issue, ensuring source protection and enforcing HW with soap should be given priority.

9. ACTION PLAN FOR SEIU

During the JSRII process, eight TWGs worked intensively on their themes in line with achieving sector targets and mitigating gaps in the process. The TWGs analyzed the respective thematic areas on various issues with evidence based learning from the five regions brought by learning visit team. Groups have come out with sets of recommendations with action plans for 2014-16 till next full JSR. SEIU needs to work as the accountable center for coordination for all activities towards efficient and effective achievement of the sector goals. The action plan for SEIU based on the JSR-II will be guided by the following principles:

1. Government-led efficient and effective sector to achieve and sustain the universal goal of water sanitation and hygiene in Nepal;
2. Sector will have one WASH Plan in which all agencies work for common goal but share responsibilities and working area fulfilling all gaps in common;
3. The Lead Department of the sector (DWSS) will play leadership role in the implementation and regulation of Sector Programs and other players support and compliment;
4. Sector partners including GOs, DPs, INGOs, NGO/CSO/CBPs, private sectors and academia need to respect Government initiatives and work in harmony in and align their institutions, strategy and ideas in line with policy and institution and strategy of the government;
5. All member partners need to continue the TWG work, and SEIU as coordinator is accountable to SSG and JSR for TWG functionality.

Action Plan for SEIU has been summarized in table 9-1

Table 9-1 Action plan for SEIU

S.N.	Activities	Responsibilities	Timeline
1	Develop WASH Development Plan, Policy and coordination mechanism in view of the recommendations of TWG	SEIU in coordination with SSG	6M+
2	Plan for regular interaction among SSG and TWG for implementing recommendations	SEIU, TWG core team	6M+12M
3	Select areas for research, assessment and study to fulfill the gap in information indicated by TWGs	SEIU, TWG and Partners	6M+12M
4	Prepare stakeholder mapping and merge existing activities and expertise of partners with the mainstream through collaborations	SEIU, leaders(GO, DP, INGO, NGO/CSO)	6M+
5	Carry out special study for evidence-based decision making and planning	SEIU, Selected partners	6M+
6	Develop WASH Sector Financing Strategy together with sector stakeholders	SEIU, Selected partners	12M+
7	Prepare systematic program for interaction and action of TWGs	SEIU, TWGs	6M+

10. THEMATIC WORKING GROUP

The Thematic Working Group formed for JSR II process remains active for regular interaction on respective themes and materialization of its recommendations. The member secretary representing focal units of the Government will take key initiatives and co-lead while representing partners will play supporting roles. The Team of lead, co-lead and member secretary remains the same unless changed by SSG for better composition. Members representing the different agencies will remain as long as they are attached to the same agencies. SEIU will play coordinating role among TWSs and prepare systematic program from interaction and action on recommendations. The list of Leader, Co-Leader and Member Secretary of TWG has been presented in table 10-1.

Table 10-1 **Leader, Co-Leader and Member Secretary of TWG**

S.N	Thematic Group	Leader	Co-Leader	M. Secretary
1	Institutional Framework & Capacity building	MOUD/ WSED: Ram Chandra Devkota	ADB: Laxmi Sharma,	MoUD/SEIU: Kabindra Bikram Karki
2	Sector Finance	NPC: Gopi Nath Mainali	WB: Silva Shrestha	DWSS/Planning: Deepak Puri
3	Monitoring and Evaluation	MOUD/Monitoring: Kabindra Bikram Karki	UNICEF: Anu Poudyal Gautam	DWSS/M & E: Ujjwal Prajapati
4	Functionality and sustainability	DWSS/DDG: Ram Lakhan Mandal	SNV: Shanker Pathak	DWSS/ Rehab: Sankar Jaiswal
5	Hygiene and Sanitation	UD/Water & Sanitation: Hari Prasad Timilsina	UNICEF: Namaste Lal Shrestha	DWSS/ESS: Uma Sankar Joshi
6	Water Quality	DWSS/DDG: Sunil Kumar Das	WHO/EH: Sudan Raj Panthi	DWSS/WQ: Sudarshan Bhandari
7	Gender Equity and Social Inclusion	MOUD/GESI: Posta Raj Dhungana	ADB: Suman Subba	DWSS/NGO & Com.: Prem Nidhi KC
8	DRR/Climate Change	DWSS/DDG : Jyoti Kumar Shrestha	UNICEF: Arinita Maskey	DWSS/ DRR&CC: Rajit Ojha

Members of the Thematic Working Groups as of JSR II

S.N	Thematic Group Members
1	Institutional Framework and Capacity building <i>Abadh Kishore Mishra (MoUD), Laxmi Sharma (ADB), Nanda Bdr. Khanal (PID), Antti Rautavara (UNICEF), Bidhya Pokharel (JICA), Balkrishna Pokhrel (FEDWASUN), Manoj Kumar Lal (FB), Suman K. Shakya (ENPHO), Ashutosh Tiwari (WaterAid), Yubraj Shrestha (CODEF), Lajana Manandhar (Lumanti), DhrubaKarki (SAVE), Han Heijnen (SEIUC)</i>
2	Sector Finance <i>Gopi Nath Mainali (NPC), Silva Shrestha (WB), Deepak Puri (DWSS), Ramesh K. Adhikari (MoFALD), Janak Giri (FEDWASUN), Ilomäki Jukka (Embassy of Finland), Nanda Bdr. Khanal (PID), Prakash Amatya (NeRWHA), Han Heijnen (SEIUC), Govinda Shrestha (WaterAid)</i>
3	Monitoring and Evaluation <i>Kabindra Bikram Karki (MoUD), Madhav Pahari (UNICEF), Ujjwal Prajapati (DWSS), Dilip K Chapagain (NPC), Laxmi Pant (DWSS), Bhupendra Aryal (RWSSFDB), Tara Devi Gurung (NRCS), Vedvyas Lamichhane (FEDWASUN), Bhushan Bhattarai (DoLIDAR), Smritee Bajracharya (WaterAid), Sunita Sulpe (CODEF), Hari Prasad Sharma (WTFB), Krishna Rana (SEIUC)</i>
4	Functionality and Sustainability <i>Ram Lakhan Mandal (DWSS), Shanker Pathak/Kabir Rajbhandari (SNV), Srawan K. Upadhyaya (DWSS), Lok Nath Regmi (DoLIDAR), Keshab Raj Bista (SSTWSSSP), Harish Chandra Neupane (RWSSFDB), Niraj Acharya/Yogesh Panta (HELVETAS), Anu Paudyal Gautam (UNICEF), Cecial Adhikari (WaterAid Nepal), Bal Krishna Pokharel (FEDWASUN), Kalawati Pokharel (NWA), Kamana Gurung (Embassy of Finland), Manima Budhathoki (CODEF)</i>
5	Hygiene and Sanitation <i>Khom Bahadur Subedi (DWSS), Ram Chandra Sah (DWSS), Shobha Adhikari (UNICEF), Bipin Dongol (ENPHO), Anup Regmi (SNV), Chandra Bista (RWSSP-WN), Biju Dongol (OXFAM), Bhojendra Aryal (DWSS), Maheswori Khadka (DoLIDAR), Sunila Ghimire (ADB), Yogesh Panta (Helvetas), Kamal Adhikari (DWSS), Guna Raj Shrestha (CODEF), B.B. Thapa (SEBAK)</i>
6	Water Quality <i>Ram Chandra Devkota (DWSS); Dr. Sudan Raj Panthi (WHO), Sudarsan Bhandari (DWSS), Kedar Prajapati (MoUD), Bijaya Man Shrestha (KUKL), Dr. Suman Shakya (ENPHO), Ryuji Ogata (JICA), Santosh Basnet (NEWAH), Ramesh Lamichhane (EDCD-DoHS), Nirjal Dhakal (Water Aid), Dr. Bhupendra Prasad (NWSC), Pramod Koirala (DFTQC)</i>
7	Gender Equity and Social Inclusion <i>Posta Raj Dhungana (MoUD), Suman Subba (ADB), Prem Nidhi K.C. (DWSS), Himalaya Panthi (NEWAH), Pravesh Niraula (RWSSFDB), Manju Tuladhar (SNV), Nuria Nefcort (UNICEF), Samira Sakya (WAN), Yaba Laxmi Shrestha (CoDeF), Mandara Mishra (FeDWASUN) and Mishri Prasad Shrestha (GESI)</i>
8	DRR/Climate Change <i>Jyoti Kumar Shrestha (DWSS), Arinita Maske Shrestha (UNICEF), Bal Mukunda Shrestha (MoUD), Binaya Raj Shrestha (Practical Action), Thakur Pd. Pandit (ICEM), Sujana Subedi (MoEST), Amar Mani Poudel (NRCS), Nutan Dev Pokharel (OSFAM), Deepak Sapkota (FB), Terrence Thompson (WHO), Sarbagya Shrestha (Water Aid), Raja Ram Pote Shrestha (LWF), Gopal Dahal, Ramesh Dhital (RWSSP-WN), Bal Bdr. Thakurathi (KVWSMB), Bhupendra Prasad (FB), Kedar Prajapati (MoUD), Prajwal Shrestha (ENPHO), Rajesh Manandhar (UNHABITAT)</i>

