

**SNV**

Strengthening gender and social inclusion in Nepal's rural water supply and hygiene services

Nepal's new constitution presents a strong foundation for an inclusive society that ends all forms of discrimination, and aims for equal outcomes for people from all origins, identities, and conditions. Realisation of equal access to water is a constitutional right, and government is duty bound to progressively realise this human right. This learning brief presents insights from an SNV baseline survey undertaken in 2019 to inform and strengthen inclusive, sustainable, and resilient rural water supply services and access to hygiene in Nepal.

The baseline was conducted as part of SNV's Beyond the Finish Line – Inclusive, Sustainable and Resilient Water Supply Services project; a collaboration with ISF-UTS, which is supported by the Australian Government's Department of Foreign Affairs and Trade's Water for Women Fund in Nepal.

The project applies SNV's Area-wide Rural Water Supply Services (ARWSS) programme approach across two districts in Nepal; Dailekh district, which is situated in the hills of Karnali province, and Sarlahi district in the *terai* (plains) of Province Two.

Research method and data collection

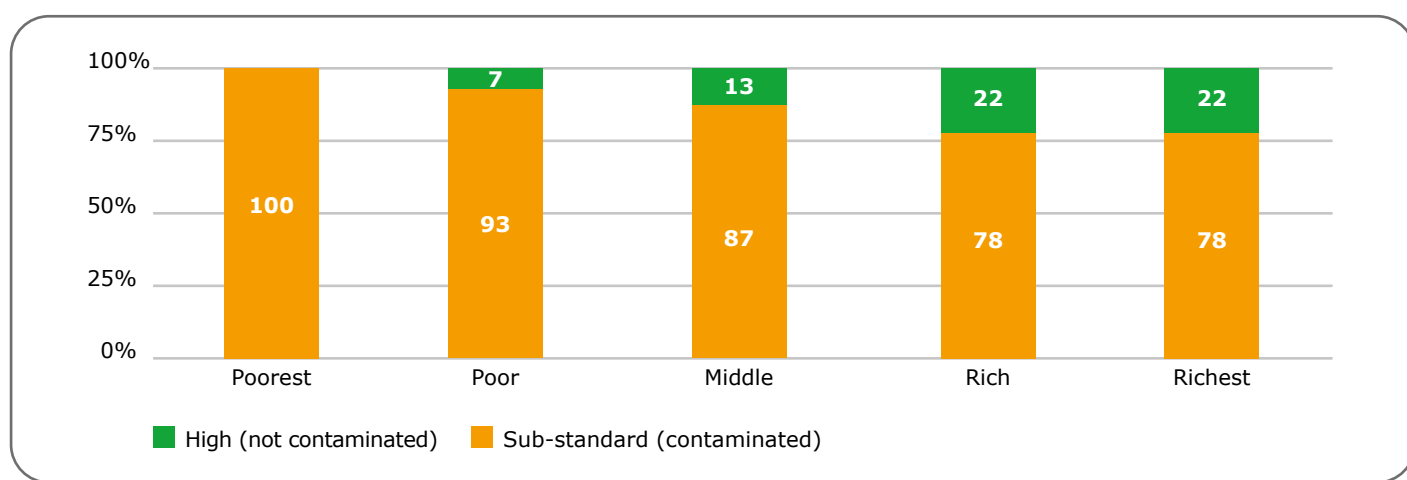
This learning brief summarises key gender and social inclusion insights gained from premises-level surveys conducted on water and hygiene indicators in 783 households, 120 schools, and 42 health facilities; and FGDs with women and men with disability, and representatives from low-economic and low-caste/minority groups. Capacity of line agencies to support gender equality and social inclusion was assessed using self-guided assessments and a score-card system. Household survey data were disaggregated by district, gender of household head, household with disability, and wealth.

¹ Gender data are limited in that the study was not able to gather meaningful data on sexual and gender minorities using the survey tool format.

Table 1: Household access to water supply and handwashing in ARWSS programme districts in Nepal, 2019

District	% of households with 'basic' water supply ²	% of households with handwashing station ³	% of households in the poor and poorest wealth quintiles
Dailekh	2%	24%	68%
Sarlahi	15%	85%	7%

Figure 1: Drinking water quality at point of consumption by wealth quintile, 2019



Findings of the baseline study

Drinking water quality is low overall, but the burden is heavier for poorer households

An overwhelming 87% of all households were found to be accessing 'sub-standard' drinking water contaminated with E.coli and/or arsenic at point of consumption.⁴ However, households in the poorer wealth quintiles were more at risk, with none benefitting from safe drinking water, compared to 22% of the richest households with access. In Dailekh and Sarlahi, only 7% and 18%, respectively, had access to safe drinking water.

Often, investments in treating water at point of use fall on households. These investments place a time and cost burden on women (who are largely responsible for household tasks) and resource-poor populations. The high prevalence of poor

drinking water quality also has potential negative health impacts on the whole population, adding an extra financial burden to families living in poverty.

Households living in poverty are more likely to use a communal water supply system

Applying the water supply parameter of accessibility, households in the poorer wealth quintiles were found worse off than wealthier households. In Dailekh for example – where community tap stands were common – many of the poorer households travelled further than the 150m government standard for community tap stand distance. In comparison, the two highest wealth quintiles were more likely to have private connections. In Sarlahi, the poorest quintile often comprised landless households and/or households that could not afford to build a tubewell within their own premises.

² Criteria for 'basic' service levels in households are measured according to four service parameters based on Nepal's WASH Sector Development Plan (draft): 1. quality (no contamination of E.coli and arsenic), 2. quantity (sufficient to meet basic food, drinking and hygiene needs), 3. accessibility (water collection point is within 150m), and 4. reliability (water supply duration is 8-11 hours daily, with no more than one service interruption monthly). Failure to meet criteria implies that a 'sub-standard' service is being received.

³ Criteria for handwashing station refers to stations with the presence of soap or soap substitute and water that is not contaminated with use.

⁴ Based on the presence of E.coli and/or arsenic (no contamination means E.coli ≤ 0 MPN/ 100ml and arsenic ≤ 0.05 mg/l). Arsenic was tested for groundwater supply only (in the *terai* plains).

Table 2: Disparities in water supply service parameters by gender of household head, 2019

	Women	Men
Households with sub-standard quantity, insufficient to meet basic food/drinking and hygiene needs	23%	11%
Households with sub-standard accessibility, water supply further than 150m	18%	7%
Households with sub-standard reliability, limited service duration	44%	23%

Access to a private connection in the hills of Dailekh typically depends on the participation and influence of community members during the design or upgrade of schemes, and their capacity to pay for the connection and monthly tariff. Findings from the FGDs pointed to the limited influence of poorer households over system design or operations, and local governments' lack of disaggregated monitoring data on the different vulnerable groups as likely contributors to the poor services received by groups.

Higher travel time of poorer households to access water has an impact on workload, especially on women who are more involved in fetching water. In Sarlahi, the poorest and landless also have to invest time to develop mechanisms for joint maintenance; a task that wealthier households with hand pumps in their premises do not have to do.

Impact of 'sub-standard' water supply services varies by district

Although drinking water quality at point of consumption is a challenge in both districts, the poorer district of Dailekh faced greater challenges in accessing 'basic' water supply services in homes and schools, relative to Sarlahi. Tubewells commonly used in Sarlahi provided better water quantity, and performed better on accessibility and reliability parameters. They are typically cheaper and easier to maintain as compared to the piped networks and other water systems in the hills of Dailekh. Furthermore, most tubewells are privately owned and therefore motivation to keep tubewells maintained is high.

By contrast, water provision in the hills of Dailekh requires finding an adequate spring or surface water source, and constructing a piped network. This responsibility falls in the remit of local government, with Water Users and

Sanitation Committees (WUSC) typically acting as system operators. Weak technical capacity of local government means infrastructure upgrade and/or installation is challenging. In addition, local governments have been prioritising the construction of new systems at the expense of improving the operation of existing systems through suitable management models. Compounding these, most WUSCs either do not work at optimal levels or are simply not active.

Gendered norms and limited engagement of women as change agents compound the impact of poor water supply services

The responsibility for collecting water was mostly assumed by women – as the sole collector or within shared work arrangements. In Dailekh, less than 3% of men took sole responsibility over water collection. In Sarlahi, it was zero. Half of all households in Dailekh indicated that this responsibility was shared between men and women, compared to 36% in Sarlahi.

Compounding the realities of women in Dailekh was the relatively higher proportion of households in the district receiving a 'sub-standard' water supply service. As a result, Dailekh's women faced greater challenges of inadequate quantity, accessibility, and reliability of water, which potentially have a negative impact on time availability and workload. By contrast, in Sarlahi, most households had a tubewell within their premises, which provided them with enough water, 24 hours a day, and therefore is a greater convenience for the women collecting water.

Female-headed households, most of which were located in the hilly terrain of Dailekh, scored worse than male-headed households on water quantity, accessibility, and reliability parameters. These are likely to have negative impacts on household members' health, workload, and time

availability, especially for women who take sole responsibility over water collection. Time spent on water collection may also take household members away from engaging in other activities, such as paid work, leading to the further marginalisation of female-headed households within the community.

Women's participation in WASH activities in Dailekh was perceived to be superficial. Women's lack of influence in WASH decision-making may be a contributing factor as to why water supply service improvements are worse for female-headed households. Another contributing factor may be the deeply entrenched process of gender-blind planning. During self-assessments by local government officials, it was found that disaggregated data of service availability by different at-risk groups were not being used to inform planning.

Despite higher needs, households with people with disabilities perform similarly or are worse off in all water supply service parameters

Compared to households with no disability, households with people with disabilities scored similarly or were worse off in all water supply service parameters. In particular, 36% of households with disability did not receive enough water for their basic food, drink and hygiene needs, compared to 13% of households with no disability. Households with disability were more likely to face interrupted and inadequate water supply service duration; 40% compared to 28% for households with no disability.

In a formative research by SNV and CBM Australia,⁵ the findings indicated that 'sub-standard' performance in any of the service parameters impacts significantly on people with disabilities, as well as their families and care givers. Yet, efforts to improve and achieve 'basic' levels of service – on quantity, accessibility, and reliability service parameters – were often insufficient to deliver to the needs of people with high levels of difficulty in walking, seeing, and those with multiple disabilities. To fulfil the drinking water and hygiene needs of people with disabilities and their care givers, good quality water, with 24-hour access on premises and often in higher quantities, are required. This means,

the household must have an 'intermediate' or 'high' level of water supply service.

During FGDs, participants indicated that influence of men and women with disabilities in decision-making fora was limited and characterised these as tokenistic to zero participation. As such, people with disabilities did not have opportunities to influence the development of water supply services towards a direction that also addresses their particular needs.

Availability of a handwashing with soap (HWWS) facility at home does not equate to adequate or accessible facilities for all

Although 91% of households had an HWWS⁶ facility near the toilet, disparities abound.

- More than 90% of the rich and richest households had access to a HWWS facility, whereas only 66% of the poorest households had access.
- In Sarlahi, 85% of all HWWS facilities were arranged in a way that hands did not contaminate water with use. This was only 24% in Dailekh.
- More male-headed households had HWWS facilities with no water contamination, i.e., 68% of male-headed households compared to 40% of female-headed households.

The baseline found that households with people with disabilities had better access to a HWWS facility (96%), compared to households with no disability (86%). People with disabilities interviewed for SNV's formative research indicated that they washed their hands with soap after defecation. However, the study also showed that people with disabilities within a household can face several challenges in accessing handwashing stations and soap including the cost of soap, difficulty finding soap in the case of visual impairment, pouring water to wash hands in the case of some physical impairments, and reaching tall tap stands when standing is not possible. People who cannot walk and those who had severe multiple disabilities were most likely unable to independently wash their hands and required assistance; the carer would often bring a bucket or container of water to them to facilitate the handwashing.

⁵ SNV in Nepal and CBM Australia, *WASH experiences of people with disabilities: Beyond The Finish Line formative research*, The Hague, SNV, 2019, <https://snv.org/cms/sites/default/files/explore/download/2019-wash-disability-report-nepal-with-cbm-btfl-wfw.pdf> [accessed 27 July 2020].

⁶ Or soap substitute

⁷ SNV in Nepal and CBM Australia, *WASH experiences of people with disabilities*, 2019.



Table 3: Water supply service parameters in health centres by district, 2019

	Dailekh	Sarlahi
Sub-standard OVERALL water supply service level (sub-standard on any one of QQAR)	100%	88%
Sub-standard quality (Q), contaminated drinking water	96%	65%
Sub-standard quantity (Q), insufficient to meet basic drinking, hygiene, and infection prevention needs	52%	12%
Sub-standard reliability (R), limited service duration and high interruption	55%	12%
Sub-standard accessibility (A), not available on premises or insufficient no. of drinking water taps	28%	35%
Running water available at key service locations (OPD, birthing centre)	44%	0%
HWWS (without water contamination), near the toilet	76%	0%

For households with no or limited access to HWWS facilities near the toilet, specifically for the poorer wealth quintiles, health risks are heightened by the inability to wash hands at critical times. Reducing the risk of water contamination is also a factor, as well as recognising that open vessels may be more accessible to some people with disabilities than taps, and that solutions need to promote accessibility as well as safety.

Water supply and handwashing challenges in health centres vary by district

Water supply services in the health centres of both districts were found to be poor. Overall, water supply services in 95% of health facilities received a 'sub-standard' rating as they did not meet the basic criteria of the four service parameters of Nepal's draft WASH Sector Development Plan, i.e., 88% for Sarlahi and 100% for Dailekh.

The survey showed mixed results in both districts. While Dailekh health facilities scored lower in the service parameters of water quality, quantity, and reliability, Dailekh’s performance on accessibility was better than Sarlahi’s. Therefore, in Dailekh, health workers, patients, and carers are at greater risk from drinking contaminated water and are likely to face greater difficulty in practising safe hygiene behaviours and implementing infection prevention protocols consistently.

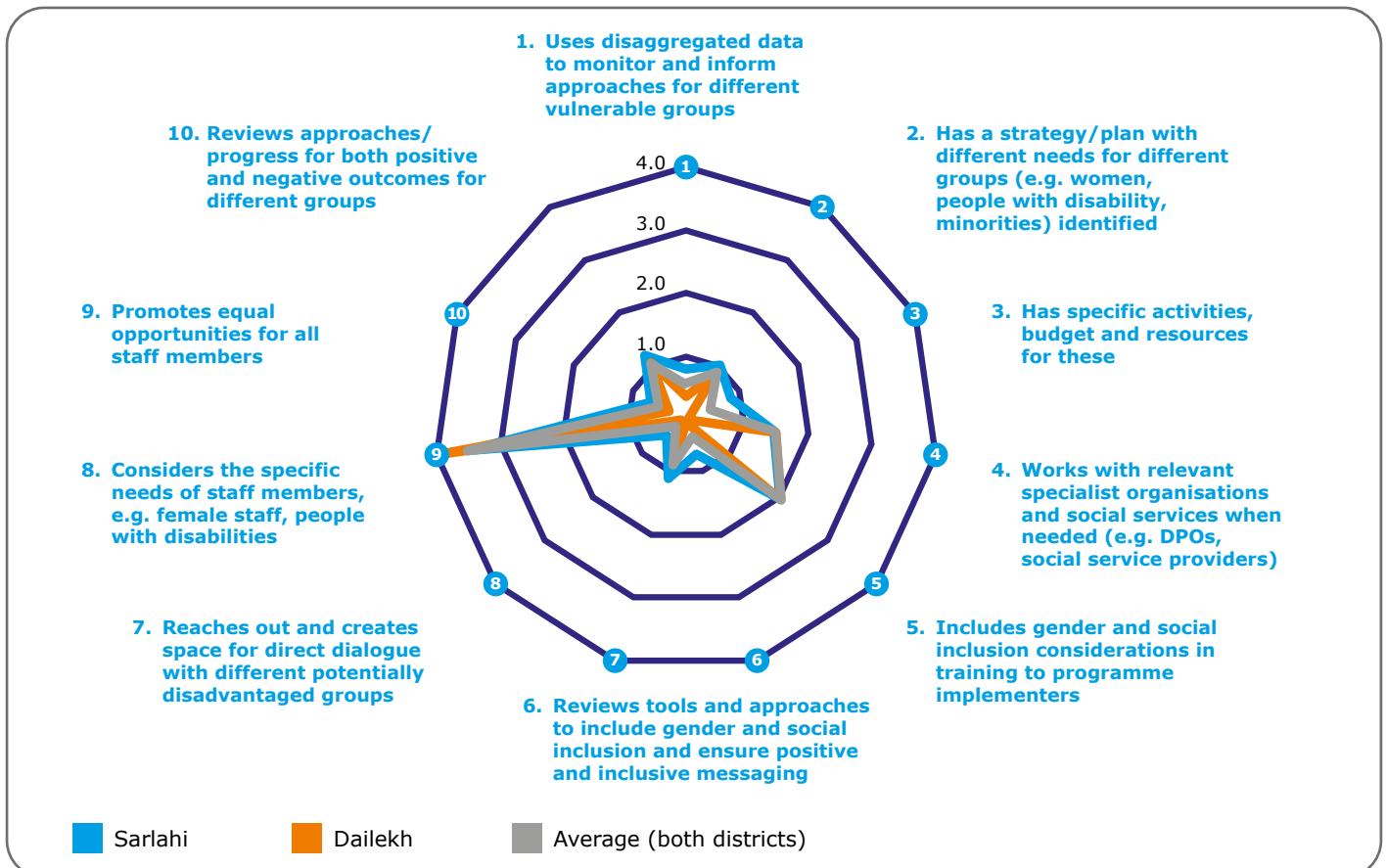
In contrast to Dailekh, however, Sarlahi health facilities did not have faucets for running water in critical areas, including in out-patient departments (OPDs) and birthing centres. The absence of running water in Sarlahi birthing centres increases the challenges for health workers to implement proper birthing and post-delivery hygiene protocols, placing women and new-born babies at risk. Handwashing with soap facilities near Sarlahi health facility toilets were also missing. In comparison, 44% of Dailekh health facilities had faucets in critical areas, and 76% had a handwashing facility with soap near the toilet.

Hygiene is a challenge in most schools, but girls face a greater burden

Only 5% of schools in both districts had handwashing with soap facilities that were near a toilet, and arranged in ways that reduced or eliminated water contamination. The majority of schools did not have a ‘basic’ facility for menstruating girls to change pads or cloths and clean themselves.⁸ In Dailekh and Sarlahi, only 13% and 24% of schools, respectively, had access to a ‘basic’ menstrual hygiene management facility.

Due to the absence of handwashing and menstrual hygiene management facilities, students, specifically adolescent girls, face the double health risk of not being able to wash their hands after defecation and not being able to manage their menstruation properly. In both districts, adolescent girls are more likely to miss out on school during menstruation, impacting on their potential learning and development.

Figure 2: Average baseline scores based on SNV’s progress measurement of local government capacity to mainstream GESI in WASH, 2019



⁸ ‘Basic’ menstrual hygiene management facilities are understood to provide privacy, have a covered disposal bin, and have water available for washing.

Local government capacity to mainstream GESI mechanisms is limited

Self-assessments conducted by local government officials revealed that actions to promote gender equality, social inclusion (refer to Figure 2), and social support mechanisms (not shown in figure) in WASH were slightly better in Sarlahi than in Dailekh. Similarly, FGDs with potentially disadvantaged groups indicated that Sarlahi offered a slightly more participatory experience during WASH fora.

However, significant strengthening of local government capacity is required in both districts (as suggested by the scores in Figure 2) in, for example, evidence-based and targeted programming, implementation, and progress monitoring of WASH access by potentially disadvantaged groups. More transparency around social support mechanisms, and strengthened processes and systems to achieve GESI goals are also needed. In both districts, challenges to the meaningful participation of all groups remained. To date, much of the focus has been in meeting representation quotas of potentially disadvantaged groups. While relevant, this needs to be complemented by efforts to encourage active participation in decision-making, supportive environments, building the confidence and influence of groups at risk of marginalisation, and effecting transparent processes

Recommendations and next steps

Doing no harm

SNV Nepal has adopted a Do No Harm approach in its Beyond the Finish Line project. This has involved a conscious effort to increase institutional commitment and capacity to predict and prevent or mitigate harm caused to or by staff and community members, including people with disabilities, as a result of programme activities.

Applying a Do No Harm approach to baseline results highlights key areas.

- Address the gaps in the availability of water and hygiene facilities relating to geography (eco-zones), wealth quintile, gender, and disability to avoid magnifying health, economic, and social challenges for people already at risk of marginalisation.

- Complement approaches with tailored district-level strategies that promote gender equity and social inclusion to make sure that realities and priorities of individual districts are not obscured.
- Design WASH improvements based on the lived realities of target audiences, and engage potentially disadvantaged groups in activities that relate to water supply services and hygiene. Ensure that meaningful participation, transparency, and accountability underpin processes to increase potentially disadvantaged groups' representation and influence. In particular, strengthen the organisation of Disabled Peoples' Organisations and networks as a strategy to support the representation of people with disabilities.
- Promote appropriate and accessible technologies, and continue behaviour change communication strategies to ensure that all household members use and have access to handwashing and drinking water stations in their premises.

Promoting greater gender and social inclusion

The collection of gender and social inclusion data during the baseline study has led to new and strengthened strategies in several programme areas.

- Improving WASH services and behaviour change communication (BCC) strategies in the eight target rural municipalities to support local government understanding and delivery – with prioritisation of human and financial resources – of sustainable and inclusive rural water supply services and hygiene promotion. Notably, evidence is supporting strategies to leave no-one behind, benefitting potentially disadvantaged groups.
- Supporting the government in Dailekh to prioritise investments for infrastructure improvements and the sustainable operation of systems to provide (at least) 'basic' water services that comply with the four service parameters. This requires examining the suitability of different management models and designing the appropriate post-construction support, as needed in the local context.

- Ensuring more meaningful participation, transparency and accountability in processes to increase potentially disadvantaged groups' representation and influence. In particular Disabled People's Organisations' capacity and networks are being strengthened to support the effective representation of people with disabilities.
- Capacity building of government, private sector, and civil society stakeholders on accessible design to improve the accessibility of rural WASH services for people with disabilities.
- Capacity building in carrying out BCC campaigns for hygiene, and supporting local government implementation of campaigns that use motivation factors tailored for different groups. SNV is also supporting local governments in strengthening their monitoring systems to support uptake of new hygiene behaviours.

Beyond the Finish Line - Inclusive and Sustainable Rural Water Supply Services

BFL - Inclusive and Sustainable Rural Water Supply Services project in Nepal aims to contribute to improved health, gender equality, social inclusion and well-being of rural communities by supporting inclusive, sustainable, and resilient rural water supply services and hygiene promotion. The project is being operationalised in the districts of Dailekh and Sarlahi.

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SNV is a not-for-profit international development organisation that makes a lasting difference in the lives of people living in poverty by helping them raise incomes and access basic services. Focusing on three sectors – Agriculture, Energy and Water, Sanitation and Hygiene (WASH) – SNV has a long-term, local presence in over 25 countries in Asia, Africa and Latin America.

This brief is based on baseline data collected as part of SNV in Nepal's Area-wide Rural Water Supply Services programme, with support from the Australian Department of Foreign Affairs and Trade's Water for Women Fund. The analysis was led by Claire Rowland and Ratan Budhathoki with support from Gabrielle Halcrow and Gian Melloni (SNV), and was reviewed by Asahel Bush (CBM Australia). It was edited by Anjani Abella (SNV) and designed by Crunchy Frog.

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P1: BCC session on HWWS with group of mothers in Dailekh

P5: Child from Dailekh practising proper HWWS

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