SNV Learning Report

November 2021

Supporting health care facilities during the COVID-19 pandemic

Lessons from the COVID-19 New Initiative in Nepal

July 2020 to September 2021

About SNV

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. We focus on three sectors and have a long-term, local presence in over 25 countries in Asia, Africa, and Latin America. Our team of more than 1,300 staff is the backbone of SNV.
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About Partner Organisations

Everest Club (EC), Dailekh is a non-governmental organisation of Karnali province, 1993. EC has been contributing in the areas of cultural and social sector, especially development of WASH, health & nutrition, education, agriculture promotion, natural economy, social empowerment, disaster risk reduction and climate change adoption.

Rural Women Upliftment Association (RWUA) is a non-governmental organisation established in 1993 in Haripur Sarlahi, Province two of Nepal. RWUA has been active in the sector and contributing in the areas of safe drinking water, personal and environmental hygiene, and gender equity mainstreaming disability.

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Cover photo: *WASH facilities at Lakandra Primary Health Care Centre, Thantikandh Municipality, Dailekh.* Shova Chhetri, WASH Engineer, SNV in Nepal

Disclaimer: The views expressed in this *unedited report* are those of the authors and do not necessarily reflect the views of SNV Netherlands Development Organisation and DFAT Australia's Water for Women Fund. This *unedited report* has been made available to contribute to water, sanitation, and hygiene programming and learning in health care facilities.

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Contents

Abbreviations

BCC	Behaviour Change Communication
BFL	Beyond the Finish Line
COVID	Corona Virus Disease
CRPD	Convention on the Rights of Persons with Disabilities
DFAT	Department of Foreign Affairs and Trade
FCHV	Female Community Health Volunteer
GESI	Gender Equity and Social Inclusion
HCF	Health Care Facility
HCWM	Health Care Waste Management
HF-OMC	Health Care Facility – Operation Management Committee
HF-QIC	Health Care Facility – Quality Improvement Committee
HHA	Health and Hygiene Activity
IEC	Information, Education and Communication
IP	Infection Prevention
JMP	The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
KII	Key Informant Interview
NGO	Non-Governmental Organisation
PHC	Primary Health Care
QIS	Quality Information System
RM	Rural Municipality
RM-QAWC	Rural Municipality – Quality Assurance Work Committee
RWUA	Rural Women Upliftment Association
SARS	Severe Acute Respiratory Syndrome
SDG	Sustainable Development Goal
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Executive summary

About the COVID-19 New Initiative

Water, Sanitation and Hygiene (WASH) responses are key to ensuring health security and health system preparedness in a COVID-affected world. The fundamental human rights of safe water, sanitation and waste management, and hygienic conditions are essential for preventing transmission and protecting human health during infectious outbreaks, including COVID-19. Health care facilities (HCFs) are at the forefront of providing basic health care services to all citizens. They, therefore, need to be adequately equipped to control the spread of COVID-19 and tackle future pandemics and other health crises. Improved WASH services help minimise health care-related infections, increase the use of health care services and improve the performance of health care personnel, ultimately impacting the overall community hygiene norms.

In response to the pandemic, the COVID-19 New Initiative was implemented in two districts in Nepal by the Netherlands Development Organisation (SNV) and their local partners, Rural Women Upliftment Association in Sarlahi and Everest Club in Dailekh. They also worked with rural municipalities (RMs), disability networks and relevant WASH sector stakeholders. The initiative aimed to build staff capacity at HCFs and RMs and improve WASH infrastructure to deliver inclusive and disability-responsive WASH facilities and services. The Department of Foreign Affairs and Trade (DFAT) Australia's Water for Women Fund provided additional funding to the ongoing Beyond the Finish Line (BFL) project to enable the initiative.

This learning report is based on a review of initiative documents and key informant interviews with stakeholders.

Approach and activities

SNV and its local partners selected one RM per district from the BFL project. The criteria for selection were remoteness and economic vulnerability. RMs are constitutionally responsible for ensuring adequate WASH infrastructure for all public HCFs in their jurisdiction to improve hygiene and wider infection prevention (IP) practices. As such, the initiative supported RM capacity building with complementary training and coaching on quality control for surveys, design, cost estimation, and construction of accessible toilets based on national standards for WASH in health facilities.

The initiative directly supported HCFs with the finalisation of detailed designs and costs for upgrading WASH infrastructure (including water supply systems, accessible toilets with menstrual hygiene management facilities, handwashing stations, and health care waste treatment and disposal facilities) and is advocating the RMs to leverage finances from other sources where possible for scaling up in all HCFs.

The initiative built four inclusive and accessible toilets; three at HCFs in Sarlahi and two in Dailekh. As well as inclusive toilets, other structures like backup water storage tanks, soak pits, and septic tanks were also built. Waste burial pits for managing hazardous waste and pits for safe placenta disposal for birthing centres were built in two additional HCFs of Thantikandh RM, Dailekh. Pedal-operated handwashing stations, waste segregation bins and autoclaves were also installed in these HCFs. Pedal handwashing stations were also installed in public places and schools as per request and need.

The initiative supported the formation (or strengthening) of five-member Health Facility-Quality Improvement Committees (HF-QIC) following government guidelines (including gender equality and social inclusion (GESI) criteria of formation), the assessment of baseline infection prevention status, the designation of clear roles and responsibilities,

and the development of an action plan. The HF-QICs were linked with government-designated Health Facility-Operation and Management Committees (HF-OMCs). The initiative also supported the formation (or activation) of RM-Quality Assurance Working Committees (RM-QAWC) to support system strengthening for longer-term resilience.

Three types of training were conducted to strengthen HCF staff capacity, including HF-QICs, HF-OMCs, RM-QAWCs, Female Community Health Volunteers (FCHV), and RM technical staff:

- infection prevention and behaviour change communication;
- technical design of accessible toilets; and
- whole-site/on-site orientation to all staff members at HCFs.

The initiative also conducted an accessibility audit in all four HCFs where inclusive toilets were constructed. An accessibility audit is a participatory process to evaluate the accessibility and safety of an existing water and/or sanitation facility and its surroundings to identify possible changes or improvements. A checklist based on CBM Australia protocols was used, with indicators on getting there, getting in, getting on, and hygiene. After completing the construction of inclusive toilets in all four HCFs, a handover document was prepared with clear roles and responsibilities for HCFs and RMs, with operation and management guidelines.

Results

The initiative conducted baseline (December 2020) and endline (September 2021) surveys covering four different impact indicators and three different outcome indicators. Impact indicators covered access to sanitation and were defined on a scale of '0' (no access) to '4' (full access); including access to sanitation, hygienic use and maintenance of the toilet, access to handwashing with soap station (after defecation and at point of care) and access to water. For outcome indicators, scorecards and a Quality Information System (QIS) ladder were used to measure progress on a scale from '0' (no progress) to '4' (advanced progress).

The standard scorecards used three indicators specific to HCFs:

a. capacity to steer and support WASH in HCFs in its area (RM level);
b. capacity to provide oversight and promote compliance with norms for WASH in HCFs in the area (RM level); and
c. leadership and management for WASH at the HCF.

The indicators for access to sanitation indicate that toilets at all the HCFs were below the benchmark at baseline. This situation improved in four HCFs where the initiative constructed inclusive toilets and were above the benchmark at endline. Similarly, during baseline, only eight HCFs' toilets were above the benchmark, while three HCFs did not have any toilets at all. After forming HF-QICs and HF-OMCs, the situation improved in all government HCFs with functional, clean and private toilets.

Only two HCFs had a handwashing station with soap for after defecation, and none of the HCFs had handwashing provisions with soap or alcohol-based rub at the point of care. The situation improved in all HCFs of Thantikandh and five HCFs in Parsa at the end of the initiative, with sufficient handwashing stations with soap and a permanent water supply to be used after defecation. However, three HCFs still lack a handwashing station with alcohol rub or soap and a permanent water supply at points of care. in terms of water supply, the initiative supported constructing an intake structure in one of the HCFs; all other HCFs already had a basic water supply.

Between June and August 2021, a total of 7,654 people (4,377 male and 3,277 female) visited four HCFs where the initiative constructed inclusive and disability-responsive WASH infrastructures. Altogether 647 people (305 male and 342 female) participated in

the training and orientations organised by the initiative.

Lessons learnt

The initiative learned that:

- local government buy-in is necessary for sustained positive change. The involvement of local government representatives/authorities and HCF staff members at all stages is key to success;
- a strengthened supply chain is necessary for faster scaling up of inclusive and disability-responsive WASH infrastructure at a reduced cost;
- private partnerships (i.e., service providers) can promote inclusive WASH facilities at HCFs and other public institution buildings across the country;
- the involvement of engineers (from institutions other than HCFs) at training on inclusive WASH infrastructure design increases the possibility of maximising training outcomes; and
- the time during subsidence of COVID-19 cases could allow for effective and faster scaling up of similar activities. It increases the possibility of effective participation of HCF staff members in initiative activities.

Conclusions and recommendations

The learnings from this initiative paint an alarming picture of the state of WASH in HCFs. Limited information on the WASH status of HCFs at local level made planning improvements difficult. An assessment based on the recently endorsed national standards for WASH in HCFs can help in evidence-based planning, implementation and monitoring of new projects. A national-level dialogue with policymakers and sector stakeholders would be useful to further advocate for the importance of mainstreaming proper WASH infrastructure and good practices within HCFs.

Buy-in from local government can help establish a conducive working environment to move forward. This buy-in is vital for influencing rural municipalities to adopt standard WASH facility designs and monitoring protocols in their annual budgeting and planning to produce positive effects in other HCFs across the country. Therefore, an appropriate dissemination strategy is essential for replication and scale-up.

Experience from this initiative on inclusive WASH infrastructure design, training, restructuring of inclusive monitoring mechanisms, and 'accessibility audit' protocols showed an example for the institutionalisation and spread of messages on inclusive WASH at HCFs, as well as broader themes including COVID-19 prevention and control. Scaling up of such initiatives must include strengthened institutional and technical capacity at the local level, which requires an increased number of skilled human resources for design, construction, and upkeep, via a strong market supply chain at the local level.

Customising training modules, considering the recently approved 'National Standard for WASH in Health Care Facilities of Nepal', could be a first step in designing training that includes both infection prevention and WASH-related behaviour change communication. While organising training, collaboration among public institutions at rural municipalities can accelerate scaling up and institutionalising inclusive and disability-responsive WASH infrastructures at all institutional buildings. In addition, a flexible timeframe can allow for a thorough assessment of local risks while also allowing for the effective participation of HCF staff members in initiative activities.

1. Introduction

1.1 Background and rationale

Nepal is one of the countries severely affected by the COVID-19.[1] As of 20 September 2021, Nepal had reported 785,541 cases with 11,048 deaths.[2] As a preventive measure, the national government declared the first nationwide lockdown effective from 24 March 2020, when only two cases were reported, which ended on 21 July 2020. After confirming a second wave of COVID-19 from April 2021, a complete lockdown was imposed in the Kathmandu valley from 29 April to 21 June 2021. Other districts with similar spikes in cases followed, and as of 12 May, 72 out of 77 districts in Nepal were under a lockdown.[3]

Along with lockdowns, the government's crisis response included quarantine centres for travellers entering the country, targeted testing, isolation units in urban centres, mass public communication campaigns on mainstream media, and personal protective equipment for frontline workers. The government is also actively running its vaccination programme, with 5,588,517 people fully vaccinated as of 20 September 2021.[4]

Providing safe water, sanitation and waste management, and hygienic conditions is essential for preventing transmission and protecting human health during all infectious outbreaks, including COVID-19. Health care facilities (HCF) are at the forefront of providing basic health care to all citizens. By ensuring evidence-based and consistently applied WASH and waste management practices in communities, homes, schools, marketplaces, HCFs help prevent human-to-human transmission of pathogens.[5] Improved WASH services help minimise health care-related infections, increase the use of health care services and improve the performance of health care personnel, ultimately impacting overall community hygiene norms. HCFs need to be adequately equipped to control the spread of COVID-19 and tackle future pandemics and other health crises. According to the WHO's report on the assessment of WASH in HCFs in 54 lower- and middle-income countries, 38% of HCFs do not provide users access to an improved water source; 19% do not provide improved sanitation; 35% do not have soap for handwashing.[6] Similarly, according to the baseline survey report of the BFL project (SNV 2019), about 45% of HCFs in the eight project rural municipalities in Sarlahi and Dailekh had no handwashing facility near a toilet; 10% had a handwashing facility, but no soap was available.

In the COVID-19 context, HCFs play a crucial role in controlling the spread of the virus and safe treatment of patients. SNV and its local partners in Sarlahi and Dailekh districts selected one rural municipality (RM) in each district to intervene. SNV and partners provided capacity development to these rural municipalities to ensure inclusive WASH infrastructures and improve health workers' hygiene practices and client counselling for

[1] World Health Organization, 'WHO Coronavirus (COVID-19) Dashboard', https://covid19.who.int (accessed 26 November 2021)
[2] Government of Nepal, 'CoVid19-Dashboard', https://covid19.mohp.gov.np/#/ (accessed 26 November 2021)
[3] Nepal Economic Forum, 'Second Wave of COVID-19 in Nepal', June 2021, https://nepaleconomicforum.org/neftake/second-wave-of-covid-19-in-nepal/ (accessed 26 November 2021)
[4] Government of Nepal, 'CoVid19-Dashboard'
[5] World Health Organization, 'Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19', July 2020, https://www.who.int/publications/i/item/WHO-2019-nCoV-IPC-WASH-2020.4 (accessed 26 November 2021)
[6] World Health Organization, 'WHO/UNICEF Report', *Water, Sanitation and Hygiene in Health Care Facilities: status in low-and middle-income countries and way forward*, https://www.who.int/water_sanitation_health/publications/qa-wash-hcf.pdf (accessed 26 November 2021)

infection prevention at all HCFs in their jurisdiction to improve hygiene and wider infection prevention practices. This included training and coaching on quality control for surveys, design, cost estimation, and construction based on national standards drafted by the national WASH in HCFs working group and the COVID-19 guidelines developed by the national WASH cluster.

Gender and Social Inclusion

The initiative strengthened gender and social inclusion processes, and outcomes following 'leave no-one behind' and 'do no harm' principles; specifically:

- RM staff were trained on the design, monitoring, and quality control of inclusive WASH infrastructure, including applying disability audits in coordination with disability self-help groups active at the ward[7] level. Disability audits were based on checklists and aimed to assess whether WASH facilities are functioning and accessible to all users. In this sense, disability audits were verification tools as well as advocacy tools.

- A training of trainers on infection prevention (IP) and BCC was conducted for the health centre in-charge of all HCFs. The training aimed to help them further disseminate messaging and knowledge to all health care staff at their respective health care facilities. In addition to training, IP supplies, an IP handbook and BCC manuals and guidelines (including messages that can be tailored to all genders and population groups) were provided.

- Whole-site and on-site orientations on IP and BCC included, at a minimum, one female health worker and cleaning staff in all HCFs. Whenever possible, orientation leaders aimed for gender parity.

- The formation/strengthening of inclusive Health Care Facility-Quality Improvement Committees (HF-QIC) and Health Care Facility-Operation and Management Committees (HF-OMC) to include at least 33% female participants. Whenever possible, the committees aimed to achieve gender parity.

- The formation/strengthening of Rural Municipality-Quality Assurance Work Committees (RM-QAWC) promoted equitable representation of women, low-caste/minority groups, and people with disabilities and promoted GESI-transformative and female-empowerment messages.[8] The initiative aims to involve women's groups and associations of people with disabilities and marginalised minorities as possible.

1.2 Objectives

The initiative's main objective was to enhance HCF efforts to address COVID-19. It aimed to improve infrastructure and strengthen personnel and institutional capacity to deliver inclusive and disability-responsive WASH facilities and services in one target RM in Sarlahi and Dailekh districts.

The specific objectives were:

[7] Ward is the smallest administrative unit of local government (municipality) in Nepal

[8] The United Nations' Covid-19 Nepal Preparedness and Response Plan - May 2020, describes emerging gender issues related to Covid-19, in areas such as information, care burden and health (e.g. p.9-10): https://reliefweb.int/report/nepal/covid-19-nepal-preparedness-and-response-plan. See also the UN's policy brief on The Impact of Covid-19 on Women – April 2020: https://www.unwomen.org/en/digital-library/publications/2020/04/policy-brief-the-impact-of-covid-19-on-women

- to demonstrate the installation of inclusive and accessible WASH infrastructure in four high priority HCFs in the two RMs, for further replication in all HCFs;
- to build the capacity of RM technical staff to design and monitor inclusive and accessible WASH infrastructure;
- to improve the knowledge of health care personnel on infection prevention protocols with a particular focus on COVID-19 prevention;
- to improve the counselling skills of health care personnel on hygiene behaviours and other protection measures such as social distancing;
- to support system strengthening for longer-term resilience at both HCF and RM level; and
- to help HCFs prepare guidelines to ensure the functionality and sustainability of WASH infrastructure.

The initiative's funding was provided by DFAT Australia's Water for Women Fund as part of the existing SNV 'Beyond the Finish Line' project and was implemented by local partner NGOs in collaboration with respective RMs. This learning document is based on a review of initiative documents and key informant interviews with stakeholders.

2. Initiative description and process

The initiative was implemented through local partners Everest Club in Dailekh and Rural Women Upliftment Association (RWUA) in Sarlahi, in coordination with rural municipalities and relevant WASH sector stakeholders, including organisations for people with disabilities.

2.1 Inclusive WASH infrastructure development

The initiative constructed four inclusive and accessible toilets in two HCFs in each district; Parsa health post, Ward no. 5 and Sang Rampur health post, Ward no. 3 of Parsa RM in Sarlahi, and Lakandra primary health care centre, Ward no. 1 and Bishala health post, ward no. 3 of Thantikandh RM in Dailekh.

Along with inclusive toilets, the initiative also constructed backup water storage tanks, soak pits and septic tanks for toilet waste, burial pits for managing hazardous waste, and placenta pits for safe placenta disposal for birthing centres. Waste burial pits and placenta pits were constructed in an additional two HCFs: Gairigaun birthing centre and Bahakot community health unit of Thantikandh RM, Dailekh.

Pedal-operated handwashing stations, waste segregation bins and autoclaves were also installed in these HCFs. Pedal handwashing stations were also installed in public places and schools as per request and need.

The initiative implemented inclusive WASH facilities and services through the following steps:

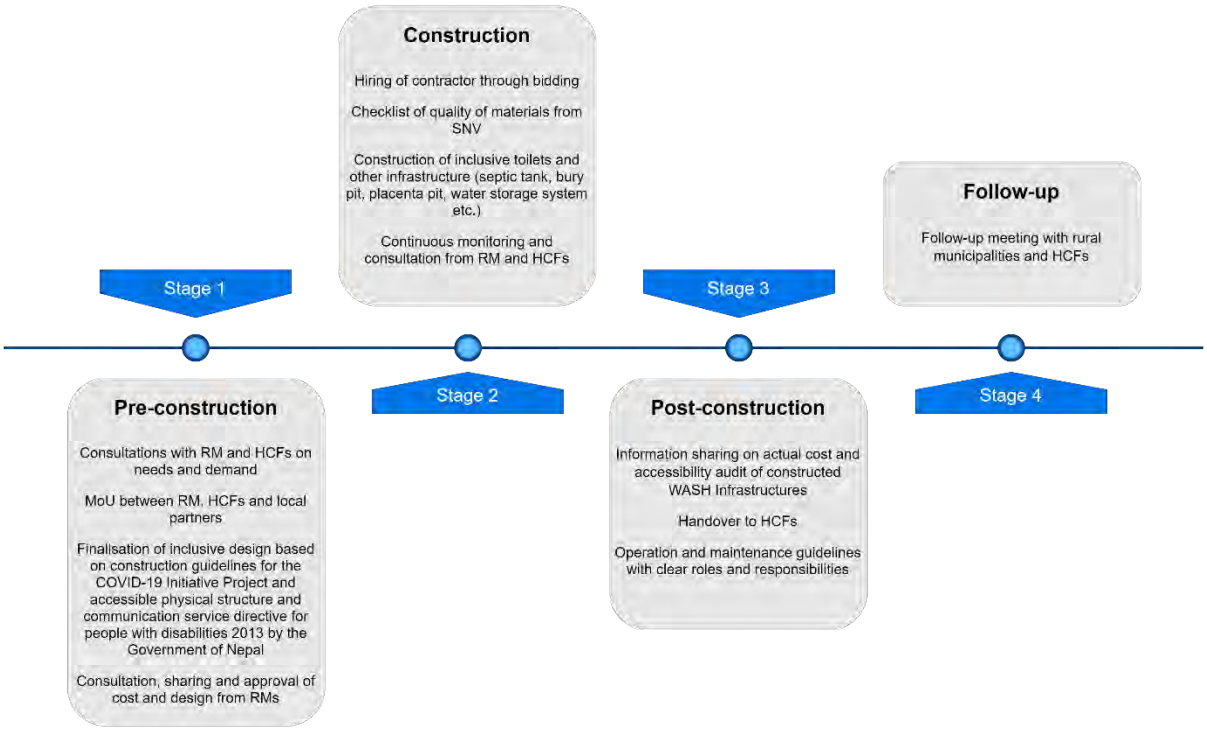


Table 1: Infrastructure constructed by the initiative

SN	Infrastructure	Number	Remarks
1	Inclusive toilets	4	One in each of the four HCFs
2	Septic tank, soak pit, waste burial pit	4	One in each of the four HCFs
3	Placenta pit	6	One in each HCF with birthing centre and additional two in birthing centres of Thantikandh RM, Dailekh
4	Pedal handwashing stations	11	Four in Sarlahi and seven in Dailekh
5	Waste segregation bins	33	
6	Autoclave	4	
7	Needle cutter	4	One in each of the four HCFs

2.2 Capacity building

The initiative conducted three types of training in each district; training of trainers on IP and BCC, technical design, and whole-site/on-site orientation to all staff members at HCFs.

Image 1 Training of trainers on infection prevention and behaviour change communication

The main objective of the IP and BCC training was to provide knowledge about infection prevention and effective behaviour change communication processes and took place over five days. The training also intended to enable trainees to replicate similar training for other HCF staff. The training comprised of IP terminology, the disease transmission cycle, nosocomial infection, standard precautions and protective barriers, hand hygiene, the purpose of wearing gloves, asepsis and antiseptics, processing instruments and other items, sterilisation, high-level disinfection, health care waste management, IP practice in clinical laboratories, and housekeeping. In addition, the training covered challenges, motivational factors, components of behaviour change, facilitation and effective use of communication. After the training, participants received relevant IEC materials, face masks and sanitisers.

Training on technical design

Training on technical design was delivered to build shared understanding and commitments towards designing, estimating, constructing and monitoring inclusive and

resilient WASH infrastructures at HCFs. The training was organised for RMs, local partners, organisations for people with disabilities and private sector companies. The main component of the training was to introduce inclusive, accessible, and resilient infrastructures and the parameters required to construct them using design and drawing. An accessibility audit was also practised. The two-day training was organised with the slogan 'a step for moving to a better world'.

Table 2: List of training beneficiaries

SN	Name of the event	Male participant	Female participant	Total participant
1.	IP and BCC trainings	7	9	16
2.	Technical trainings	10	1	11

Whole-site/on-site orientation

After training trainers on IP and BCC, a whole-site/on-site orientation was organised for all staff members at seven HCFs in Thantikandh RM and four HCFs in Parsa RM. The on-site orientation was given to health care staff, QIC members and female community health volunteers (FCHVs) of the respective wards. The training covered BCC and mainly focused on five indicators of sanitation and hygiene. The BCC orientation was also focused on mentoring and supporting FCHVs to improve WASH in communities. In addition, a whole-site orientation was given to all staff members at HCFs, including cleaning staff, focusing on waste management and IP. A monitoring checklist for WASH improvement was provided to help prioritise agendas and gap analysis to address identified gaps with joint efforts among the staff, OMC and QIC of HCFs.

The purposes of the on-site orientation included:

- strengthening the capacity and knowledge of FCHVs;
- dissemination of BCC and its importance;
- information on five indicators of sanitation and hygiene; and
- mentoring FCHVs to improve WASH at community level.

The purposes of the whole-site orientation included:

- follow up and revision of health care waste management (HCWM) and IP;
- supporting health care staff members to adopt effective and needs-based systems and guidelines;
- promoting the importance of IP/HCWM;
- improving understanding of the important stages of IP/HCWM such as decontamination, sterilisation, waste collection and disposal;
- strengthening the collective effort of health care staff;
- strengthening and supporting the QIC to discuss IP/HCWM activities in every meeting;
- promoting environmental and toilet cleanliness; and
- promoting hand hygiene behaviour among health care staff.

Figure 1: Participants in whole-site/on-site orientation - Dailekh

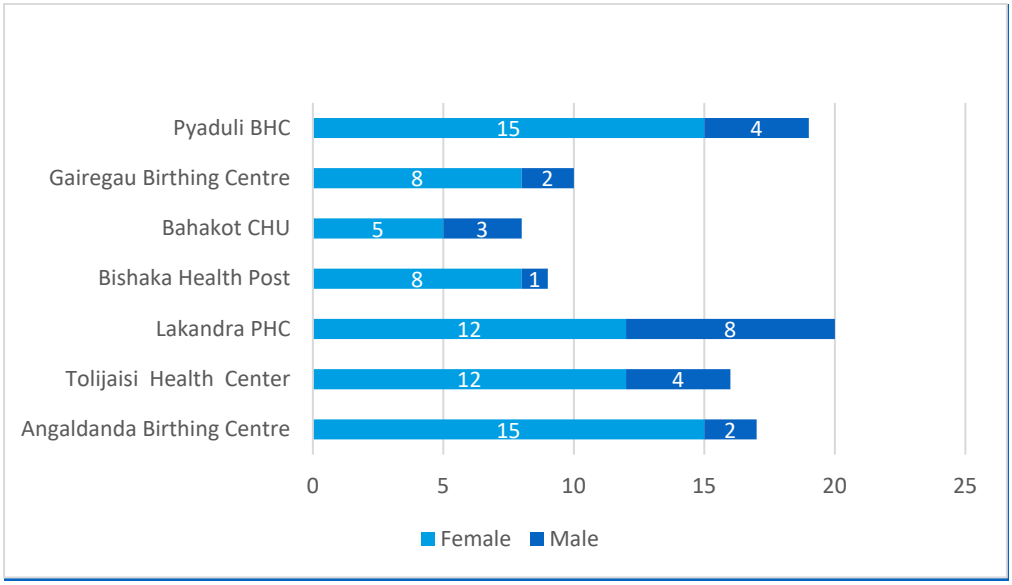
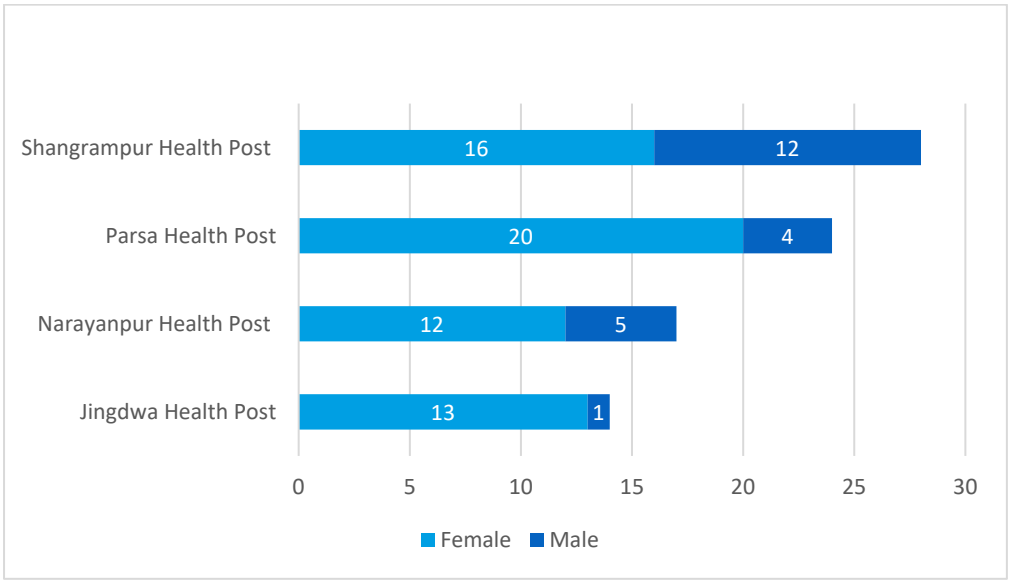


Figure 2: Participants in whole-site /on-site orientation - Sarlahi



2.3 Governance and institutional strengthening

The initiative supported the formation (or strengthening) of five-member HF-Quality Improvement Committees (HF-QIC) following government guidelines (including GESI criteria of formation), the assessment of baseline infection prevention status, the designation of clear roles and responsibilities, and the development of the action plan. HF-QICs were also linked with government-designated HF-Operation and Management Committees (HF-OMC). The initiative also supported the formation (or activation) of RM-Quality Assurance Working Committees (RM-QAWC) with the objective of system strengthening for longer-term resilience.

Image 2 Training on infection prevention and behaviour change communication

The roles and responsibilities of an HF-QIC are to:

- ensure effective, safe, client-centred, timely, equitable, culturally appropriate health services;
- improve WASH activities; and
- improve waste management and promote IP/BCC strategy.

The roles and responsibilities of an HF-OMC are to:

- conduct monthly meetings to oversee the progress and gaps in respective health facilities;
- work according to plans and guidelines and provide client-oriented needs-based services;
- conduct monitoring and evaluation of existing activities as well as reporting;
- prepare budget plans for the health facility;
- coordinate with the local community, ward and RM; and
- focus on WASH activities and their components.

The roles and responsibilities of an RM-QAWC are to:

- conduct monthly meetings to oversee the progress and gaps in health facilities;
- work according to plans and guidelines and provide client-oriented needs-based services;
- conduct monitoring and evaluation of existing activities as well as reporting;
- prepare budget plans for health facilities; and
- coordinate at the ward level.

Accessibility audit

The initiative conducted an accessibility audit in all four HCFs where inclusive toilets were constructed. An accessibility audit is a participatory process to evaluate the accessibility and safety of an existing water and/or sanitation facility and its surroundings to identify possible changes or improvements. A checklist with indicators regarding getting there, getting in, getting on, and hygiene was used (Annex 3).

Handover and operation and management guideline

After completing the construction of inclusive toilets in all four HCFs, a handover document was prepared with clear roles and responsibilities for HCFs and RMs with operation and management guidelines. The main objectives of the guidelines were to:

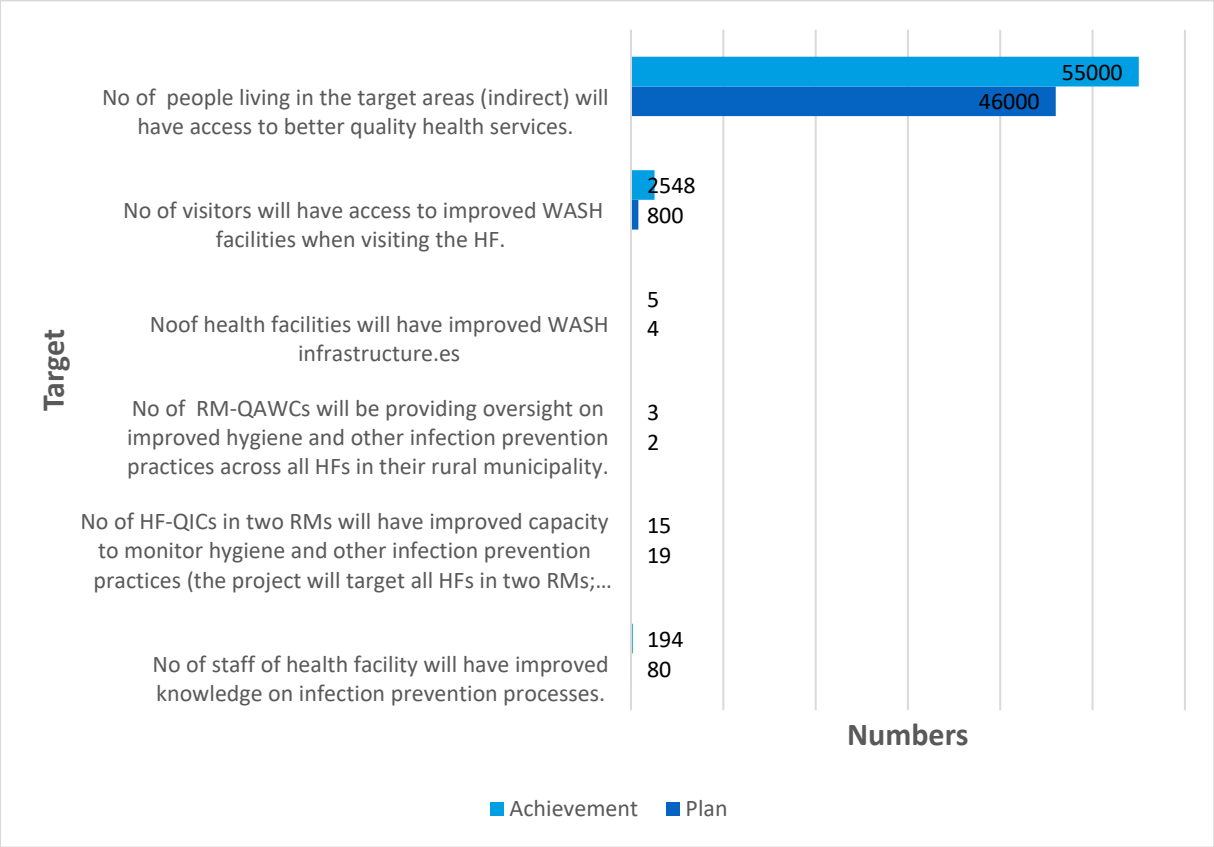
- protect all assets regarding toilets and related infrastructures;
- ensure regular cleanliness and hygiene of toilets;
- provide a quality service for regular toilet use;
- ensure the satisfaction of toilet users;
- ensure the safe use of toilets; and
- manage the waste generated from toilets and HCFs.

The guidelines also included the basic protocol for maintaining the operation of the toilets, including:

- daily toilet cleaning;
- management of sanitation equipment like 'harpic', phenol, brushes, soap, buckets etc.;
- maintenance and management of water and electricity;
- regular maintenance and minor repairs; and
- safety measures.

3. Findings

Figure 3: Plan vs achievement of proposal targets



The above chart shows the plan vs achievement of the targets in the proposal. The proposed plan versus achievements:

- Planned: Up to 80 staff of health facility will have improved knowledge on infection prevention processes. Achieved: 194
- Planned: Up to 19 HF-QICs in two RMs will have improved capacity to monitor hygiene and other infection prevention practices (the project will target all HFs in two RMs; the final number of HF-QICs depends on the total number of HFs in the selected RMs). Achieved: 15
- Planned: 2 RM-QAWCs will be providing oversight on improved hygiene and other infection prevention practices across all HFs in their rural municipality. Achieved: 3
- Planned: 4 health facilities will have improved WASH infrastructure. Achieved: 5
- Planned: 800 visitors will have access to improved WASH facilities when visiting the HF. Achieved: 2548
- Planned: 46,000 people living in the target areas (indirect) will have access to better quality health services. Achieved: 55000

Initially, two rural municipalities were proposed, but due to the availability of surplus budget and high demand, one additional RM was added in Sarlahi. The above numbers in figure 3 detail achievements in the three RMs. The number of HF-QICs with improved capacity to monitor hygiene and other infection prevention practices is less than planned. This is due to the lack of committees in private health care facilities owned by a single person.

3.1 Thantikandh RM

Thantikandh RM is one of the four municipalities and seven RMs in Dailekh district. It has a total area of 88.22 sq km and a population of 18,896 as per the 2011 census. There are seven HCFs in this RM.

Table 3: List of HCFs in Thantikandh RM

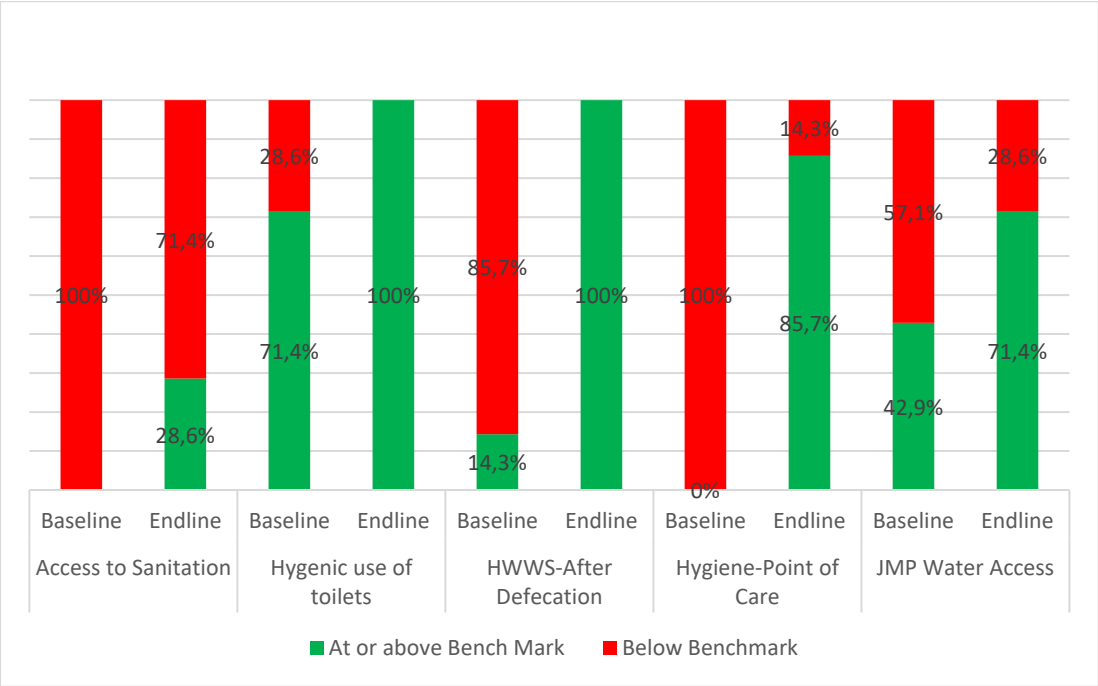
SN	Name of HCF	RM Ward no.
1	Pyaduli Basic Health Unit	2
2	Baakote Community Health Unit	3
3	Gairagau Birthing Centre	4
4	Tolijaisi Community Health Unit	5
5	Bishala Health Care Facility	3
6	Aamaldada Birthing Centre	6
7	Lakandra Primary Health Care Unit	1

Impact indicators

The initiative conducted a baseline and endline survey covering four impact indicators and three outcome indicators. Impact indicators covered access to sanitation and were defined on a scale of '0' (no access) to '4' (full access): access to sanitation, hygienic use and maintenance of toilet, access to handwashing with soap station (after defecation and at point of care) and access to water.

The below graph summarises the findings for impact indicators from baseline and endline for Thantikandh RM. For each indicator level, '2' was considered the benchmark.

Figure 4: Baseline vs endline - impact indicators - Thantikandh RM



The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) indicators were used for drinking water.

The indicator for access to sanitation indicates that the toilets at all seven HCFs in Thantikandh were below the benchmark during baseline, i.e., none of the HCFs had separate toilets for staff and patients, separate toilets for males and females, or accessible toilets for people with disabilities. This situation improved in two HCFs where the initiative constructed inclusive toilets and were above the benchmark during the endline survey.

Similarly, five HCFs' toilets were above the benchmark during baseline (see annexure 2), i.e., had a functional toilet. After forming HF-QICs and HF-OMCs, the situation improved in all seven HCFs resulting in 100% having functional, clean and private toilets.

Regarding handwashing after defecation and at the point of care, only one HCF had a handwashing station with soap for after defecation. None had handwashing provisions with soap or alcohol-based rub at the point of care. At the end of the initiative, the situation improved in all HCFs, with 100% having sufficient handwashing stations with soap and a permanent water supply to be used after defecation. However, one HCF still needs to have a handwashing station with alcohol rub or soap and a permanent water supply at the point of care.

Regarding water supply, four HCFs had an improved source (as per JMP indicators) either on the premises or within a 500m distance at the beginning of the initiative or water collection time within 30 minutes for a round trip including queuing; free from faecal and priority chemical contamination. However, after the initiative supported the construction of an intake structure in Bishala HCF, five HCFs are now getting water from an improved source.

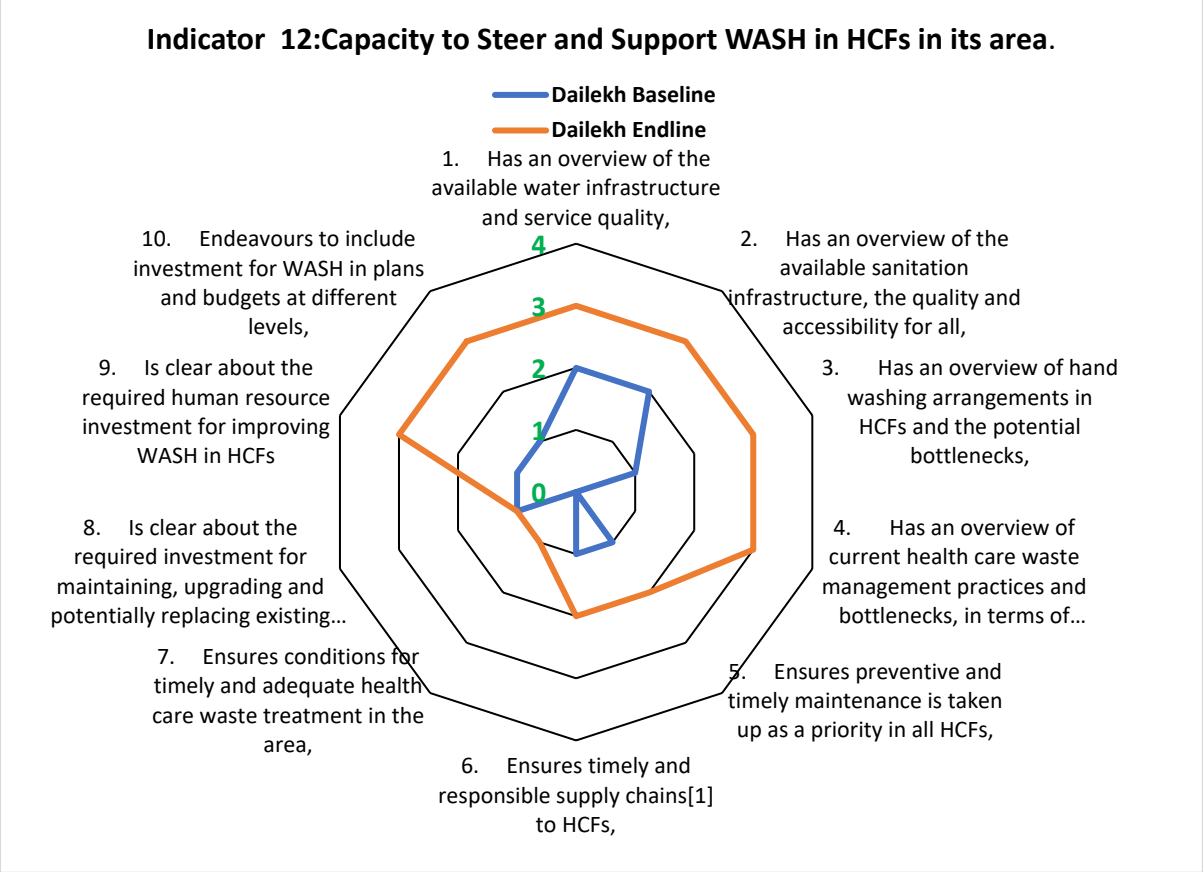
Outcome indicators

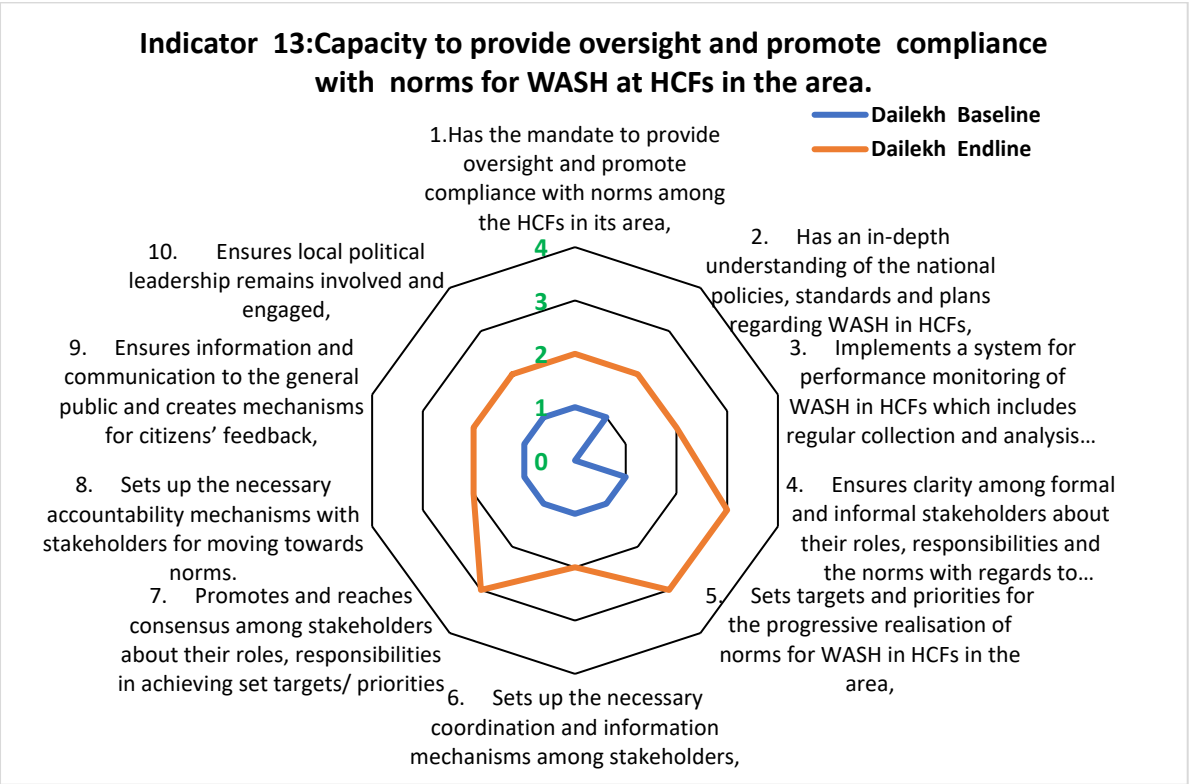
For outcome indicators, scorecards and a Quality Information System (QIS) ladder were used to measure progress on a scale from ‘0’ (no progress) to ‘4’ (advanced progress). Standard scorecards for three indicators specific to HCFs were used. These indicators were: capacity to steer and support WASH in HCFs in its area (RM level), capacity to provide oversight and promote compliance with norms for WASH in HCFs in the area (RM level), and leadership and management for WASH at the HCF. For each indicator, ‘2’ was considered the benchmark.

At the beginning of the initiative, the HCFs were not fully aware of the status of the WASH infrastructure and service quality. Operation and maintenance of WASH services and infrastructures and linkages with the market chain were low priority. Budget for the human resources and requirements for improving WASH, and plans and budget to enhance the quality of service were lacking. Among all HCFs, the management of health care waste was poor. Similarly, the performance monitoring of the system, roles and responsibilities of formal and informal stakeholders, prioritisation of WASH service quality, information and communication strategy, and involvement of local political leaders for improving WASH service quality with HCFs were all below the benchmark. Further, the leadership and management of WASH within the HCFs were very poor in all HCFs.

Following the formation of HF-OMCs and HF-QICs through the initiative, there have been regular meetings, adherence to WASH service quality monitoring checklists, and increased knowledge on WASH management through training and workshops. The situation is much improved, and most indicators are at least above the benchmark in all HCFs. Considerable progress has been made in waste management, especially in the two HCFs where waste bins were provided, and burial pits and placenta pits were constructed along with inclusive toilets.

Figure 5: Baseline vs endline - outcome indicators - Thantikandh RM





Two of seven HCFs from Thantikandh RM were selected for WASH infrastructure construction or upgrades based on geographical accessibility, current WASH service status, COVID-19 situation and recommendation from the RM. The prioritisation basis for each HCF is presented below:

Table 4: Reasons for prioritisation of HCFs for intervention in Thantikandh RM

SN	Name of the HCF	Reason for Prioritisation
1	Lakandra Primary Health Care Unit	- Poor condition of existing toilet, potential maximum number of COVID-19 positive cases and service takers; - Availability of land for construction; and - Recommendation of RM.
2	Bishala Health Care Facility	- No access to water supply service; - Poor condition of existing toilet, and - Recommendation of RM

3.1.1 Lakandra Primary Health Care (PHC) Unit

Lakandra Primary Health Care Unit lies in Ward no. 1 of Thantikandh RM, Dailekh. Before the initiative, there was one toilet that was not accessible to people with disabilities, and it had no overhead tank or regular water supply. The sanitation and hygienic status of the toilet was poor. After the initiative's intervention, a universal access toilet was built along with a proper septic tank and soak pit, waste burial pit and handwashing station. The toilet is currently being used with reported high user satisfaction. According to KIIs, around five to six people with disabilities visit this PHC a month. Previously, they couldn't access these toilets; however, now they are very excited to use them and wish to use the infrastructure more widely.

During the construction of the toilet, regular feedback and suggestions were collected from this PHC. The initiative's handover guideline is being followed, and the PHC has decided to use their internal budget for minor repairs with a plan to solicit funds from

the RM if any major repair is required. They are very satisfied with the design, construction materials and speed of the work accomplished by the private construction company.

The initiative also improved governance by supporting the formation of an inclusive HF-OMC and HF-QIC. A seven-member (four female and three male) HF-OMC was formed with the presidency held by the ward president and the health centre in-charge as the member secretary. The HF-OMC is currently conducting monthly meetings on the last Friday of every month to oversee the progress and gaps in the PHC.

Along with the HF-OMC, a six-member HF-QIC was also formed comprising three HCF staff members, one representative from HF-QIC, one FCHV and one stakeholder. The HF-OMC regularly conducts meetings to resolve any issues that arise to ensure effective, safe, timely and equitable services.

Three staff from the HCF participated in IP/BCC training organised by the initiative. After the training, they used their knowledge and strictly followed the IP protocol, especially related to COVID-19. The FCHV has been using the IEC materials they were provided during their community visit for BCC.

As the patient flow rate is relatively high in this PHC, the existing water source and supply is not sufficient; as a result, they will make a formal request to the RM for a water supply project in the upcoming fiscal year.

3.1.2 Bishala Health Care Facility

Bishala HCF is situated in Ward no. 3 of Thantikandh RM. The existing toilet was in poor condition with no water supply and weak infrastructure. There was no handwashing station, and the facility lacked a proper drinking water supply. The initiative constructed a new inclusive toilet and bury pit. Bishala HCF is also a birthing centre; previously, placenta and other hazardous waste were thrown haphazardly in the HCF compound. The initiative constructed a placenta pit for the safe decomposition of placenta and other similar waste. Although one water source was specially designated for the school and HCF, the lack of proper intake resulted in a very irregular water supply. The initiative also constructed an intake in the source, resulting in a continuous and sufficient water supply.

The HCF was regularly consulted for their suggestions and feedback during their infrastructure's design, site selection, and construction. The operation guideline is being followed, and the quality improvement committee does regular service monitoring. There is no other existing budget or programme related to WASH in this HCF. However, as the building is also old, they have requested a new building with proper inclusive infrastructure from the RM.

Like in Lakandra, the initiative supported the formation of an HF-OMC and HF-QIC. A seven-member (four female and three male) HF-OMC was formed with the presidency held by the ward president and the health centre in-charge as the member secretary. The HF-OMC is currently conducting monthly meetings on the last Friday of every month to oversee the progress and gaps in the PHC.

Along with the HF-OMC, a five-member HF-QIC was also formed, comprising two HCF staff members, one representative from HF-OMC, one FCHV and one stakeholder. The HF-OMC regularly conducts meetings to resolve any issues that arise and ensure effective, safe, timely, and equitable services.

Two staff from this HCF participated in IP/BCC training which has helped them remain safe during encounters with service seekers in the current COVID-19 situation. One whole-site orientation for all staff members at the HCF and one on-site orientation for health care staff, FCHVs and QIC members were also organised. In this orientation, the

FCHVs were provided with IEC materials on BCC and shared about the five indicators of BCC.

3.1.3 Other HCFs

Although the RM has highly appreciated the work done by the initiative and is committed to replicating a similar project in the future, they are yet to produce a similar plan for other HCFs. All the training and governance activities (formation of an HF-QIC and an HF-OMC) were conducted in a further five HCFs in this RM. There has been a huge demand for a similar project with SNV. In the RM, a technical workshop was also organised where technical persons and engineers discussed the design and features of the inclusive and accessible toilets and other infrastructure constructed in two HCFs. The engineers have committed to using a similar design while constructing any public infrastructure. The eight-member (two female, six male) RM-QAWC was formed with the RM president holding the presidency and the health coordinator as member secretary. The RM-QAWC has been conducting monthly monitoring visits and holding monthly meetings to oversee the progress and gaps in HCFs.

The RM is also committed to any major repair required in WASH infrastructure in these HCFs. In the current COVID-19 situation, the RM has realised the importance of proper HCFs and thus are planning to significantly increase their health budget to improve the quality of services. There are no other private health care centres apart from these HCFs in the area.

3.2 Parsa Rural Municipality

Parsa RM is one of eleven municipalities and nine RMs in Sarlahi district. It lies 10 km east of the district headquarters, Malangwa, and has an area of 23.12 sq km and a population of 21,650 as per the 2011 census.

There are four government HCFs and four private health centres in this RM.

The multiplier effect in promoting inclusive WASH at HCFs

After the initiation by SNV and its partners to promote inclusive WASH facilities in rural municipalities, the contractor for the design and construction of WASH structures at HCFs has received demands from other development agencies and the private sector (e.g., party houses) to build inclusive WASH infrastructures in Sudurpaschim Province and other parts of Nepal.

Claiming the best quality service in constructing inclusive WASH infrastructures, Mr. Rajendra Sharma has been a promoter of inclusive WASH infrastructure in public institutions.

"With permission from SNV, I am branding this design through my company to keep momentum behind this concept of inclusiveness."

Conscious of the limits of depending on the demand-based approach, he aims to make it a norm in his company's design and construction.

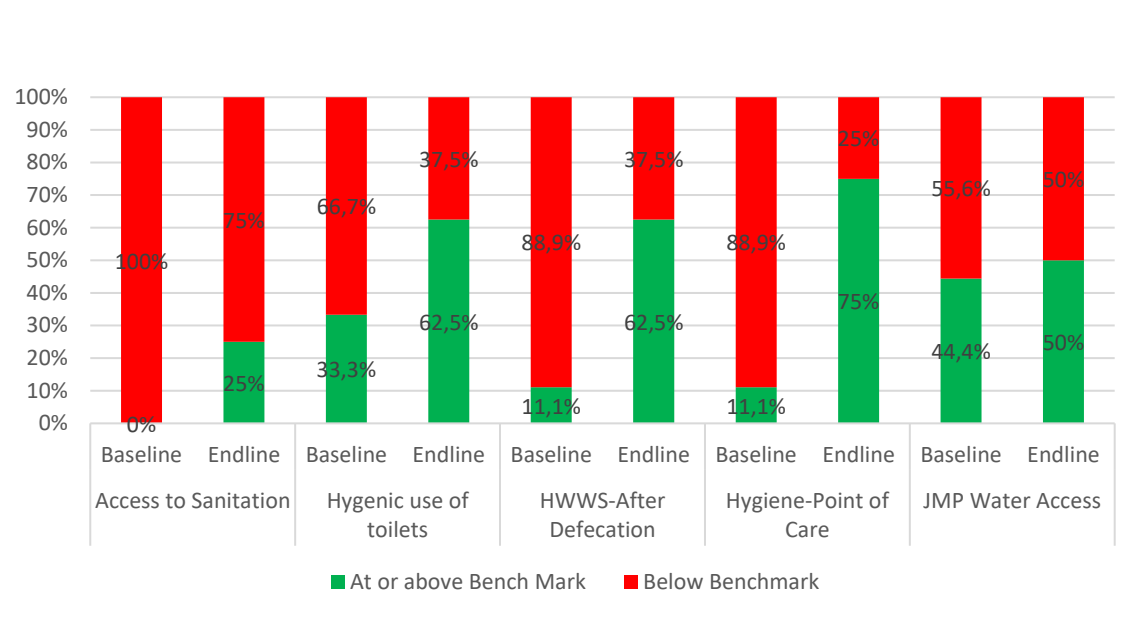
Table 5: List of HCFs in Parsa RM

SN	Name of HCF	RM Ward no.
1	Sangrampur Health Care Facility	2
2	Parsa Health Care Facility	5
3	Narayanpur Health Care Facility	3
4	Jinggadwa Health Care Facility	4
5	Parsa Private Clinic	5
6	First Aid Clinic	3
7	Gaurav Medical Clinic	1
8	Maa Baudhi Health Care	2

Impact indicators

The initiative conducted baseline and endline surveys covering four indicators measuring impact and three indicators measuring outcome. Impact indicators were defined on a scale of '0' to '4' for access to sanitation, hygienic use of toilets and hygiene (access to a handwashing station after defecation and the point of care). For drinking water and environmental cleanliness practices, JMP indicators were used. The following graph summarises the findings on impact indicators from baseline to endline for Parsa RM. For each indicator, '2' was considered the benchmark.

Figure 6: Baseline Vs Endline- Impact indicators – Parsa RM



The indicator for access to sanitation indicates that at baseline, toilets at all eight HCFs in Parsa RM were below the benchmark, i.e., none of the HCFs had separate toilets for staff and patients, separate toilets for males and females, or accessible toilets for people with disabilities. This situation improved, and in two HCFs where the initiative constructed inclusive toilets, the indicator was above the benchmark at the endline survey.

Similarly, at baseline, only three HCFs' toilets were above the benchmark, i.e., have a functional toilet, while three HCFs did not have any toilets at all. After forming an HF-QIC and an HF-OMC, the situation improved in four public/government HCFs, resulting in 62.5% having a functional, clean and private toilet.

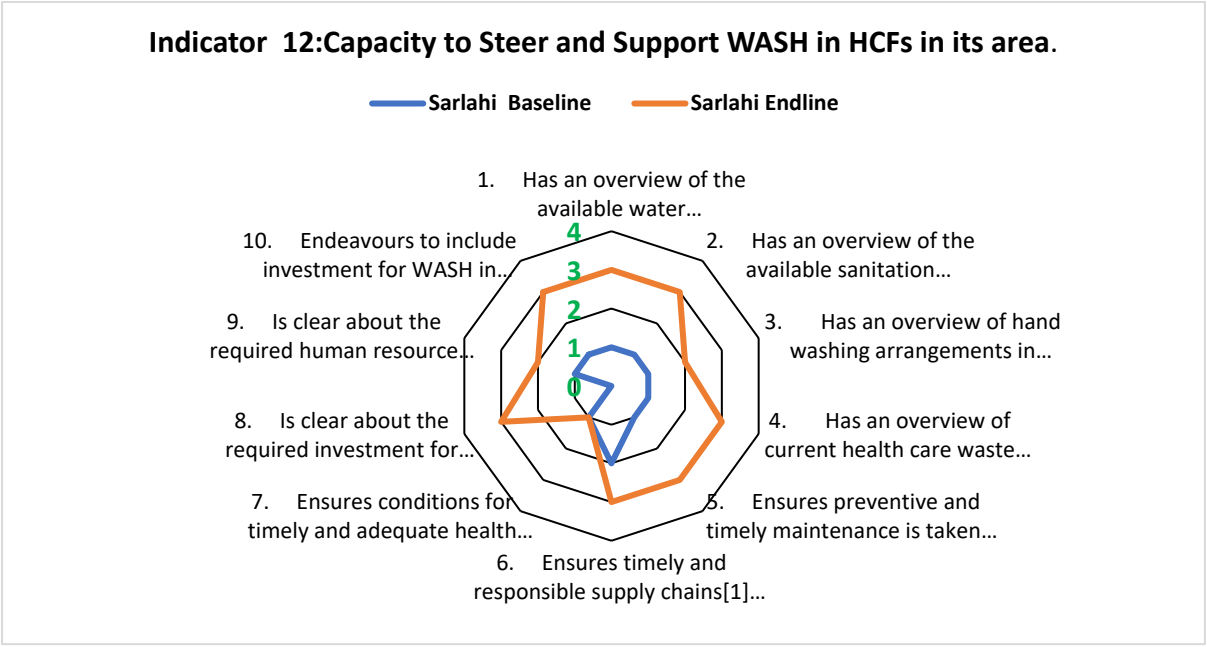
Considering the indicator on handwashing after defecation and at the point of care, only one HCF had a handwashing station with soap for after defecation. None of the HCFs had handwashing provisions with soap or alcohol-based rub at the point of care. At the end of the initiative, the situation improved in public HCFs, with five HCFs having sufficient handwashing stations with soap and permanent water supply to be used after defecation. Still, two HCFs lack a handwashing station with alcohol rub or soap and a permanent water supply at points of care.

Regarding water supply, only three HCFs had an improved source either on the premises or within a 30-minute round trip distance at the beginning of the initiative. However, after the initiative supported improving the water source, four HCFs are now getting water from an improved source.

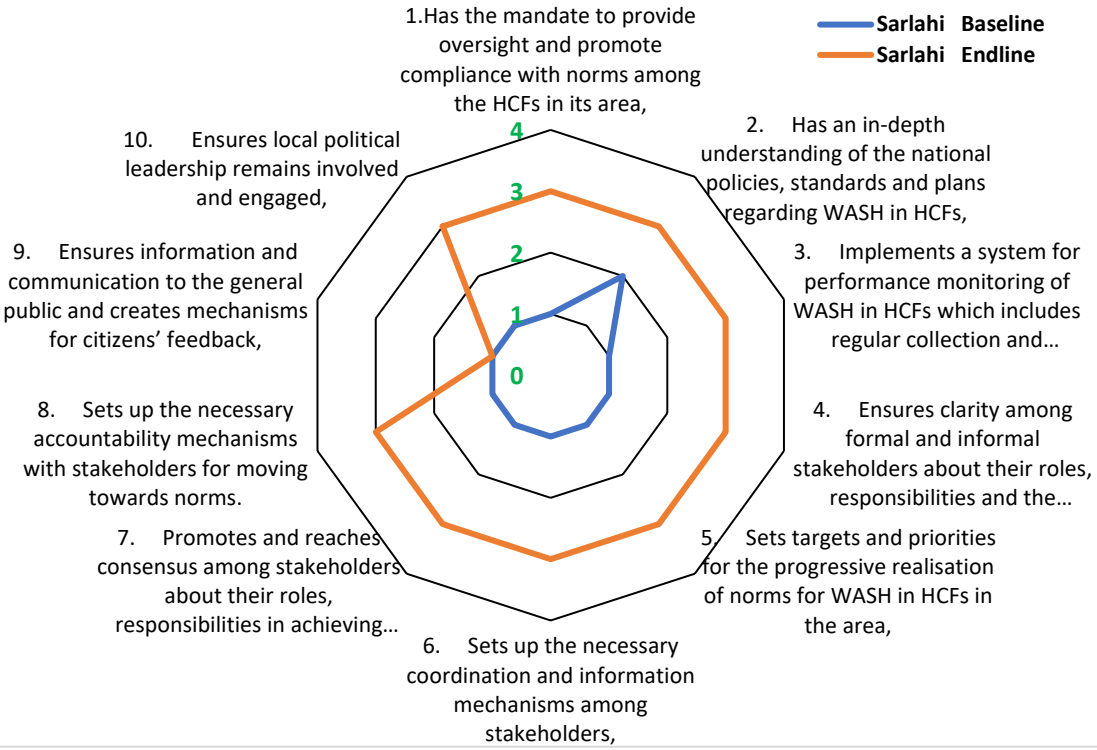
Outcome indicators

For outcome indicators, scorecards and a QIS ladder were used to measure progress on a scale from '0' (no progress) to '4' (advanced progress). Standard scorecards for three indicators specific to HCFs were used. These indicators were capacity to steer and support WASH in HCFs in its area (RM level), capacity to provide oversight and promote compliance with norms for WASH in HCFs in the area (RM level) and leadership and management for WASH at the health care facility. For each indicator, '2' was considered the benchmark.

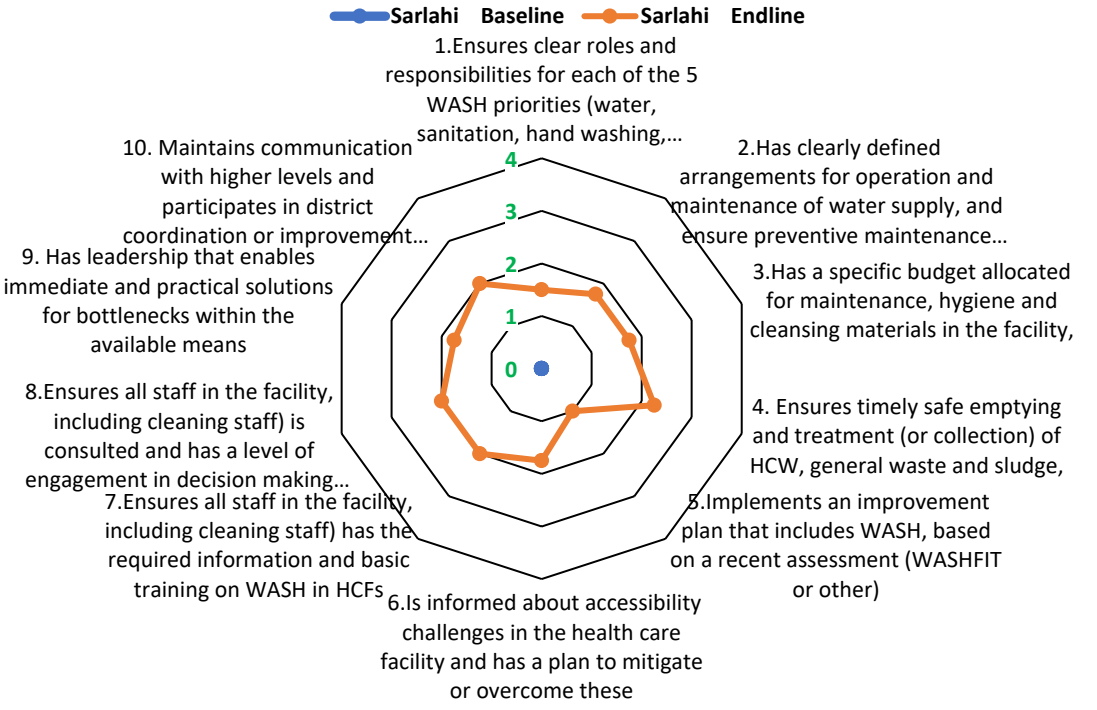
Figure 7: Baseline Vs Endline- Outcome indicators – Parsa RM



Indicator 13:Capacity to provide oversight and promote compliance with norms for WASH at HCFs in the area.



Indicator 14:Leadership and Mangement for WASH at the Health care Facility



At the beginning of the initiative, the HCFs were not fully aware of the status of WASH infrastructure and service quality. Operation and maintenance of WASH services and

infrastructure and linkages with the market chain were the HCFs' lowest priority. The HCFs also lacked the budget for human resources requirements for improving WASH in HCFs and any plans or budget to enhance the quality of service. The performance monitoring of the system, roles and responsibilities of formal and informal stakeholders, prioritisation of WASH service quality, information and communication strategy, and involvement of local political leaders for improving WASH service quality with HCFs were all below the benchmark. Further, the leadership and management of WASH within the HCFs were very poor in all HCFs. Above all, the management of health care waste was the poorest in all HCFs.

After the initiative intervention and formation of an HF-OMC and an HF-QIC in all HCFs, there have been regular meetings, adoption of a checklist for monitoring WASH service quality and a focus on knowledge on different management dimensions of WASH through training and workshops. As a result, the situation is much improved, and most of the indicators are at least above the benchmark in all HCFs. Considerable progress has been made in waste management, especially in the two HCFs where waste bins were provided, and burial pits and placenta pits were constructed along with inclusive toilets.

Two out of four government HCFs from Parsa RM were selected for WASH infrastructure construction or upgrading. The selection was based on geographical access, current WASH service status, the COVID-19 situation, and recommendation from the RM. The prioritisation basis for each HCF is presented below:

Table 6: Reason for prioritisation of HCFs for intervention in Parsa RM

SN	Name of the HCF	Reason for Prioritisation
1	Sangrampur Health Care Facility	- No toilet, - Potentiality of many people using the service from the centre, and - Recommendation of RM.
2	Parsa Health Care Facility	- Poor condition of existing toilet, - Maximum number of service takers, - Availability of land for construction, and - Recommendation of RM.

3.2.1 Sangrampur Health Care Facility

Sangrampur HCF lies in Ward no. 2 of Parsa RM, Dailekh. Before the initiative, there was no toilet available at this HCF. A tube well provided a water supply. After the initiative intervention, a universally accessible toilet was built along with a proper septic tank and soak pit, a waste burial pit, an overhead tank for water supply and a handwashing station. The toilet is currently being used with reported high user satisfaction. Previously, visitors used to urinate in open spaces and even defecate around the HCF. Now visitors report that they are very excited to use these toilets and realise that all infrastructure should be accessible for people with disabilities.

During the construction of the toilet, regular feedback and suggestions were collected from this HCF. The guideline provided during the handover of the initiative is being followed, and the HCF has decided to use their internal budget for minor repairs. They plan to solicit assistance from the RM if a major repair is required. They are very satisfied with the design, construction materials and speed of the work by the contractor.

The initiative also worked on improving governance by supporting the formation of an inclusive HF-OMC and HF-QIC. A nine-member (three female and six male) HF-OMC was formed with the ward president in the presidency and the health centre in-charge as member secretary. The HF-OMC conducts monthly meetings on the last Friday of every month to oversee the progress and gaps in PHC.

Along with the HF-OMC, a five-member (two female and three male) HF-QIC was also formed, comprising two HCF staff, one representative from the HF-OMC, one FCHV and one stakeholder. The HF-QIC regularly conducts meetings to resolve any issues that arise and ensure effective, safe, timely, and equitable services.

Three staff members participated in IP/BCC training organised by the initiative. After the training, they used their knowledge and strictly followed the IP protocol, especially related to COVID-19. The FCHV has been using the IEC materials they were provided during their community visit for BCC.

As the recently constructed WASH infrastructures here are sufficient, there is no current plan for upgrading WASH infrastructure in this HCF.

3.2.2 Parsa Health Care Facility

Parsa HCF is situated in Ward no. 5 of Parsa RM. The existing toilet was in poor condition with no piped-water supply and weak infrastructure. There was no handwashing station or proper drinking water supply. The initiative constructed a new inclusive toilet and waste burial pit. The HCF is also a birthing centre; previously, placenta and other hazardous waste were thrown haphazardly in the HCF compound. The initiative constructed a placenta pit for the safe decomposition of placenta and other similar waste.

The HCF was regularly consulted during design, site selection, and construction. The operation guideline is being followed, and the quality improvement committee monitors services regularly. There are no other existing budgets or programmes related to WASH in this HCF. An issue of land allocation for toilets was resolved in coordination with the RM.

The initiative also supported the formation of an HF-OMC and HF-QIC. A nine-member (four female and five male) HF-OMC was formed with the ward president holding the presidency and the health in charge as member secretary. The HF-OMC is currently conducting monthly meetings on the last Friday of every month to oversee the progress and gaps in PHC.

Along with the HF-OMC, a five-member HF-QIC was also formed comprising two HCF staff, one representative from HF-OMC, one FCHV and one stakeholder. The HF-QIC regularly conducts meetings to resolve any issues and ensure effective, safe, timely, and equitable services.

Two staff from this HCF participated in IP/BCC training which has helped them remain safe during

Increased workhours of health care workers

Ajay Kumar Shah, a health care facility sub-in-charge at Parsa Health Post in Sarlahi district who lives with physical challenges, has an easier time at work after the construction of an inclusive toilet at the health post. Before, the lack of an accessible toilet at work forced him to travel back home to use a toilet.

The availability of accessible toilets with water and sufficient space for wheelchair movement has made life easier for Mr. Shah who can now concentrate on his work. "Now, I don't have to worry about the toilet while on duty," says Mr. Shah.

Separate, spacious cubicles for women with proper ventilation and lighting, access to water, and provision of bins for disposal of pads has made it easy for staff members to manage menstrual hygiene at work.

their interaction with service seekers in this current COVID-19 context. There was one whole-site orientation for all staff of the HCF and one on-site orientation for health care staff, FCHV and QIC members. In this orientation, the FCHVs were provided with IEC materials on BCC and discussed five indicators of BCC.

3.2.3 Other HCFs

Half of the HCFs in Parsa RM are private HCFs that operate in rented rooms. Some of them had a small common toilet, while others did not have any toilets at all. The RM has not yet conducted any monitoring or issued any regulations for these private HCFs. However, they were invited to and participated in all capacity building events organised by the initiative, which imparted to them the importance of quality WASH services and provisions.

Though the RM expressed high appreciation for the work done by the initiative and committed to replicating similar projects in the future, they have yet to develop a plan for other HCFs. All the training and governance activities (formation of HF-QICs and HF-OMCs) were conducted in all four public HCFs from this RM. A technical workshop was also organised where technical persons (engineers) discussed the design and features of the inclusive toilets and other infrastructure constructed in two HCFs. Upon request, refreshment training for the design and monitoring of inclusive infrastructure was also organised in the neighbouring two RMs – Ramnagar RM and Chandranagar RM. The engineers have committed to replicate similar designs while constructing any public infrastructure in the future.

An inclusive RM-QAWC was also formed with the presidency held by the RM chairperson and member secretary held by the health coordinator. The RM-QAWC has been conducting monthly monitoring visits and holding monthly meetings to oversee the progress and gaps in HCFs.

The RM has also committed to providing any major repairs required in WASH infrastructure in these HCFs. Due to COVID-19, the RM has realised the importance of proper HCFs. Thus, they are planning to significantly increase their health sector budget to improve the quality of services.

3.3 Initiative constraints

The initiative found several constraints during implementation:

- The technical staff required were not available locally. The initiative hired technical staff (such as health officers) from other districts for both Dailekh and Sarlahi.
- The initial budget was based on learning from another SNV project, Health and Hygiene Activity (HHA). However, the cost per health facility increased by around 25% due to the current market rate of materials and COVID-19.
- Due to COVID-19, local governments and health facility staff were more occupied with their daily duties. The training on infection prevention and BCC was not possible within the planned timeline due to the limited availability of facilitators.
- There was an issue with land acquisition in the case of Parsa Health Post, which was considered entirely political. Local leaders created hindrances to the development work, which were later resolved through mutual understanding.

4. Lessons learnt

This section highlights the lessons learnt regarding institutional strengthening, capacity enhancement and infrastructure development.

Local government buy-in for sustained positive changes

Involving local government representatives and authorities at all stages of initiative implementation is key to success. The COVID-19 New Initiative involved HCF staff members and RM representatives from the start-up meeting through monitoring and post-project follow-ups. This helped to generate interest and establish the same understanding of inclusive WASH facilities and services. Their involvement through collectively agreed monitoring protocols made follow-ups effective. This has been vital in influencing RMs to adopt standard WASH facility designs and monitoring protocols to scale up and cascade this approach in other HCFs under their jurisdiction. The initiative applied a combined approach in mobilising hardware and software activities by enhancing HCF staff capacities and understanding of local government representatives on the need for inclusive and disability-responsive WASH practices. Although only a few HCFs demonstrated WASH infrastructure in both municipalities, the design and approach generated buy-in from local government authorities and has provided them with models for replication.

Engaging local governments in disseminating learning outcomes can help replication and scale-up by influencing provincial and federal governments. This initiative has shown the importance of collaboratively working with RMs and HCFs to influence them.

Supply chain strengthening for scaling up and faster results

Faster results were possible by mobilising external contractors instead of using local ones. The cost to construct inclusive and disability-responsive WASH infrastructure was 20% higher than normal. A stronger market supply chain needs to be established, focusing on policy and regulatory frameworks, operations and processes, and financing and resource mobilisation. Local government, communities, and the private sector need to collaborate for faster scaling in remote and hard-to-reach areas. Local partners believe that enhancing the capacities of local water supply and sanitation vendors could be a step forward in scaling up and faster results.

Private sector as potential marketers of inclusive WASH infrastructure

Private partnership can help in the promotion of inclusive WASH facilities at public institutions. The service provider (private construction company) employed in this initiative has been replicating inclusive design in an unexpected outcome. The service provider received demands from other development agencies and the private sector (e.g., party houses) to build inclusive WASH infrastructures in other parts of the country. The service provider, considered a best performer in constructing quality inclusive WASH infrastructures, has been a promoter of inclusiveness. With permission from SNV, the company is now branding the accessible WASH infrastructure design to keep momentum behind the concept of inclusiveness. If the design is curated properly, it can be promoted nationally and globally.

Possibilities for maximising training outcomes

The involvement of engineers from institutions other than HCFs could have provided an opportunity to build inclusive and disability-responsive infrastructure at other public buildings in RM. Realising the importance of accessible infrastructure and learning from SNV's COVID-19 New Initiative intervention at the HCF in Parsa RM, an engineer at Chandrapur rural municipality designed and built a ramp at the municipal office building.

A small increase in capacity-building funds could make the participation of engineers from other public institutions possible, thereby increasing the potential for scaling up inclusive and disability-responsive WASH and other infrastructures.

Likely subsidence of COVID-19 an opportunity for scale-up

The second wave of COVID-19 resulted in delays in implementation as well as field supervision and monitoring. After the gradual slowdown of the COVID-19 caseload across the country, the initiative's activities escalated later. Hence, scaling up can be faster and effective if similar activities are undertaken during the period when we experience likely subsidence of COVID-19 cases. The participation of health workers in training and monitoring activities could be accelerated during the subsidence period as it was not possible when the caseload was higher.

5. Discussion

This section highlights the successes and challenges of the initiative based on a review of the documents and key informant interviews with stakeholders.

Realisation of the importance of proper WASH facilities at HCFs

Access to clean drinking water, sanitation, and hygiene is a human right; this right is enshrined within the United Nations Convention on the Rights of Persons with Disabilities (CRPD).[9] It is essential to ensure proper WASH facilities and services at HCFs to achieve the national health goals and Sustainable Development Goals (SDGs)—3 (ensure healthy lives and promote well-being) and 6 (ensure availability and sustainable management of water and sanitation). In addition, HCFs must have the appropriate inclusive infrastructure and sufficient staff capacity to provide safe, effective, equitable and people-centred services. WASH services strengthen the resilience of health care systems to prevent disease outbreaks[10] and provide the capacity to effectively respond to emergencies (including to prevent the spread of COVID-19).

The Government of Nepal has decentralised the authority and responsibilities related to health care after federal restructuring in 2015. Nepal's health care service delivery system is also changing in the transition to federalism. The responsibility for delivering public health services now rests with the local governments. Learnings showed that local governments are realising the importance of improved health care systems and are also better positioned to allocate funds for such initiatives. In the current context of the COVID-19 pandemic, local governments are prioritising enhancing HCFs' capacity to control the spread of the virus and provide safe treatment of patients. In this regard, WASH interventions by SNV and its local partners helped enhance HCFs' capacities in two selected RMs.

Inclusive and disability-responsive WASH facilities and services

According to the baseline survey report of the Beyond the Finish Line project (SNV, 2019), about 45% of HCFs in the eight project RMs in Sarlahi and Dailekh had no handwashing facility near a toilet; 10% had a handwashing facility, but no soap was available. The inclusive WASH infrastructure at the HCF allowed the physically challenged HCF sub-in-charge at Parsa Health Post in Sarlahi to work full time as he no longer needs to travel back home to use a toilet. Separate, spacious cubicles for women with proper ventilation and lighting, access to water, and provision of bins for the disposal of pads have also made it easier for staff members to manage menstrual hygiene at work.

The standard of WASH in HCFs is directly linked with the quality of health services; at any given time, the prevalence of healthcare-associated infection varies between 5.7% and 19.1% in low- and middle-income countries.[11] The results of this initiative have established a benchmark in the design of inclusive and disability-responsive WASH infrastructures at HCFs and institutionalised mechanisms for sustainable and quality operation and management.

[9] International Disability Alliance, 'Resource Page on Disability-Inclusive WASH' https://www.internationaldisabilityalliance.org/DisabilityInclusiveWASH (accessed 26 November 2021)
[10] Water and Sanitation for Health Facility Improvement Tool (WASH FIT). Geneva: World Health Organization; 2017.
[11] World Health Organization, 'Fact Sheet', *Health care-associated infections,* https://www.who.int/gpsc/country_work/gpsc_ccisc_fact_sheet_en.pdf, (accessed 26 November 2021)

Institutional strengthening and capacity building

WASH infrastructure operation and management monitoring structures at RMs and HCFs have been reformed and strengthened at Parsa and Thantikandh RMs in Sarlahi and Dailekh. The HF-QIC, HF-OMC, and RM-QAWC have been reconstituted to make them inclusive, and a protocol defining their roles and responsibilities has been prepared and institutionalised. 'It has been easy to track operation and management challenges after the formulation of this monitoring protocol and increased accountability among HCF staff members and RM representatives,' says Laxmi Buda from Thantikandh PHC in Dailekh. Moreover, the RM has committed to providing any major repairs required in WASH infrastructure in these HCFs.

Accessibility auditing has been an integral part of the initiative. Through activities such as training, restructuring of inclusive monitoring mechanisms, and disability audit protocols, the partners helped to spread and institutionalise messages on inclusive WASH at HCFs and wider themes, including COVID-19 prevention and control.

6. Conclusions and recommendations

Learning from this initiative provides an alarming picture of the state of WASH in HCFs in the selected RMs. The limited information on the WASH status of HCFs at local level made planning to improve such facilities difficult. Though HCFs are functioning well in health care services, their quality of services has been compromised due to poor WASH infrastructure and limited knowledge on inclusiveness. An assessment of WASH in HCFs, based on the recently endorsed national standards for WASH in HCFs, can help in evidence-based planning, implementation and monitoring of new projects. Information on human resources, budgets, patient/staff satisfaction and documentation for appropriateness of WASH is mostly neglected[12] during HCFs surveys. Therefore, these aspects should be included for evidence-based planning of HCF activities to ensure quality service delivery. A national-level dialogue with policymakers and sector stakeholders would be useful to advocate the importance of mainstreaming proper WASH facilities and practices within HCFs.

Commitments from elected representatives

Commitments from elected local representatives, enforcement of national standards, and clearly defined roles and responsibilities of health care-related stakeholders provide an enabling environment to ensure inclusive WASH facilities and services at HCFs. Implementing sustainable WASH services also requires trained human resources and adequate budgets for regular operation and maintenance. Buy-in from local government can help establish a conducive working environment to move forward. This is vital in influencing the annual budgeting and planning of RMs to adopt standard WASH facility designs and monitoring protocols to produce cascading positive effects in other HCFs across the country. Therefore, an appropriate dissemination strategy is essential for replication and scaling-up. Initiative activities at both RMs have shown the importance of collaboration for local government buy-in.

Inclusive and disability-responsive WASH facilities and services

The scaling up of the initiatives for inclusive and disability-responsive WASH facilities and services at HCFs needs strengthened institutional and technical capacity at the local level. This requires an increased number of skilled human resources—for design, construction, and upkeep via a strong market supply chain at the local level. Scaling up such initiatives based on this learning can help the government achieve the target of universal access to safe water, improved toilets, and sustained hygiene practices at HCFs.

A collaborative training on inclusive and disability-responsive WASH infrastructure can be helpful in faster scaling up and institutionalisation of inclusive and disability-responsive WASH infrastructure at all public buildings in RMs. Such training programmes can be organised in collaboration with RMs so that all responsible engineers will be trained and oriented on such infrastructure design and operation. A small increase in capacity-building funds could produce higher outcomes, thereby increasing the potential for scaling up inclusive and disability-responsive WASH and other infrastructures at public institutions.

Duration of the initiative

The initiative timespan could be planned with flexibility so that scaling up can be done during subsidence of COVID-19 cases. This helps in understanding local challenges that

[12] Patel, Krupali, Kalpana, Pachillu, Trivedi, Poonam, Yasobant, Sandul and Saxena, Deepak. "Assessment of water, sanitation and hygiene in HCFs: which tool to follow?" Reviews on Environmental Health, vol. 34, no. 4, 2019, pp. 435-440. https://doi.org/10.1515/reveh-2019-0001

might result in conflicts. Moreover, this provides an opportunity to mobilise all concerned, including health care staff, in training and monitoring activities for sustainable outcomes. In addition, linking existing infection prevention and control training with specific items on WASH and health care waste management measures would improve the quality of services at HCFs, thereby delivering WASH messages at community level. In Kenya, for example, three years after implementing a programme to improve handwashing and water treatment in rural HCFs, 97% of the facilities still had water stations in use, and 79% of staff knew how to treat water (Sreenivasan et al., 2014).[13] Hence, it's high time to work collectively in scaling up and institutionalising good WASH practices at HCFs by improving both infrastructure and capacities of health care staff. Customising training modules considering the recently approved 'National standard for WASH in health care facilities of Nepal' could be a first step in designing such training that includes both IP and WASH-related BCC.

Furthermore, disseminating learning outcomes from the COVID-19 New Initiatives and engaging local governments can help replication and scale-up by influencing provincial and federal governments. The attention to WASH in HCFs, particularly at health posts and primary health care centres, has proven successful and paved the way for national advocacy to upgrade WASH infrastructures across the country. The COVID-19 initiative in both the districts in the two RMs has shown the importance of collaboratively working with RMs and HCFs for better results in a short timeframe.

[13] Sreenivasan N, Gotestrand SA, Ombeki S, Oluoch G, Fischer TK, Quick R. Evaluation of the impact of a simple hand-washing and water-treatment intervention in rural health facilities on hygiene knowledge and reported behaviours of health workers and their clients, Nyanza Province, Kenya, 2008. Epidemiol Infect. 2015 Mar;143(4):873-80. doi: 10.1017/S095026881400082X. Epub 2014 May 27. PMID: 24865584.

Annexures

Annexure 1: Outcome indicators

Outcome indicator 1: Capacity to steer and support WASH in HCFs in its area

Capacity to steer and support WASH in HCFs in its area	Baseline Survey			Endline Survey		
	Parsa	Thantikandh	Average	Parsa	Thantikandh	Average
1. Has an overview of the available water infrastructure and service quality	1	2	1.5	3	3	3
2. Has an overview of the available sanitation infrastructure, the quality and accessibility for all	1	2	1.5	3	3	3
3. Has an overview of hand washing arrangements in HCFs and the potential bottlenecks	1	1	1	2	3	2.5
4. Has an overview of current health care waste management practices and bottlenecks, in terms of segregation, storage and treatment	1	0	0.5	3	3	3
5. Ensues preventive and timely maintenance is taken up as a priority in all HCFs	1	1	1	3	2	2.5
6. Ensures timely and responsible supply chains to HCFs	2	1	1.5	3	2	2.5
7. Ensures conditions for timely and adequate health care waste treatment in the area	1	0	0.5	1	1	1
8. Is clear about the required investment for maintaining, upgrading and potentially replacing existing WASH infrastructure in HCFs	0	1	0.5	3	1	2
9. Is clear about the required human resource investment for improving WASH in HCFs	1	1	1	2	3	2.5
10. Endeavors to include investment for WASH in plans and budgets at different levels	1	1	1	3	3	3

Outcome indicator 2: Capacity to provide oversight and promote compliance with norms for WASH in HCFs in its area

Capacity to provide oversight and promote compliance with norms for WASH in HCFs in its area	Baseline Survey			Endline Survey		
	Parsa	Thantikandh	Average	Parsa	Thantikandh	Average
1. Has the mandate to provide oversight and promote compliance with norms among the HCFs in its area	1	2	1.5	3	3	3
2. Has an in-depth understanding of the national policies, standards and plans regarding WASH in HCFs	1	2	1.5	3	3	3
3. Implements a system for performance monitoring of WASH in HCFs which includes regular collection and analysis of information	1	1	1	2	3	2.5
4. Ensures clarity among formal and informal stakeholders about their roles, responsibilities and the norms with regards to WASH in HCFs	1	0	0.5	3	3	3
5. Sers targets and priorities for the progressive realisation of norms for WASH in HCFs in the area	1	1	1	3	2	2.5
6. Sets up the necessary coordination and information mechanisms among stakeholders	2	1	1.5	3	2	2.5
7. Promotes and reaches consensus among stakeholders about their roles, responsibilities in achieving set targets/priorities	1	0	0.5	1	1	1
8. Sets up necessary accountability mechanisms with stakeholders for moving towards norms	0	1	0.5	3	1	2
9. Ensures information and communication to the general public and creates mechanisms for citizens feedback	1	1	1	2	3	2.5
10. Ensures local political leadership remains involved and engaged	1	1	1	3	3	3

Outcome indicator 3: Leadership and management for WASH at the health care facility

Leadership and management for WASH at the health care facility	Baseline Survey			Endline Survey		
	Thantikandh	Parsa	Average	Thantikandh	Parsa	Average
1. Ensure clear roles and responsibilities for each of the 5 WASH priorities (water, sanitation, hand washing, HCWM and cleanliness)	0	0	0	2	1.5	1.75
2. Has clearly defined arrangements for operation and maintenance of water supply, and ensure preventive maintenance takes place routinely	0	0	0	1	1.75	1.37
3. Has a specific budget allocated for maintenance, hygiene and cleansing materials in the facility	0	0	0	1	1.75	1.37
4. Ensure timely safe emptying and treatment (or collection) of HCWM, general waste and sludge	0	0	0	2	2.25	2.12
5. Implements an improvement plan that includes WASH based on a recent assessment (WASHFIT or other)	0	0	0	1	1	1
6. Is informed about accessibility challenges in the health care facility and has a plan to mitigate or overcome these	0	0	0	2	1.75	1.87
7. Ensures all staff in the facility, including cleaning staff has the required information and basic trainings on WASH in HCFs	0	0	0	2	2	2
8. Ensures all staff in the facility, including cleaning staff is consulted and has a level of engagement in decision making about resolving bottlenecks	0	0	0	2	2	2
9. Has leadership that enables immediate and practical solutions for bottlenecks within the 0available means	0	0	0	1	1.75	1.37

10. Maintains communication with higher levels and participates in district coordination or improvement initiatives	0	0	0	2	2	2

Annexure 2: Impact indicators

Impact indicators for access to sanitation

	Impact indicator for Access to Sanitation
4	**Environmentally safe sanitation service Advanced** sanitation facility as below ***AND*** human faeces are contained for storage/collection in such a way that contents or effluent cannot contaminate surface or groundwater.
3	**Advanced sanitation service** **Improved** Toilet without fly access: Human faeces contained in a toilet pit/ tank in such a way that it is inaccessible for human contact *or* flies or other animals (rodents, insects) ***AND*** separate facilities with the ratio of improved toilets in compliance with the defined standard for men, women, inpatients and outpatients. ***AND*** at least one toilet: Separate for staff and patients and/or Suitable for people with limited mobility
2	**Basic sanitation service** Improved Toilet: Human faeces contained in a toilet pit/ tank in such a way that it is inaccessible for human contact or contact by other animals ***but*** still is accessible by flies (e.g., pan allows flies to enter and leave pit) ***AND*** at least one toilet: Separate for staff and patients Separate for men and women Suitable for people with limited mobility Separate for in-patients and out-patients (if applicable) ***AND*** not used by people from outside the health facility (excluding visitors)
1	**Limited sanitation service** Unimproved toilet: Human faeces are contained in a toilet pit/ tank but are accessible for human contact or contact by animals (insects, rodents) ***OR*** Toilet has no pit and human faeces is conveyed directly to the environment ***OR*** no separate facilities for women and men, staff, in-patient/outpatients, no facilities for people with limited mobility. ***OR*** toilets can be used by people from outside the health facility (excluding visitors)
0	No **toilet/ no service** **There are** no toilets available in the premises of the health facility

Impact indicators for access to handwashing with soap

	Impact indicator HF (Health facilities) After defecation	Impact indicator HF Points of care
4	Sufficient hand washing stations with soap and permanent water supply Hand washing station with soap, hands not touching the water storage (see below) AND the hand washing located at a tap with running water or at a hand pump AND number of handwashing stations is at least one fourth of the number of cubicles	Hand washing station with alcohol rub, or with soap and permanent water supply Provision of hand washing facility within the room or within 2 meters AND either with soap as well as permanent water supply (tap or pump) OR alcohol-based rub (in this case no water is required)
3	Sufficient hand washing stations with soap, hands not touching the water storage There is a hand washing station within accessible distance AND soap is observed at the hand washing station AND the practice of hand washing does not involve hands touching the water storage AND number of handwashing stations is at least one fourth of the number of cubicles	Hand washing station with soap, hands not touching the water storage There is a hand washing station within accessible distance AND soap is observed at the hand washing station AND the practice of hand washing does not involve hands touching the water storage
2	Hand washing station with soap There is a hand washing station within accessible distance AND soap is observed at the hand washing station	Hand washing station with soap or alcohol-based rub Provision of hand washing facility within the room or within 2 meters BUT without availability of soap for washing hands or alcohol-based rub
1	Hand washing station, no soap There is a hand washing station within accessible distance	Hand washing station, no soap or alcohol-based rub Provision of hand washing facility within the room or within 2 meters BUT without availability of soap for washing hands or alcohol-based rub
0	No hand washing station There is no hand washing station OR the hand washing station is not within accessible distance OR the hand washing station shows no signs of use	No hand washing station There is no hand washing station OR the hand washing station is not within accessible distance OR the hand washing station shows no signs of use

Impact indicators for access to water (JMP)

Level	Criteria/description
	No services No water source or unimproved sources (unprotected well/spring, surface water) or an improved source that is more than 500m from the facility
	Limited An improved water source is within 500 m of the premises but not all requirements of basic services are met
	Basic Water is available from an improved source on the premises
	Advanced To be defined at national level (N/A for Nepal)

Annexure 3: Checklist of accessibility audit

	Address/location of public latrine:			
		Yes	No	If
Getting there	*Path*			
	Is the path to reach the latrine wide enough for a wheelchair user to use safely? *Minimum path width: 90cm (35 inches)			
	Is the path even and firm, with nothing to trip on?			
	Is the path easy to get to from the surrounding area? (e.g., no obstacles or very steep terrain)			
	Is the path clear of branches or any overhanging objects?			
	Is there a way for a person with vision impairment to follow the path (e.g., landmarks or guide rail)?			
	Is the path and ramp slope moderate enough for a wheelchair user to use independently? *Maximum slope gradient: 1 in 12			
	Can the facility be entered without using steps?			
	If there is a ramp into the facility, does it have handrails (at least on one side)			
	Does the path make users (including girls or women with disabilities) feel safe (e.g., it does not pass through an unsafe area)?			
Getting in	*Entrance*			
	Can a wheelchair user open the door and enter the facility independently? *Minimum door width: 80cm (32 inches)			
	Is the door easy to open (and lock) by someone with weak hands or by a child?			
	Can a wheelchair user close the door (and lock it) easily from inside?			
	If someone faced harassment or other safety risks when using the facility would they be able to safely get away from the facility?			
	Inside			
	Does the layout of the facility allow enough space for a wheelchair user/crutches user or a user and assistant to turn around in?			
	Is the floor non slippery?			
	Is the floor easy to clean?			
	When the door is closed, is there enough light to see inside the toilet during the day?			

	Does the toilet provide enough privacy for users?			
Getting on	*Squatting latrine*			
	Is there a something to guide a person with vision impairment to the latrine hole?			
	Is there something to hold onto when squatting to support people to squat and stand? (e.g., ropes or rails)			
	Is there a portable seat (commode) for people who cannot squat?			
	Are their handrails to support a wheelchair user easily transfer onto the portable seat?			
	Sitting latrine			
	Is there something to hold when sitting? (e.g., rope or rail)			
	Are there handrails to support a wheelchair user to easily transfer onto the latrine?			
	Can a wheelchair user flush the toilet (if applicable) independently?			
Hygiene	*Anal cleansing*			
	Can the anal cleansing system be reached when sitting on the latrine or portable seat?			
	Disposal of sanitary products			
	Is there a bin with a lid for disposal of sanitary products?			
	Is the bin emptied regularly?			
	Is there an agreed and safe procedure for the final disposal of waste?			
	Hand washing			
	Is there water available for hand washing all year round?			
	Is there soap or another method for cleaning (e.g., ash) available?			
	Can a wheelchair user access the handwashing facility and soap?			
	Is the tap or water device easy to operate by someone with weak hands or a child?			
	Is the hand washing facility private for females managing their menstruation?			
	Comments			

Annexure 4: Salient features of inclusive toilets

Salient Features (Type A)		
Description of items	**Quantity**	**Remarks**
Cubicle	3	Man-1 Woman-1 Universal-1
Disable Friendly Commode	1	Height 450mm
Hand Washing Basins	3	At accessible height (800mm-840mm)
Pan	3	
Door	3	With lock, latch and handle at (1067mm - 1219mm)
Grab bars	7	At suitable location and height around 700mm from GL
Ramp with railings and Tac Tiles	1	Minimum width 1500mm and with slope of 1:15
Ventilations	4	For lighting and air
Soak Pit	1	
Septic Tank	1	
Waste Burial Pit	1	For hazardous wastes
Placenta Pit	1	

Salient Features (Type B)		
Description of items	**Quantity**	**Remarks**
Cubicle	4	Man-1 Woman-2 Universal-1
Disable Friendly Commode	1	height 450mm
Hand Washing Basins	5	At accessible height (600mm-840mm)
Pan	4	
Urinal	3	2 - adult friendly and 1 - child friendly
Grab bars	8	At suitable location and height around 700mm from GL
Ramp with railings and tac tiles	1	Minimum width 1500mm and with slope of 1:15
Door	6	`
Ventilations	8	For lighting and air
Soak Pit	1	
Septic Tank	1	
Waste Burial Pit	1	For hazardous wastes
Placenta Pit	1	

Annexure 5: List of people consulted

Parsa Rural Municipality, Sarlahi	
Organisation	**Name**
Parsa Health Post	Ajay Shah
Jingdwa Health Post	Sanjay Lal Karna
RWUA (Local Partner)	Sapana Rana
Health Focal Person, Parsa RM	Nawal Kishor Mahato

Thantikandh Rural Municipality, Dailekh	
Organisation	**Name**
Lakandra Primary Helath Care Unit	Laxmi Budha
Bishala Health Post	Hasta Budha
WASH Focal Person, Thantikandh	Kriparam
Everest Club, Local Partner	Kamal Khadka Bimala Bisunke

SNV in Nepal	
WASH Sector Leader	Sunetra Lala
Project Leader – Rural Water Supply Services	Ratan Bahadur Budhathoki
WASH Engineer	Shova KC

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