Progress Brief

Inside Sustainable Sanitation and Hygiene for All (SSH4A)

Sustainable Sanitation and Hygiene for All (SSH4A) is SNV’s comprehensive approach to ensure equitable and sustainable access to improved sanitation and hygiene by supporting the delivery of district-wide rural sanitation and hygiene services. Developed since 2008 in Asia with IRC, the SSH4A approach is now implemented by SNV in 19 countries in Asia and Africa. The SSH4A programme integrates best practices in sanitation demand creation, sanitation supply chain strengthening, hygiene behaviour change communication and governance, including gender and social inclusion. SNV focuses on strengthening the capacities of local stakeholders to plan, implement, monitor and sustain sanitation and hygiene interventions.

This progress brief focuses on the recently concluded second phase of the SSH4A programme in Bhutan and Nepal, which was part of the DFAT Civil Society WASH Fund running from May 2014 until June 2018.

Summary

In the past four years the programme achieved the following impact:

- **360,000** people gained access to **74,000** new sanitation facilities which means that **92%** of the population now have access to an improved toilet.
- **392,000** people are now living in a total of **116** Open Defecation Free (ODF) communities.
- All existing toilets are in use and **96%** of all households practice hygienic use and maintenance of their toilets.
- **65,800** households gained access to a handwashing facility with water and soap which means that **73%** of the population are now able to wash their hands at critical times.

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SSH4A in Bhutan

In Bhutan, SNV has been implementing the SSH4A programme since 2008 as part of the national Rural Sanitation and Hygiene Programme (RSAHP) with the Ministry of Health. Following a successful pilot phase, the programme is now being scaled up nation-wide by the government and, as of 2018, has reached 10 of the 20 districts in Bhutan. Funded by the Australian Government’s Department of Foreign Affairs and Trade (DFAT), the programme supported the government in this effort by leading in two new districts (Samtse and Trashigang), providing ongoing support to sustain progress in two districts (Pemagatshel and Lhuntse), providing technical support to the Public Health Engineering Division (PHED) in scaling in six new districts (Mongar, Samdrupjongkar, Trashiyangtse, Trongsa, Tsirang and Wangdue) and providing strategic inputs at national level.

The DFAT funded SSH4A programme is implemented in eighteen districts in Bhutan and Nepal. More than 630,000 people directly benefited from the four-year phase of this programme.

SSH4A in Nepal

In Nepal, the SSH4A programme was initially implemented in the mountainous districts of the Karnali Zone and two hill districts in the midwest. The DFAT funded programme included three of the initial mountain districts (Jumla, Dolpa, Kalikot), three new hill districts (Rukum, Rolpa and Salyan) and two new districts (Sarlahi and Mahotari) situated in the southern plains (the terai belt). In addition to the DFAT funded programme, SNV in Nepal has been implementing an SSH4A programme in nine other districts, funded by the UK Government’s Department for International Development (DFID).
SSH4A Programme Impact | 2014 - 2018

This brief presents the cumulative results achieved against four impact indicators (see box 1 on page 10) over the past four years by comparing the endline measured in early 2018 against the baseline obtained in mid-2014. For Bhutan, results primarily reflect progress made in Samtse and Trashigang districts. Progress on indicator 1 for the two ongoing districts of Lhuentse and Pemagatshel are shown separately based on baseline data collected in 2012/13. For Nepal, results reflect progress made in all eight focus districts.

INDICATOR 1: ACCESS TO SANITARY TOILETS (see figure 1)
This indicator is measured at household level and assesses access to toilets as well as design and quality of construction of toilets.

Access to toilets in Bhutan
During the four-year project period, over 5,700 new toilets were constructed in Samtse and Trashigang districts. As a result:

- toilet ownership increased from 67% to 88% overall.
- toilet ownership among the poorest 40% of households increased to 77% from 54%.
- households with access to a toilet reached 97%, either using their own toilet (88%) or using the toilet of someone else (9%).
- the proportion of people defecating in the open reduced from 18% to 3%.

The following additional results were realised in Bhutan:

- More than 12,000 people (around 3,000 households) gained access to improved sanitation in the two ongoing districts of Pemagatshel and Lhuntse.
- Led by PHED, an additional 75,000 people gained access to improved sanitation in a further six RSAHP districts.
- Since 2015, 39 communities (sub-district blocks) have achieved Open Defecation Free (ODF) status. Furthermore, in November 2017, the Mongar district was declared the first district with 100% improved sanitation coverage. Some 71,000 people are now living in ODF environments.

Access to toilets in Nepal
During the four-year project period, close to 47,000 new toilets were constructed in the eight districts. As a result:

- toilet ownership increased from 50% to 95% overall.
- toilet ownership among the poorest 40% of households increased to 94% from 18%.
- households with access to a toilet reached 99%, either using their own toilet (95%) or using the toilet of someone else (4%).
- the proportion of people defecating in the open reduced from 43% to 1%.

![Figure 1: Access to sanitary toilets in Bhutan - MDG definitions](image-url)

Toilet ownership has increased by **21%**
Toilet ownership has increased by **45%**

- **Bhutan**

  - Baseline (n = 751)
    - No toilet / open defecation: 18%
    - No toilet / use others: 15%
    - Unimproved toilet: 50%
    - Improved toilet: 67%
  - Endline 2018 (n = 776)
    - No toilet / open defecation: 3%
    - No toilet / use others: 12%
    - Unimproved toilet: 76%
    - Improved toilet: 88%

- **Nepal**

  - Baseline (n = 2,979)
    - No toilet / open defecation: 43%
    - No toilet / use others: 6%
    - Unimproved toilet: 44%
    - Improved toilet: 50%
  - End 2015 (n = 1,187)
    - No toilet / open defecation: 27%
    - No toilet / use others: 11%
    - Unimproved toilet: 52%
    - Improved toilet: 48%
  - End 2016 (n = 1,146)
    - No toilet / open defecation: 14%
    - No toilet / use others: 1%
    - Unimproved toilet: 74%
    - Improved toilet: 95%
  - Endline 2018 (n = 1,148)
    - No toilet / open defecation: 1%
    - No toilet / use others: 4%
    - Unimproved toilet: 95%
    - Improved toilet: 95%
In addition, 51 communities (VDCs) achieved ODF status (making all 77 project VDCs ODF) and 34 settlements (clusters within VDCs) achieved Towards Total Sanitised status. Some 321,000 people are now living in ODF environments.

**Sustainable Development Goal sanitation ladders**

Aligning with the Sustainable Development Goals (SDGs), estimates for access to safely managed services were developed in May 2018 using a combination of information obtained from SNV’s 2018 endline survey and field experience of SNV’s SSH4A team and national stakeholders (see figure 2). Further details can be found in SNV learning briefs: *Estimating Safely Managed Sanitation in Bhutan* and *Estimating Safely Managed Sanitation in Nepal*, June 2018.

**Figure 2: Access to sanitation - SDG definitions**

<table>
<thead>
<tr>
<th>Country</th>
<th>Rural Districts</th>
<th>Terai</th>
<th>Mountain</th>
<th>Rural Hill</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bhutan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JMP 2017 Rural Bhutan</td>
<td>39%</td>
<td>85%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>Endline 2018 SSH4A districts</td>
<td>4%</td>
<td>6%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Nepal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JMP 2017 Rural Nepal</td>
<td>35%</td>
<td>85%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td>Endline 2018 SSH4 districts</td>
<td>6%</td>
<td>14%</td>
<td>44%</td>
<td>47%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>District Type</th>
<th>No service</th>
<th>Unimproved</th>
<th>Limited service</th>
<th>Basic service</th>
<th>Safely managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Bhutan</td>
<td>39%</td>
<td>4%</td>
<td>12%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Terai</td>
<td>25%</td>
<td>13%</td>
<td>47%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Mountain</td>
<td>20%</td>
<td>7%</td>
<td>14%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Rural Hill</td>
<td>18%</td>
<td>3%</td>
<td>12%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

**Safely managed sanitation in Bhutan**

The Bhutan learning brief reveals that:
- 79% of faecal waste in the four project districts is likely to be safely managed compared to only 39% for the entire country, as estimated using the 2017 Joint Monitoring Programme (JMP) baseline data.
- Major faecal exposure risks occurred due to unsafe emptying or disposal of wet sludge from septic tanks and soak pits, the use of unimproved sanitation services (primarily dry pit latrines) and the failure to safely contain children’s faeces.

**Safely managed sanitation in Nepal**

The Nepal learning brief reveals that:
- 81% of faecal waste is likely to be safely managed in the three hill districts.
- 44% of faecal waste is likely to be safely managed in the three mountain districts; and
- 13% of faecal waste is likely to be safely managed in the two terai districts.
- Faecal exposure risks depend on specific local conditions but, in general, major risks are future anticipated risks from the failure to safely empty and safely treat faecal sludge.
Design and quality of toilets in Bhutan (see figure 3)
During the four-year project period in Samtse and Trashigang districts:

- the overall quality of toilets improved, with the proportion of improved toilets increasing from 50% to 76%.
- the proportion of unimproved and shared toilets decreased from 12% to 21%.
- the proportion of environmentally safe toilets increased from 34% to 71% overall.

In all four districts, 79% of all households now have an improved toilet. Furthermore, 92% of all existing toilets are pour-flush toilets, which require water for flushing. The remaining 8% consist of simpler dry pit latrines.

Figure 3: Access to sanitary toilet

Design and quality of toilets in Nepal (see figure 3)
During the four-year project period in the eight districts:

- the overall quality of toilets improved, with the proportion of improved toilets increasing from 44% to 95%.
- the proportion of unimproved and shared toilets decreased to 4% from 13%.
- the proportion of environmentally safe toilets among the poorest 40% of households increased from 32% to 94% compared to an overall increase of those types of toilets to 95%.

In the eight districts, almost all toilets (97%) are a flush type of toilet. The remaining 3% consist of simpler dry pit latrines.
INDICATOR 2: HYGIENIC USE AND MAINTENANCE OF TOILETS (see figure 4)

This indicator is measured at household level and assesses whether toilets are used or not, as well as the quality of operation and maintenance and hygiene status.

Hygienic use of toilets in Bhutan

During the four-year project period in Samtse and Trashigang districts:

- over 16,000 additional people started to use a toilet.
- the proportion of hygienically used and maintained toilets, those on or above the benchmark, increased from 70% to 90% overall.
- the proportion of toilets that meet the highest possible standards (toilet is functional, clean and provides privacy to the users) increased from 33% to 72% overall, equal to close to 11,000 additional households.

In the four districts, close to 110,000 people (71% of the total population) now have access to a functional and clean toilet that provides privacy to its users.

The endline survey also revealed that:

- 94% of households experienced no operating related problems while using the toilet. Lack of water (1.4%), uncleanliness (1.9%) and difficult to reach (0.7%) were cited as the main problems.
- 96% of households had no problems with maintenance of the toilets. A lack of water for cleaning (2.6%) and cleaning materials (0.5%) were cited as the main constraints.

Hygienic use of toilets in Nepal

During the four-year project period in the eight districts:

- over 223,000 additional people started to use a toilet.
- the proportion of hygienically used and maintained toilets, those on or above the benchmark, increased by 44% to 97% overall, with no noticeable differences across the different wealth quintiles.
- the proportion of toilets that meet the highest possible standards (toilet is functional, clean and provides privacy to the users) increased from 2% to 90% overall, equal to more than 78,000 households.

In the eight districts, over 438,000 people (90% of the total population) now have access to a functional and clean toilet that provides privacy to its users.

The endline survey also revealed that:

- 97% of households experienced no operating related problems while using the toilet. Uncleanliness (1.2%) and toilet too small (0.7%) were cited as the main problems.
- 97% of households had no problems with maintenance of the toilets. A lack of cleaning materials (2.2%) and blocked toilet (1%) were cited as the major constraints.

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**Figure 4: Hygienic use and maintenance of toilets**

- **Bhutan**
  - Baseline 2014/2016
  - Endline 2018
  - L4 = Toilet is functional, clean and provides privacy
  - L3 = Toilet is functional and clean
  - L2 = Toilet is functional with water seal / lid that covers squatting hole
  - L1 = Toilet is in use as a toilet
  - L0 = No toilet or not used as a toilet

- **Nepal**
  - Baseline 2014/2016
  - End 2015
  - End 2016
  - Endline 2018
  - L4 = Toilet is functional, clean and provides privacy
  - L3 = Toilet is functional and clean
  - L2 = Toilet is functional with water seal / lid that covers squatting hole
  - L1 = Toilet is in use as a toilet
  - L0 = No toilet or not used as a toilet
INDICATOR 3: ACCESS TO HANDWASHING FACILITIES WITH SOAP (see figure 5)

This indicator is measured at household level and assesses the existence and quality of handwashing facilities in or near the toilet as a proxy indicator for the practice of handwashing after defecation.

Access to handwashing facilities with soap in Bhutan

During the four-year project period in Samtse and Trashigang districts:

- the existence of handwashing facilities with water and soap inside or near the toilet (on or above the benchmark) increased from 37% to 65% overall.
- some 6,000 additional households gained access to handwashing facility with water and soap. An additional 1,600 households gained access to a handwashing facility in the two ongoing districts of Pemagatshel and Lhuntse.

In the four districts, close to 100,000 people (64% of the total population) now have facilities at home to wash their hands with water and soap at critical times.

Access to handwashing facilities with soap in Nepal

During the four-year project period in the eight districts:

- the existence of handwashing facilities with water and soap inside or near the toilet (on or above the benchmark) increased from 9% to 74% overall.
- some 58,300 additional households gained access to handwashing facility with water and soap.
- 40% of the poorest households are slowly catching up with the wealthiest 40% although there is still a noticeable difference of 68% versus 83%.

In the eight districts, more than 360,000 people (74% of the total population) now have facilities at home to wash their hands with water and soap at critical times.

Figure 5: Access to handwashing facilities in or near the toilet

<table>
<thead>
<tr>
<th></th>
<th>Bhutan</th>
<th>Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td>L4</td>
<td>37%</td>
<td>60%</td>
</tr>
<tr>
<td>L3</td>
<td>32%</td>
<td>3%</td>
</tr>
<tr>
<td>L2</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>L1</td>
<td>15%</td>
<td>43%</td>
</tr>
<tr>
<td>L0</td>
<td>48%</td>
<td>7%</td>
</tr>
</tbody>
</table>

- L4 = Handwashing facility with running (piped) water
- L3 = Handwashing facility that prevents water contamination
- L2 = Handwashing facility with water and soap
- L1 = Handwashing facility with water near toilet
- L0 = No specific handwashing facility

Legend: 
- = Benchmark
INDICATOR 4: TOILET CAN BE USED BY ALL, AT ALL TIMES WHEN AT HOME (see figure 6)

This indicator is measured at household level and assesses issues such as accessibility, convenience and privacy as proxy indicators for use of a toilet by all, at all times when they are in or around the home.

Ability to use a toilet when at home in Bhutan

During the four-year project period in Samtse and Trashigang districts:

- the proportion of toilets on or above the benchmark increased from 50% to 82%.
- the proportion of toilets that meet the highest possible standards (accessible for all, providing convenience and privacy and no evidence of children’s stool) increased from 40% to 74% overall.

Across the four districts, over 27,000 households now have access to a toilet that can be used by more than 117,000 people at all times when at home, meaning that all faecal matter can be disposed of safely (including the stool of infants and small children) and that no faecal matter was found in or around the house.

Ability to use a toilet when at home in Nepal

During the four-year project period in all eight districts:

- the proportion of toilets on or above the benchmark increased from 45% to 93%.
- the proportion of toilets that meet the highest possible standards (accessible for all, providing convenience and privacy and no evidence of children’s stool) increased from 21% to 91% overall.

In the eight districts, some 79,000 households now have access to a toilet that can be used by some 440,000 people at all times when at home, meaning that all faecal matter can be disposed of safely (including the stool of infants and small children) and that no faecal matter was found in or around the house.

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**Figure 6: Toilet can be used by all, at all times**

<table>
<thead>
<tr>
<th>Country</th>
<th>Baseline 2014/2016</th>
<th>Endline 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhutan</td>
<td>50% 40% 2% 8% 25% 45%</td>
<td>82% 74%</td>
</tr>
<tr>
<td>Nepal</td>
<td>45% 21% 2% 11% 8% 67% 2%</td>
<td>91% 93%</td>
</tr>
</tbody>
</table>

- L4 = No evidence of children’s stools in or around the house
- L3 = Toilet provides convenience and privacy
- L2 = Toilet is accessible for all, at all times
- L1 = Toilet is visibly in use
- L0 = No toilet or not in use as a toilet
Figure 7: Summary of progress 2014 - 2018

2014 - 2018 achievements

**Access to sanitary toilet**
- 74,000 households gained access to new sanitation facilities
- **27,000** new sanitation facilities
- **47,000** new sanitation facilities

**Hygienic use & maintenance of toilet**
- All toilets are in use and hygienic standards continue to improve
- **110,000** people (71%) are now using a hygienic toilet
- **438,000** people (90%) are now using a hygienic toilet

**Access to handwashing facility with soap**
- 65,800 households gained access to a handwashing facility with water and soap in or near the toilet
- **7,500** new handwashing facilities
- **58,300** new handwashing facilities

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**Bhutan**
- 4 districts + 6 govt’-led districts (technical support)
- **49** communities (Geogs) + 56 in govt’-led districts
- In the 4 districts some 34,000 households have benefited

**Nepal**
- 8 districts (3 mountain, 3 hill and 2 terai)
- **77** communities (VDCs)
- In the 8 districts some 87,000 households have benefited

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**Bhutan**
- 49 communities (Geogs) + 56 in govt’-led districts
- In the 4 districts some 34,000 households have benefited

**Nepal**
- 77 communities (VDCs)
- In the 8 districts some 87,000 households have benefited

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**Nepal**
- 8 districts (3 mountain, 3 hill and 2 terai)
- **77** communities (VDCs)
- In the 8 districts some 87,000 households have benefited
Box 1: Performance monitoring in the SSH4A programme

A shared monitoring framework with standard key performance indicators was developed as part of SNV’s SSH4A programme to monitor progress. This paper presents progress achievements to date against the following four impact indicators:

1. Progress in number of households (and number of people) with access to a sanitary toilet;
2. Progress in number of households (and number of people) that use a hygienic toilet;
3. Progress in number of people using a sanitary toilet when at home (“use by all, at all times”); and
4. Progress in number of households (and number of people) with adequate handwashing facilities with soap, in or near the toilet.

The above indicators measure changes in behaviour and practices based on a qualitative assessment. The Qualitative Information System (QIS) quantifies qualitative information with the help of progressive scales called ladders. Households can climb to higher levels on the ladders developed for each indicator. The value is in analysing and visualising improvements over the course of the programme.

To continuously observe changes across the intervention districts, village level data is collected by local authorities. Annual performance monitoring, carried out by SNV and its local partners, complements this ongoing monitoring. Since the start of this phase, it has used the Akvo FLOW tool, consisting of an Android smartphone app that facilitates data collection and automated data entry, and an internet-based management tool.