What costs are captured?

**Households:**
- Material and labour costs for building a toilet
- Costs of soap
- Cost for water installation / use

**Implementers:**
- Capital expenditure hardware costs: e.g., latrines for hard surface
- Capital expenditure software costs: e.g., training of health workers, material development, workshops
- Operational costs: transport, salaries

Results in brief

Before the intervention more than half of the HHs did not score basic or above on either of the three hygiene practices level ladder.

With an investment of USD 2 on hygiene interventions per household the programme saw a huge increase in safer hygiene practices:
- A 30% increase of households with a practice level of basic or above for sanitation and use and handwashing with soap; and
- Almost 40% for safe drinking water management.

Implementers’ costs

Programme spending on hygiene promotion averages approximately BTN 6.85 USD ($0.16 USD) per person.

Costs include salaries and other cost of programme advisors, government officials, NGOs and consultants (78% by NGOs/local capacity builders and 22% by others).

For example:
- Time spent on planning, preparation and coordination
- Travel costs, allowances, etc
- Training of Trainers for health assistants before the start of the programme
- Monthly outreach clinics by health assistants
- Global Handwashing Day activities and sanitation fair
- Intensive workshops on health and hygiene for household members
- Post-workshop follow-up activities

Costs related to the three behaviours

**Cost of toilet**
- Average amount household (with a toilet up to 2 years) are spending: BTN 8,100 (USD 134)
- Labour BTN 10,188 (USD 154)
- Material BTN 14,100 (USD 213)
- Engineering BTN 31 (USD 0.47)

**Cost of water**
- No water rates are charged for the rural households, but they have to pay about BTN 500-19,000 (USD 7.6–288) per year for the rural connection.
- Average amount households with a water system paid BTN 618 (USD 9.24)  per household / USD 1.97 per person.

**Cost of handwashing with soap**
- Of those households who said they spent money (23%) an average of BTN 2.07 USD ($0.03 USD) per month for handwashing with soap.
- Average amount households (with a toilet up to 2 years) are spending: BTN 0.30 USD ($0.005 USD) to buy a piece of soap per month/month: $ 0.03 USD ($0.005 USD)

Overview

The Hygiene Cost Effectiveness Study in Bhutan aims to analyse and compare the costs and outcomes of hygiene promotion interventions. It is based on IRC’s WASHCost methodology, designed to help determine the costs and efficacy of WASH-related hygiene promotion interventions.

In Bhutan, it is part of SNV Bhutan’s Sustainable Sanitation and Hygiene for All Programme, which provides technical support to the Ministry of Health for the further development and scaling up of the national Rural Sanitation and Hygiene Programme (RSaMP). IRC supports in terms of performance monitoring, knowledge and learning.

Why a Hygiene Cost Effectiveness Study?

We all know that unless improved water and sanitation services are used hygienically, health and socio-economic benefits will not be realised. We have limited knowledge of financial benchmarks for water and sanitation improvements and this is even less for hygiene improvement. To encourage people to improve hygiene behaviour; many hygiene promotion activities are being developed and carried out worldwide.

However, planners and policy makers still often face questions on the need for hygiene promotion:
- Why invest in hygiene promotion?
- What works, where, and why?
- How much is enough?
- How do we know if, and to what extent, inputs are achieving outcomes?

The hygiene cost-effectiveness study includes:
- Capturing behaviour change using the effectiveness ladder;
- Capturing costs of hygiene interventions;
- Comparing costs against behaviour changes.

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For more information visit http://www.ircwash.org.

For more information visit http://www.snvworld.org.
Hygiene study

The hygiene study in Samtse focused on three key behaviors:

1. Handwashing with soap at critical times
2. Hygienic usage of a sanitary toilet
3. Safe household water management

A baseline was carried out in 2014 before starting the intervention. Findings showed more than 50% of households practiced hygiene behaviour that was below the basic level of an effectiveness ladder with four levels:

- Not effective
- Limited
- Basic
- Improved

Any practice classified as basic or above is noted as a good practice level, and anything below basic is classified as an unacceptable and unhygienic practice; risky to human health.

In 2016 a second assessment was carried out to see if progress was made.

1. **Baseline per indicator**
2. **Comparison per indicator**
3. **Hygiene levels**

Using a hygiene effectiveness ladder & flow diagram

Baseline / 2016

- N = 370/379
- As indicated here:
  - Not effective: 16/33
  - Basic: 62/31
  - Limited: 148/69
  - Improved: 143/79

Baseline area: Samtse District

Comparison per indicator

How is data collected?

**HH-level data collection: Before & after intervention**

- At sampled households:
  - Determine hygiene practice levels
  - Determine all costs for hardware & software (participation)

**Interviews and cross-checks: Implementers**

- Map actors & hygiene promotion implementers
- Determine cost for hygiene promotion implementers

**Do you have a toilet?**

- Yes (294/365) - Improved
- No (31/2)

- I share (32/7*) - Limited
- No (44/3)

- Is the toilet in use as a toilet?
  - Yes (292/345) - Basic
  - No (171/2)

- Does the toilet safely contain faecal waste?
  - Yes (117/252) - Improved
  - No 16/33

- Is the toilet hygienic? (free from faecal matter)
  - Yes (133/283 – 271 inc.)
  - No (44/3)

- Is there faecal disposal of stools under 5?
  - Yes (91/198)
  - No (110/2)

- Is the toilet in use as a toilet?
  - Yes (294/346)
  - No (172/4)

- Does all family members have access to the toilet?
  - Yes (247/335)
  - No (45/3)

- Is the toilet maintained in a clean state?
  - Yes (117/252)
  - No 16/33

**Hygiene study area: Samtse District**

**Hygiene effectiveness ladder**

- **Not effective**
  - There is no toilet
  - OR
  - There is a toilet or sewer, but it is not used as a toilet

- **Limited**
  - There is a toilet but it does not separate users from faecal matter

- **Basic**
  - Toilet is sanitary: separating users from faecal matter

- **Improved**
  - Toilet is used as toilet

**Improved: 117/252**

**Basic: 62/31**

**Limited: 148/69**

**Not effective: 16/33**

**N = 370/379**

**Safe household water management**

- Drinking water comes from a piped tap or dug well
- Drinking water comes from a dug well

**Latrine & use**

- Handwashing with soap
- Sanitation supply chains & finance
- Hygiene study

**Data collection**

- HH-level data collection: Before & after intervention
- Interviews and cross-checks: Implementers

**Hygiene levels**

- Not effective
- Limited
- Basic
- Improved

**Baseline study area:** Samtse District

**Baseline / 2016**

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