SNV ASIA

SUSTAINABLE SANITATION AND HYGIENE FOR ALL

FINAL REPORT
OF
WORKSHOP
TO
DESIGN A STUDY ON
'*COST-EFFECTIVENESS OF HYGIENE PROMOTION*'

THIMPHU, 11-12 SEPTEMBER 2013

WORKSHOP REPORT | FINAL VERSION

Celebrating 25 years of sustainable and inclusive development in Bhutan

IRC

CONTENTS

ACKNOWLEDGEMENT

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Further thanks to UNICEF who generously shared their experiences, and to the team of SNV Bhutan for their support in logistics and organising the workshop.

Finally we would like to thank all the participants for their valuable contributions and active engagements, making participatory learning in this workshop possible.

SNV and IRC International Water and Sanitation Centre

INTRODUCTION

The Rural Sanitation and Hygiene Programme is carried out by the Public Health Engineering Division under the Ministry of Health with technical assistance from SNV Bhutan. The Programme started in June 2008 with a two year pilot phase in four geogs, Jarey in Lhuntse, Nanong in Pemagatshel, Laya in Gasa and Hilley in Sarpang. In June 2010 the pilot phase was expanded to all of Lhuntse Dzongkhag. As a scale up of the Rural Sanitation and Hygiene Programme it was further expanded to Pemagatshel Dzongkhag in August 2011 for two years. The programme aims to increase access to improved sanitation and hygiene practices and services living in rural households and also strengthening the enabling environment.

The Hygiene Effectiveness study design was a two day workshop on 11th-12th September 2013 organized by the Public Health Engineering Division, MoH in partnership with the International Water and Sanitation Centre (IRC) and SNV Bhutan.

Purpose of the Hygiene Effectiveness Study

To assess the effectiveness, results and costs of interventions to improve hygiene and behavior change interventions in Bhutan.

Objectives of this Workshop

The main objective of this workshop was to outline the design for the Hygiene Effectiveness Study by carrying out the following steps:

- share the concept of the hygiene effectiveness study with the participants;
- develop and agree on the indicators to design the Hygiene Effectiveness study;
- share experience on current hygiene promotion interventions;

The workshop was set up to explain the proposed study on cost-effectiveness of hygiene interventions and the methodology for the study and to develop a common understanding of the topic and work to be carried out.

Outline of the workshop programme:

- Presentation of the SSH4A programme and where this study fits in;
- Introduction to the concept and the method of the hygiene cost effectiveness study;
- Group work and discussions on current hygiene promotion activities; what works well, what works less well and how do you know this;
- Introduction of the hygiene effectiveness ladder and the main indicators;
- Discuss the indicators to design the Hygiene Effectiveness study;
- Look at the cost data of hygiene interventions;
- Discussing next steps;

A total of 12 participants[1] participated in the workshop; representing partners from the Public Health Engineering Division and the Health Promotion Division under the Ministry of Health, UNICEF Bhutan, and SNV Bhutan Rural and Urban WASH.

[1] List of participants in the Annex

WHY HYGIENE COST EFFECTIVENESS?

We all know that unless improved water and sanitation services are used hygienically, health and socioeconomic benefits will not be realised. To encourage people to improve hygiene behaviour, many hygiene promotion activities are 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 study aims to analyse and compare the costs and outcomes of hygiene promotion interventions. Through this study we hope to be able to provide guidance to the programme on where to adapt or refine hygiene interventions to make them more successful or where best to allocate money to.

Until now we have limited knowledge of financial benchmarks for water and sanitation improvement and this is even less for hygiene improvement. Some countries (Burkina Faso, Ghana and Mozambique) started to identify hygiene effectiveness levels and link that to the costs for the hygiene intervention(s) carried out. Similar studies are now starting up in Ethiopia, Bangladesh and now in Bhutan as well. SVN Cambodia is also interested in taking up this study and may possibly join. Below is an overview of these studies.

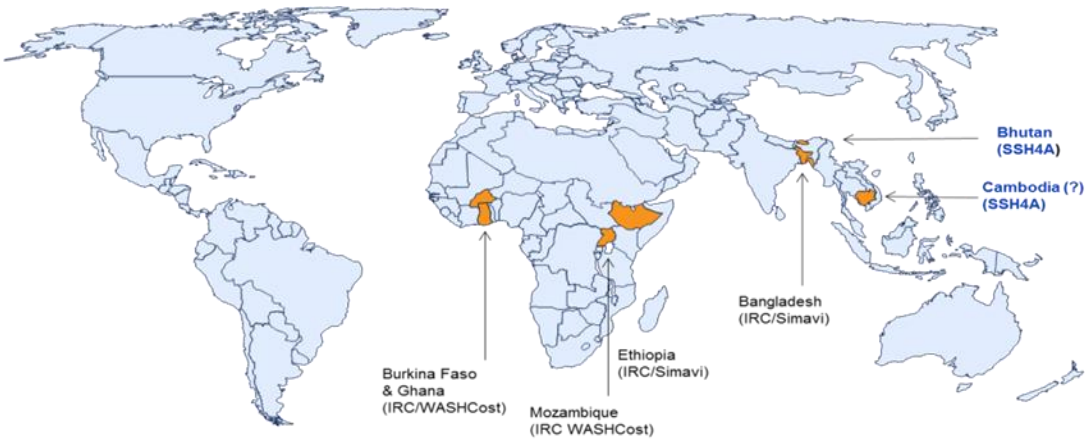

Figure 1: overview of recent hygiene-cost effectiveness studies carried out in Burkina Faso, Ghana, and Mozambique; and planned or on-going studies in Ethiopia, Bangladesh, Bhutan and Cambodia.

Water and sanitation related hygiene promotion is usually an 'intervention' taking place in project cycles. The focus of this study will therefore be on hygiene interventions. This study is expected to provide decision makers at the Ministry of Health with more accurate information regarding the cost and the effectiveness of hygiene promotion interventions on behaviours. The results of the study can be used as input for a possible research grant for scaling up to other districts in Bhutan and can be used by other countries implementing the SSH4A programme.

From a global perspective, the study will contribute to a credible evidence base on the cost-effectiveness of hygiene promotion. That will help advocate continued and improved investment in hygiene promotion.

The proposed hygiene cost-effectiveness study includes:

- Capturing behaviour change using the effectiveness ladder;
- Capturing costs of hygiene interventions;
- Comparing costs against behaviour changes.

In recent studies three key hygiene behaviours were observed for the purpose of this study:

- Fecal containment, toilet use and maintenance;
- Hand washing with soap or substitute at critical times, particularly after defecation and before handling food;
- Safe drinking water-source and management of drinking water at household level;

These key criteria of hygiene behaviour are aligned with the three main hygiene behaviours known to have the greatest positive impact on individual health.

Based on these 3 indicators, a hygiene effectiveness ladder was developed with four levels:

- Not effective
- Limited
- Basic
- Improved

For each level, each of the 3 key indicators (hand washing, use of toilets and safe water) is characterized. For example: if drinking water never comes from an improved source, the effectiveness level would be characterized as 'not effective'. This would assume that the hygiene promotion intervention aiming to achieving safe drinking water management (third indicator) is not effective.

HYGIENE PROMOTION INTERVENTIONS IN BHUTAN

For the study it is crucial to have a common understanding on the definition of 'hygiene promotion' and 'effectiveness';

"Hygiene promotion is defined as any activity that provides knowledge, increase awareness, identify the behaviour determinants and the gaps and the needs which will improve hygiene behaviour. Effectiveness is defined as 'doing the right thing'. It is the degree to which objectives are achieved and the extent to which problems are solved."

The first group worked to get a clear understanding on hygiene promotion activities carried out in Bhutan and to understand whether effectiveness is currently monitored.

Table 1: Results of group work listing hygiene promotion activities, their effectiveness and whether effectiveness is currently monitored

HP ACTIVITY	What would show that a HP activity/intervention is effective?	How are you tracking effectiveness of HP intervention at the moment?
Development of HP communication packages (audio visual/posters/games)	-Knows the steps/procedure Can share the messages/content -Increased awareness and knowledge and application (changed behaviour) Further information/questions are asked	-End of project cycle evaluation (WINS) and MIS at HH level Increased demand on HP materials -Positive feedback on HP materials
CDH Workshops	-Talking about the HP and knows the critical times of HWWS -Building S&H toilets -Soap available at HW places -Increased awareness & community starts working on action plans -Empowered community (e.g. know where to go for info) -More priority to invest in S&H -Increased no of improved toilets Link between SMEs and HHs	-RSAHP-MIS Annual HH survey -Programme review Evaluation and follow-up -Follow-up / documentation -Discussion during review meetings -Physical change in surroundings -More actors playing active role
Training of teachers (Health coordinators) /Health Assistants	-Teachers conduct activities in the schools (Global HW Day, hand washing activities through skits, tippy taps, soap collection -Follow-up carried out by Has and constant reminder to the HHs	-School WASH reviews RSAHP-MIS -Annual Health Bulletin
Stakeholder workshop and engagement	Local leaders discuss and include S&H in their Gewogs planning: - Pro-poor support mechanism - Planning and strategising	-Check on Gewog plans -Gewog review meeting and status -Check data on annual HH survey
Hand washing promotion	-Observed more HW practices	-RSAHP-MIS
Household visits	-Increased hygienic use of toilets	-RSAHP-MIS
Construction of toilets	-Improved access to improved toilets	-RSAHP-MIS

CAPTURING BEHAVIOR CHANGE USING THE EFFECTIVENESS LADDER

This list of activities above provided input for the next session; developing a hygiene effectiveness ladder for Bhutan.

The participants discussed the main indicators for the Bhutan study. The first two indicators agreed upon were:

Agreed:

1. Having a sanitary toilet and using it; and
2. Hand washing with soap

Discussed:

3. Safe water handling

The third indicator on 'safe water handling' has not been included in hygiene promotion activities so far. It was discussed if this indicator should be included in the study while there are no specific activities related to this indicator. It was agreed to consider water handling as an indicator in the Hygiene Effectiveness study but only as a one-time activity to meet PHED's interest to use it to develop evidence based interventions, develop fund proposals and to guide relevant agencies on e.g. improving drinking water quality. SNV will not carry out BCC activities relating to water.

With the three indicators a draft hygiene effectiveness ladder was developed. Participants discussed which sub indicators would fit under each of the four effectiveness levels:

- Not Effective
- Basic
- Limited
- Improved

In addition, flowcharts were drawn to categorize the 3 key indicators into one of these levels. These flowcharts describe a logical chain of events or practices and this allowed the participants to identify points which did not work – if any – in the chain of events, resulting in certain behaviours.

Three groups were formed to work on the three main indicators:

INDICATOR 1: FAECAL CONTAINMENT, TOILET USE AND MAINTENANCE[2]

For the first indicator: the group discussed faecal containment, toilet use and maintenance.

The key questions related to this indicator are:

- Do people have a toilet? If the answer to this question is no, do they share?
- If people have a toilet, or if they share, what type of toilet do they have?
- Is it used?
- Is it safe? In other words; is the toilet preventing users to get into contact with faecal matter?
- Is the toilet maintained and kept clean?

[2] Group work: flow chart as annex

This logical chain of events was used to identify sub-indicators for faecal containment and toilet use, followed by allocating sub-indicators to one of the four levels of the effectiveness ladder.

Table 2: hygiene effectiveness ladder for faecal containment, toilet use and maintenance – draft made by the participants

Effectiveness level	FAECAL CONTAINMENT, TOILET USE AND MAINTENANCE
Improved	Toilet is maintained (cleanliness) Household members use a toilet all the time Sanitary toilet is used: separates users from faecal matter
Basic	Household members use a toilet some or most of the time Sanitary toilet is used: separates users from faecal matter
Limited	Shared toilet Sanitary toilet is used: separates users from faecal matter
Not effective	Open defecation

INDICATOR 2: HAND WASHING WITH SOAP[3]

For the second indicator: the second group discussed Hand washing with soap.

The key questions discussed for this indicator are:

- Is there a hand washing facility?
- With the facility used, is there a possibility of contamination?
- Is there soap near the facility?

[3] Group work: Flow chart as annex

Table 3: hygiene effectiveness ladder for hand washing with soap - draft by participants

Effectiveness level	HAND WASHING WITH SOAP
Improved	Hand washing facility within 30 paces from toilet Sufficient water is available for hand washing Water for hand washing is not re-contaminated (use MIS) Soap or substitute available and used All household members wash their hands with soap/ substitute at four critical times
Basic	Hand washing facility within 30 paces from toilet Water for hand washing is not re-contaminated (use MIS) Sufficient water available Soap or substitute available and used HH members have limited knowledge on hand washing (e.g. wash their hands on 1-2 critical times)
Limited	Hand washing facility within 30 paces from toilet Water is not poured (chance of contamination)
Not effective	Household members have no specific place to wash their hands within 30 paces from toilet

The crucial element in this ladder is the 30 paces distance between the hand washing facility and the toilet. This is the national norm in Bhutan. The consequence is that all hand washing at facilities that are located further away automatically fall in the 'not effective' category. No matter if there is soap, sufficient water, or if everyone washes hands.

INDICATOR 3: SAFE DRINKING WATER HANDLING AND STORAGE[4]

For the third indicator: the third group discussed safe drinking water handling and storage.

Table 4: hygiene effectiveness ladder for safe drinking water handling and storage - draft by participants

Effectiveness level	Safe drinking water handling
Improved	Drinking water always comes from an improved source Water is collected safely Water is stored safely Water is drawn in a safe manner Water is treated
Basic	Drinking water always comes from an improved source Water is collected safely Water is stored safely Water is not drawn in a safe manner Water is not treated
Limited	Drinking water sometimes comes from an improved source or Drinking water comes from a safe source but Water is not collected safely Water is not stored safely And Water is not drawn in a safe manner
Not effective	Drinking water never comes from an improved source (=piped water supply)

COST DATA

Looking at outcomes on hygiene behaviour is one part of the hygiene cost-effectiveness study. The other part is costs. Suppose the hygiene intervention appears to be effective; would it be possible to replicate the same intervention in all other districts or would it be too costly? To answer that question we need to know more about the costs.

The study will look at all the costs of an intervention at various stages of an intervention. It will look at different types of costs, e.g. are we taking into account the time household members spent at a CDH workshop? And it will identify the costs by different stakeholders. Governments will have different costs than members of the households for example. See table 5.

[4] Group work: flow chart as annex

Examples of costs by Government and non-government actors

- Material required for the intervention (promotion materials, materials for participatory work, etc.)
- Intervention preparation costs (defining approach, training of trainers, etc.)
- This involves for example: identification of hygiene workers, training of trainers and training of hygiene workers, per diem costs, etc.
- Costs of interest payments: World Bank loans and other loans
- Costs of the intervention itself, monitoring and overhead; such as support staff salaries, office rent, maintenance of vehicles and IT systems, etc, supervision of hygiene workers; local activities
- Replacement costs of hygiene goods at intervention level (i.e., replacing hand washing facilities, toilets, etc.)
- Costs of supporting community-based organisations at local level: WASH committees, sanitation and hygiene groups, etc. This cost component also includes subsidies to households for WASH facilities

Examples of costs by households

- Hygiene goods required for hygiene behavior change, e.g., hand washing facility, materials to build toilet, etc.
- Costs for hygiene behavior change: household investment of time and money in participation in campaigns for hand washing, safe sanitation for all, etc.
- Costs of interest payments: personal or group loans, for e.g., household toilets and other microfinance schemes related to access to sanitation
- Costs of hygienic behavior, e.g., use of water and soap; time spent on hygiene-related activities, e.g., cleaning toilets, fetching extra water required for hygiene purposes, etc.
- Replacement costs of hygiene goods at household level (i.e., replacing hand washing facilities, toilet superstructure, etc.)

Table 5: All the costs of an intervention: at various stages, for different types of costs and by different stakeholders

STAGES OF THE INTERVENTION	TYPE OF COSTS	STAKEHOLDERS
• before (start-up), • during (implementation) • after (maintenance) completion of the intervention	• financial costs (monetary investments) • economic costs (time spent)	• Governments • Implementers and/or non-government stakeholders • Households

Data from project documents such as budgets and reports may be relatively easy to get. Participants pointed out that this could be done as desk research. However, other it may not be easy to find all the other cost data related to the hygiene promotion activities. Participants mentioned that hardly any of the activities carried out are allocated solely to hygiene promotion. The study needs to find a way to deal with this and one of the things to

do this is by one-on-one interviews with staff members working on hygiene and going through each cost item. Do they estimate this particular cost item to be almost all for hygiene, is it half, or only a very small portion. These kinds of discussions will take time, but are essential to get a good estimation of those costs that cannot be obtained otherwise.

As input for the study and to get a feeling of the detail and complexity involved, the participants looked at the hygiene activities listed earlier and added cost items. They did this for three groups: government stakeholders, non-government stakeholders and household members. (See annex)

NEXT STEPS

A hygiene cost-effectiveness study can be used for different purposes:

- **One approach** (intervention) to hygiene promotion is being assessed. Comparing the behavioral outcomes and costs before and after an intervention and comparing these to the alternative of not having an intervention will enable conclusions to be drawn about the intervention's cost-effectiveness.

- **Two (or more) different approaches** to hygiene promotion are being assessed. Comparing the costs and effects of different approaches to hygiene promotion within a single country will allow conclusions on which approach is more cost-effective for the country and the households.

- **Across two or more countries**, a comparison of costs and outcomes of one or various approaches to hygiene promotion interventions is being made. This will allow stronger conclusions on the more cost-effective hygiene interventions. This could be an option when Cambodia is joining.

For the AusAID proposal, it will focus on the first and last purpose: to be able to see if the behavioural change component of the SSH4A approach is indeed effective in the countries where it is implemented. For Bhutan that means that the study has to be carried out in at least one new district so we can have a proper baseline and measure progress while carrying out phase 2 of the programme.

During the workshop there was a discussion that it would be useful to carry out the study in the Dzongkhags where the approach has been carried out for the past two years (Pemagatshel/Lhuntse). Although this is technically possible, there are some practical and methodological limitations of carrying out the research in Pemagatshel/Lhuntse:

- Difficult to get the same sample as was used for the baseline;
- There will be gaps in the baseline data as the household questionnaire was developed without taking the hygiene service levels into account;
- No Information on the third indicator (water indicator) as this was not part of the programme;
- Some of the data may be difficult to allocate to the hygiene intervention;
- Consequences of additional costs, human resources and time;

- Difficulty in capturing the (historical) expenditure of implementers and household members

Therefore, in light of the above limitations, it is suggested not to conduct research in the districts where programme was implemented.

Table 6: Four stages of the study in the new districts

STUDY WILL COLLECT DATA FROM THE START OF THE PROGRAMME (Samtse, Dagana)
Stage 1: Prior to the intervention Before the intervention, a household questionnaire is used to obtain an understanding of: - The existing hygiene practices (using the main indicators) - The current level of household expenditure for each hygiene behaviour
Stage 2: The intervention: the programme starts implementing. At this stage the focus is on capturing the expenditure of implementers
Stage 3: After the intervention Twelve months (and 36 months) (to be decided) after the end of the intervention, hygiene behaviour indicators and household expenditures are measured once more to determine the influence of the intervention on behaviours, using the same questionnaire and survey tools, allowing a comparison with the baseline data. This stage completes the data collection.
Stage 4: Analysis 'Before and After' data is then processed and analysed.

It is important to focus on hygiene interventions alone and not on combined WASH interventions if possible as that makes it more difficult to determine what changes in hygiene behaviour are attributable to community hygiene promotion. The flowcharts and the sub-indicators for each of the three indicators need to be reviewed carefully while designing the questionnaire/survey tool for the baseline study.

Detailed documentation on the intervention costs – both from implementers as from household members is needed. The main method to be used for quantification of resources used by households is observation supplemented by a questionnaire. Data on the costs by implementers can be captured through a mix of documents and interviews, and validated by market-price data. Categorization of costs and collection of costs from implementers can be undertaken as the intervention rolls out.

Complementary qualitative information, including an assessment by key implementers, can give insight in the successes and limitations of the intervention.

ANNEXES

Annex 1: List of participants

Sl.no	Name	Gender	Ministry/Organization
1	Rinchen Wangdi	M	PHED, Ministry of Health
2	NB Yonzin	M	PHED, Ministry of Health
3	Sonam Pelzom	F	PHED, Ministry of Health
4	Tshering Tashi	M	PHED, Ministry of Health
5	Sonam Gyeltshen	M	PHED, Ministry of Health
6	Ugyen Norbu	M	PHED, Ministry of Health
7	Kencho Namgyal	M	UNICEF
8	Tashi Yetsho	F	SNVBhutan
9	Tshering Choden	F	SNVBhutan
10	Ugyen Rinzin	M	SNVBhutan
11	Henk	M	SNVBhutan
12	Tashi Dorji	M	SNVBhutan
13	Raj kumar	M	SNVBhutan
14	Thinley Dem	F	SNVBhutan
15	Ingeborg Krukkert	F	IRC International Water and Sanitation Centre

Annex 2: List of hygiene promotion activities

List of Hygiene promotion activities prepared by the participants

Sl.no	Activities
1.	Hand Washing with soap promotion through print, TV, radio etc
2.	CDH workshop
3.	Household visits by health assistants and VHW
4.	Construction of toilets
5.	Training of teachers
6.	Stakeholder engagement/workshops
7.	Sanitation fair
8.	Out-Reach Clinics (ORCs)

Annex 3: Group work on hygiene-related costs by different stakeholders

Costs by NGOs

Activities	Cost
1. Development of Communication Packages (TV spots, radio spots etc)	-Planning -Time -Research/Study/Pre testing -Development/Review -Publish -Distribution/Airing -Trainings -Workshops/Meeting -Meals/Materials -Sanitation fair -DSA/Travel cost -Out of pocket expenditure
2. CDH workshop	-Planning -Time -Posters/Materials -ToT -DSA/Travel/Fuel -Working Lunch/Refreshment
3. Training of Teachers	-Planning -Development of Manual -ToT -Time -DSA/Travel/Fuel -Working Lunch -Refreshment -Conference Hall Charges -Materials
5. Stake Holder Meeting	-Planning -Time (salary) -DSA/Travel/Fuel -Working Lunch -Refreshment -Conference Hall Charges -Materials
6. Follow Up	- DSA/Travel -Planning -Time (Salary)

Costs by Households

Activities	Cost
1. CDH Workshop 2. Hand washing with soap 3. Radio 4. Television 5. Toilet Construction 6. For Households without hand washing facilities 7. Mothers Visiting Out-Reach Clinics (ORCs) 8. ANC	-Materials, DSA, Travel, Working Lunch, time -Soap -Radio battery -TV connection rental -Materials/ labourers -Bowl/water mugs -Time/Vaccination - Time/Vaccination

Government Costs

Activities	Cost	
1. Development of Communication Packages (TV spots, radio spots etc)	-Planning -Time -Research/Study/Pre testing -Development/Review -Publish -Distribution/Airing	-Trainings -Workshops/Meeting -Meals/Materials -Sanitation fair -DSA/Travel cost -Out of pocket expenditure
2. CDH workshop	-Planning -Time -Posters/Materials	-DSA/Travel/Fuel -Working Lunch/Refreshment -ToT
3. Training of Teachers	-Planning -Development of Manual -ToT -Time -DSA/Travel/Fuel	-Working Lunch -Refreshment -Conference Hall Charges -Materials
5. Stake Holder Meeting	-Planning -Time (salary) -DSA/Travel/Fuel -Working Lunch -Refreshment -Conference Hall Charges -Materials	
6. Follow Up	- DSA/Travel -Planning -Time (Salary)	
7.Construction Of Toilets	-DSA/Travel -Training Materials -Working Lunch -Cost for Building toilets	
8. Out-Reach Clinics (ORCs)	-DSA/Travel	
9. Establishment charges + Salary		

Annex 4: Flow charts for the three indicators

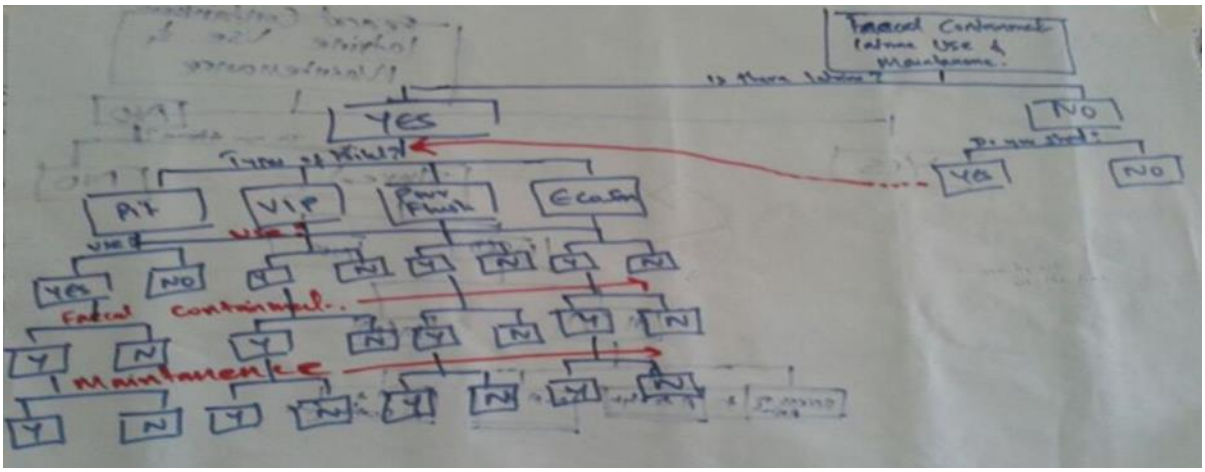

FIGURE 1: FAECAL CONTAINMENT, TOILET USE AND MAINTENANCE

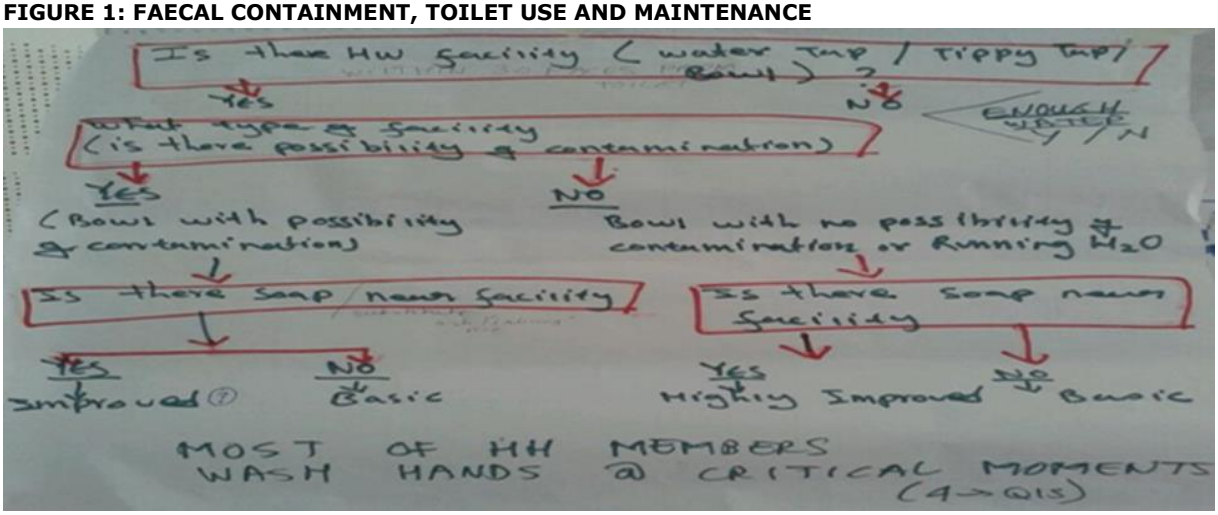

FIGURE 2: HAND WASHING WITH SOAP

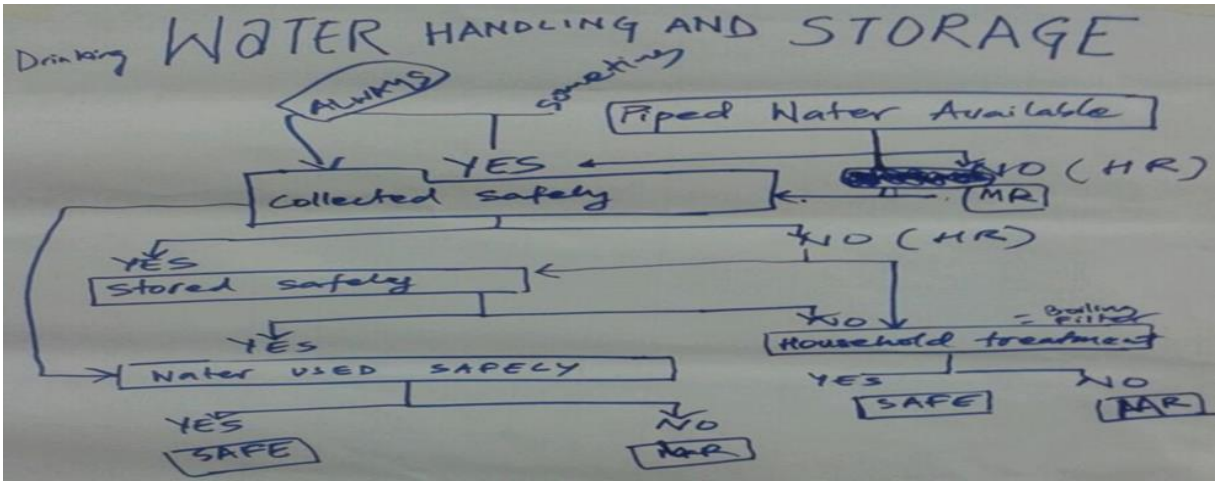

FIGURE 3: SAFE DRINKING WATER HANDLING AND STORAGE

Annex 5: Workshop programmme

DESIGN WORKSHOP
FOR
SSH4A STUDY ON COSTS AND EFFECTIVENESS OF
SANITATION AND WATER RELATED HYGIENE INTERVENTIONS

11-12 SEPTEMBER 2013
THIMPHU, BHUTAN

WEDNESDAY 11 SEPTEMBER

Time	Content session
9:00 – 10:00	Welcome and opening by Chief PHED Introduction of participants and facilitators Outline of the workshop programme
10:00 – 10:15	SSH4A programme presentation by Thinley Dem SNV Bhutan
10:15 – 10:45	Introduction to the Hygiene effectiveness study by Ingeborg Krukkert IRC International Water and Sanitation Centre
10:45 – 11:00	Group work #1 (3 groups) on hygiene promotion activities - What do you understand by hygiene promotion activities? - Who are potential target groups/individuals of hygiene promotion activities? - What can be the results or outcomes of an effective hygiene promotion activity
11:00 – 11:15	TEA BREAK
11:15 – 11:45	Plenary: presentations by the groups and feedback
11:45 – 13:00	Group work #2: - Which HP interventions work well and why? - Which hygiene promotion interventions work less well? Why is that you think? Plenary presentations and discussion

Time	Content session
13.00 – 14.00	LUNCH
14.00 – 14.15	Re-cap & introduction to effectiveness and group work
14:15 – 15:00	Group work #3: - What would show that a hygiene promotion activity is effective? - How are you monitoring your HP intervention at the moment? How are you tracking effectiveness? Plenary presentations and discussion
15:00 – 15:15	TEA BREAK
15:15 – 15:30	Re-cap on effectiveness
15:30 – 16:00	Presentation: explain the hygiene effectiveness ladder and the chain of behaviours Questions and Answers
16:00 – 16:45	Group work #4 on main indicators for hygiene promotion and presentations
16:45 – 17:00	Closure

THURSDAY 12 SEPTEMBER

Time	DAY TWO
9:00 - 9:15	Re-cap by participant
9:15 – 10:15	Summarise group work #4 and linking it to the hygiene effectiveness ladder. Discussion on main indicators.
10:15 – 10:30	Presentation: Introduction to cost data of hygiene promotion interventions
10:30 – 11:00	Group work #5 on identifying costs for interventions (using the list made in Group work #1)
11:00 – 11:15	TEA BREAK
11:15 – 13:00	Group presentations & discussion on how to find/collect these data.

Time	DAY TWO
13.00 – 14.00	LUNCH
14.00 – 14.30	Next steps
14:15 – 15:00	Questions and Answers
15:00 – 15:15	TEA BREAK
*	*
16:30	Wrap up and closure

*Note: we have deliberately left some space in case we need more time for discussion or questions during the day. After day one we will re-schedule the work for day 2 if needed.

Annex 5: Handout for participants on proposed study – for discussion

Study on the costs and effectiveness of hygiene interventions in Bhutan Handout

for discussion on how to set up the study

This study is part of the second phase of the Sustainable Sanitation and Hygiene for All (SSH4A) programme, a four year rural sanitation and hygiene programme running from 2013 – 2017. AusAID has provided funds for two countries: Bhutan and Nepal to follow-up on phase one.

The SSH4A programme is carried out by the Public Health Engineering Division under the Ministry of Health in partnership with SNV Bhutan and IRC International Water and Sanitation Centre. Focus of the programme is on encouraging latrine use and handwashing while strengthening the enabling environment: supply chain, policy and regulations. In addition, the hygiene effectiveness study will take place in Bhutan – as a start[5].

The hygiene effectiveness study will look at the hygiene interventions in Bhutan to see if these interventions are successful in encouraging safe hygiene practices and how much they cost.

Why is this study important?

First of all the study outcomes will benefit the people in Bhutan. We believe that the results from this study will provide guidance to the programme on where to adapt hygiene interventions to make them more successful or where best to allocate money to.

In addition, we think that this study could facilitate evidence-based policy decision-making in the field of public health. It may provide decision makers with more accurate information regarding the cost and the effectiveness of hygiene promotion interventions on behaviours.

Thirdly, to have other countries in the SSH4A programme benefitting from it and to be able to compare different country contexts we could submit a proposal for a research grant to make this possible.

The study intends to include:

1. Capturing behaviour change using the effectiveness ladder;
2. Capturing costs of hygiene interventions;
3. Comparing costs against behaviour changes.

Capturing behaviour change

[5] Four additional countries were included in the original proposal: Cambodia, Indonesia, Laos, and Vietnam. These countries will try to continue the approach and they agreed to link up with Bhutan and Nepal, e.g. by using the same basic indicators for monitoring.

In previous studies three key hygiene behaviours were observed for the purpose of this study:

- Faecal containment, latrine use and maintenance
- Handwashing with soap or substitute at critical times, particularly after defecation and before handling food
- Safe drinking water-source and management of drinking water at household level

These key criteria of hygiene behaviour are aligned with the three main hygiene behaviours known to have the greatest positive impact on individual health.

Will we use these three? Which sub-indicators are we looking at? This is to be decided with the Ministry of Health and other stakeholders in the first workshop. Based on these indicators, a hygiene effectiveness ladder will be developed. This will provide a framework for behavioural analysis, allowing systematic categorisation of hygiene behaviour data into 4 (or more) effectiveness levels: not effective, limited, basic, improved (and highly improved).

Capturing costs

Costs related to hygiene interventions will be collected. We assume that the implementers, government as well as the households have a certain cost. The process to be followed is:

Collecting the data on costs
Data on government and implementers costs will be collected via key informants. In addition, data about implementation will also be collected from financial and maintenance reports. Information about the costs by the households will come from the households that are surveyed.

Identifying types of costs
The costs for hygiene interventions will be categorised by the three groups: government, implementers and households and these costs will be analysed in types of costs: preparation or investment costs; capital (one-off) costs, and recurrent costs.

Allocate value to non-financial costs
To obtain the total cost of the intervention, economic costs such as locally available materials, unpaid time/volunteering for participating in meetings, should also be taken into account. These costs will then have to be translated into financial costs.
[Note: we have to decide for this study if we will aim to capture these non-financial costs]

Collected costs will be entered in a database and processed. Prices will be indexed to enable comparison.

Comparing costs against behaviour changes

This is the analysis part of the study. First we will assess the hygiene behaviour changes per household before and after implementation ; then we will place the costs collected into categories (e.g. capital costs, one-off costs, recurrent costs). By doing so we can compare the costs against the effectiveness of the intervention in hygiene behaviour change.