Nacaroa, Mozambique

BEHAVIOR CHANGE MANUAL

Version 1, 2017

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List of abbreviations

RANAS	R(isk), A(ttitudes), N(orms), A(bility), and S(elf-regulation)
BCT	Behavior change techniques
WASH	Water, Sanitation and Hygiene
CLTS	Community Led Total Sanitation
NGO	Non-Governmental Organization

Thanks

Developing this behavior change guide with Eawag and all our colleagues in the field was a long and inspiring learning experience. I would especially like to thank our colleagues from the HELVETAS Swiss Intercooperation WASH projects in Mali, Benin and Mozambique, who were open to piloting this approach. I am very grateful for all their time, energy, thought and reflection, which was crucial to being able to include first-hand experience in the drafting of this manual.

I would also like to express my gratitude to Dr. Prof Hans-Joachim Mosler and his research team at Eawag for all their support and for the meetings, discussions, and vital feedback that enabled us to improve our behavior change approach.

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This Manual was developed by HELVETAS Swiss Intercooperation.

It aims at providing hands on guidance to field-based staff of development organizations that are working on Behavior Change

Publication written by: Valérie Cavin (HELVETAS Swiss Intercooperation)

Comments: Nicolas Morand (HELVETAS Swiss Intercooperation), Jacques Louvat (HELVETAS Swiss Intercooperation), Dr. Prof Hans-Joachim Mosler (Eawag)

1. Introduction

1.1. Background

Several studies have shown that improved water technologies lead to better water quality at the source, but not necessarily to better water quality at the point of use. This was also observed in the recent impact study conducted by HELVETAS Swiss Intercooperation Project in Benin in 2013 and in another research study in Nepal in 2015. The unsatisfactory water quality at the point of use is largely explained by inadequate hygiene, water transport and storage practices. In the field of sanitation, especially in the post CLTS phase, it is a challenge to achieve long-lasting behavioral change in the appropriate use of latrines. This underlines the need for behavioral changes ranging from handwashing and the use of toilets to water treatment and storage.

This shows the need to address behavioral change in a more systematic way within the WASH project. We need innovative approaches if we are to achieve lasting results.

- Just because a person knows what she should do does not mean she will do it.
- Just because a person wants to adopt a behavior does not mean she will.
- Just because a person fears a given consequence does not mean she will take action to prevent it.
- Many of the action that people engage in to improve their lives are not necessarily done for the rational reason we promote.

These findings persuaded HELVETAS to start the Learning Expedition Behavior Change program. In 2014 and 2015 HELVETAS started three pilot projects in partnership with Eawag to use the RANAS approach in Mali (handwashing), Benin (handwashing; water transport and storage) and Mozambique (handwashing and latrine use). The aim was to improve the impact of WASH projects on behavior change and to work with local teams to test the applicability of the approach in the field. This experience enabled us to adapt the approach to NGOs' needs, and this manual is the fruit of our learning expedition.

Applying the approach in three pilot projects has achieved impressive results. For example, handwashing behaviors rose from 12% to 49% in Mali; and new and innovative interventions to address the use and the maintenance of latrine were developed in a post-CLTS situation in Mozambique.

This manual is based on "Systematic Behavior Change in Water and Sanitation and Hygiene – A practical guide using the RANAS approach" developed by Eawag (download under Eawag Guidelines: http://www.eawag.ch/en/department/ess/empirical-focus/environmental-and-health-psychology-ehpsy/). This manual is a practical, abridged version of the RANAS guidelines. It is made for project managers running WASH projects.

1.2. How to use this manual

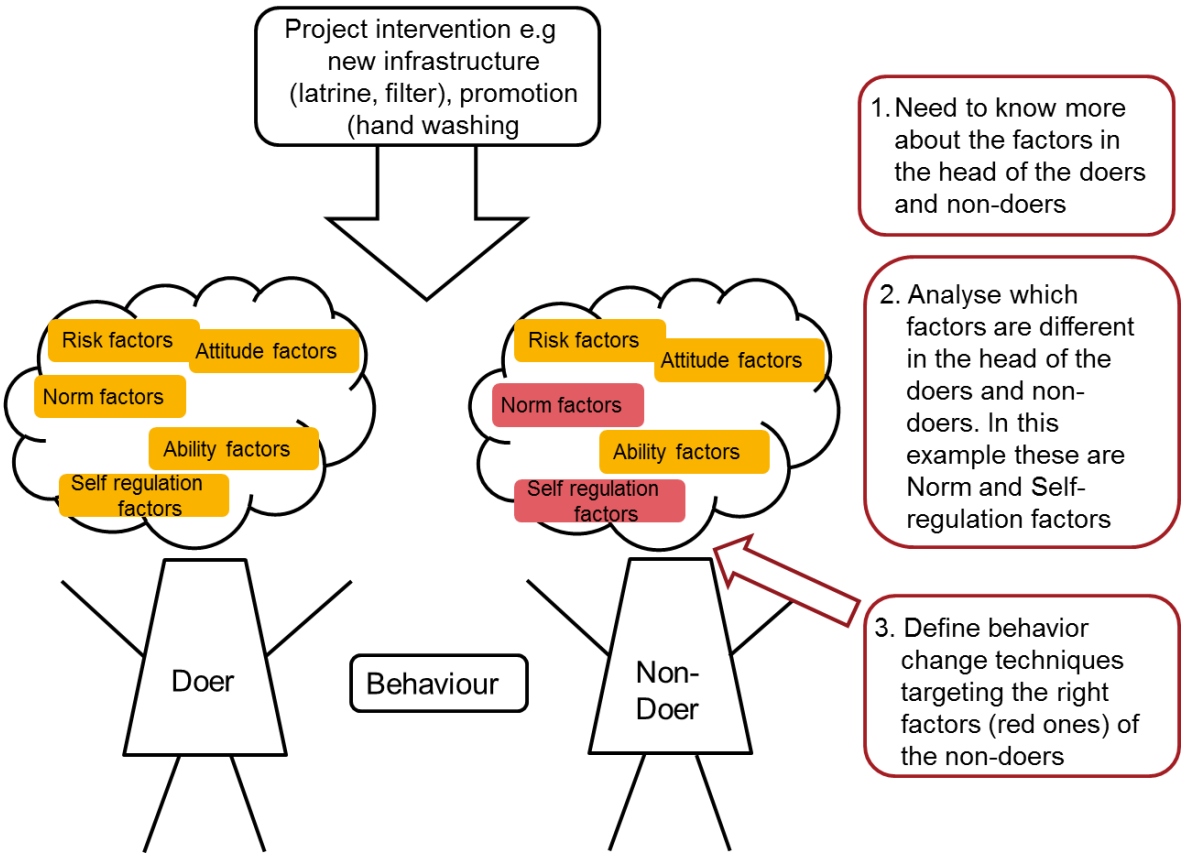
This is a step-by-step manual, but it is advisable to have a good overview of the whole document before starting behavior change activities. The Eawag guide to "Systematic Behavior Change in Water and Sanitation and Hygiene" can give more in-depth knowledge if needed.

After providing a short introduction to the RANAS model, this manual outlines two main steps. Step 1 is an introduction to the behavior change concept and a quick analysis of the project interventions currently in use. Step 2 builds on Step 1 and applies the four phases of the RANAS approach.

Every step is divided into phases with corresponding training sessions. There is a short description of each session with instructions and additional tools and information, which can all be found in the annexes.

1.3. The RANAS approach

The theoretical basis for behavior change is Mosler's RANAS model (2012). The model is guided by the principle that human behavior depends on a set of psychological factors, which can be divided into five factor blocks. Experience shows that a behavior strategy is more effective if it influences these psychological factors.



On the next page you will see the RANAS model with a description of the behavioral factors

The RANAS model: R(isk), A(ttitudes), N(orms), A(bility), and S(elf-regulation)

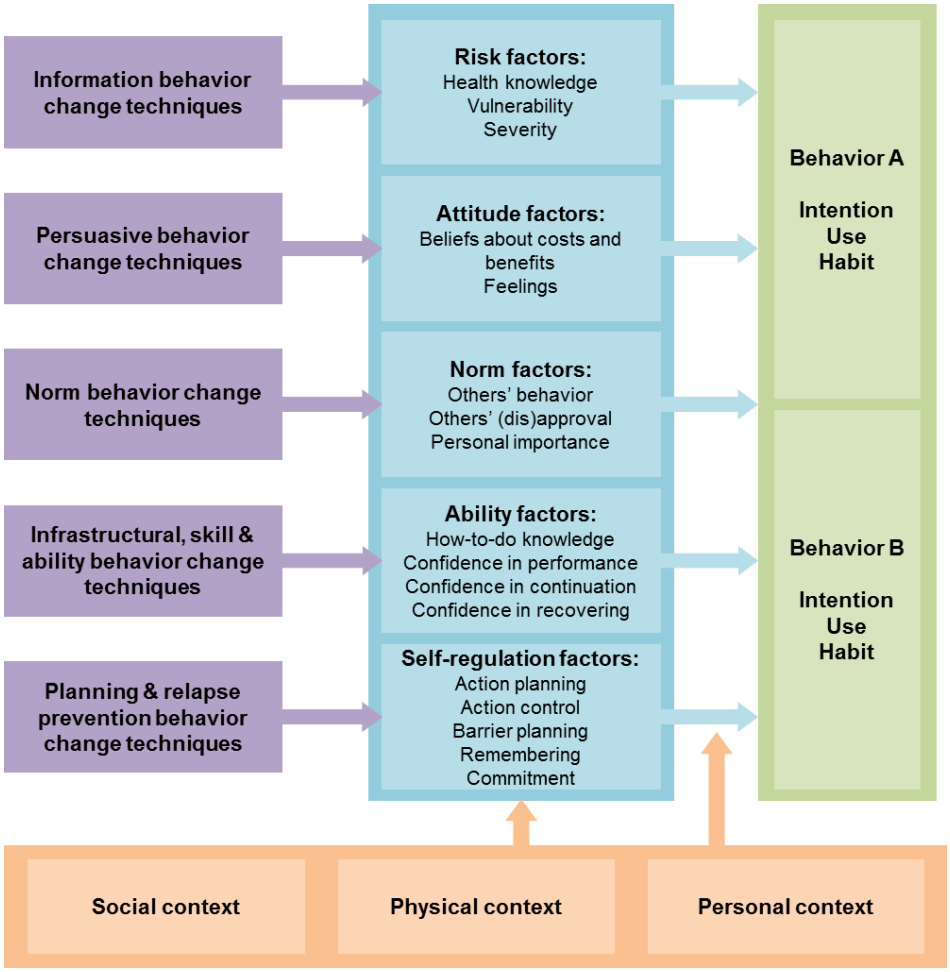


Figure 1: RANAS model of Behavior Change

Risk factors: Perceived vulnerability *(Am I at risk of contracting diarrhea?)* and perceived severity *(And if I get cholera, how much will this affect my life?);* actual knowledge about the possibility of being affected by a potential contamination *(Do I know how diarrhea is contracted, and how to prevent it?)*.

Attitude factors: Beliefs about advantages/disadvantages or cost/benefit *(It takes me too much time to wash my hands. I feel well regarded when I wash hands)* of the behavior, as well as the emotion and feeling arising when thinking about the behavior *(I like the smell of my hands after I've washed them. I feel safe using a latrine)*.

Norm factors: Social influence: other people's behaviors *(All my relatives wash their hands),* other people's approval or disapproval *(The head of the family encourages me to wash my hands)* and personal importance *(It is important to me to have clean hands).*

Ability factors: A person's knowledge to perform the behavior *(I know the different step to wash my hands correctly)*, the confidence in one's ability to organize and manage the behavior (how-to-do knowledge, confidence in performing) and the confidence in one's own ability to deal with possible barriers, confidence to continue, confidence to recover (*I am confident that I will start washing my hands again when I'm at home and have water and soap again*).

Self-regulation factors: These factors help to manage conflicting goals *(If I don't have any soap, I use ashes to wash my hands until I can go to the market)* and distracting cues when intending to adopt and maintain a behavior. Commitment and remembering are important determinants.

For each factor block, there are corresponding **behavior change techniques** (e.g. a behavior change technique for the "Risk" factor would be to Inform people about risks), which can influence them.

Contextual factors: There are three categories of contextual factors – social, physical and personal. The social context is defined by culture and social relations, laws and policies, economic conditions and the information environment. For example, tradition can influence why people do not like to defecate on the same site. The physical context consists of the natural and built environment, e.g. the season can have a significant influence on water availability and thus on handwashing. The personal context comprises socio-demographic factors such as age, sex and education. For example, it might more difficult for a child to use a latrine than for an adult.

These contextual factors influence psychological factors and their effect on the behavior.

There is a more detailed description and an example of behavioral factors and the RANAS model in

Annex 1: Behavioral factors and the RANAS model

Our project interventions target risk and ability factors through traditional BCT (PHAST, etc.) and we ignore the others. Therefore, it makes sense to get more information about all of these factors to better understand the factors that drive a behavior.

1.3.1. The phases of the RANAS approach

The RANAS approach contains the following principal phases, which can be integrated into a project cycle.

1. **Identify behavioral determinants**
    a) Define the behavior to be changed and the specific population to be targeted;
    b) Collect information on psychological and contextual factors that influence the behavior;
    c) Allocate behavioral factors to the factors in the RANAS model;
2. **Measure and determine behavioral factors**
    a) Develop a questionnaire to measure behavioral factors, behaviors, and conduct observations;
    b) Conduct a representative baseline survey;
    c) Determine the factors which steer the target behavior (compare doers and non-doers);
3. **Select behavior change techniques (BCTs) and design behavior change strategies**
    a) Determine behavior change techniques;
    b) Develop and design behavior change strategies based on the factors identified;
4. **Implement and evaluate behavior change strategies**
    a) Implement different strategies;
    b) Develop the final questionnaire and conduct an evaluation survey;
    c) Define the most effective strategy and adapt intervention.

2. Steps for implementing the Behavior Change Approach

The manual divides the implementation of the behavior change approach into two main steps. The project can choose to apply only Step 1 or apply the whole approach with Steps 1 and 2.

Step 1: Understanding the behavior change approach and analysis of the existing interventions

This first step aim at introducing the topic of behavior change to a project team to foster the view on the problematic and the complexity of behavior change. The introduction of the RANAS model helps project managers to understand the behavior and its influencing factors, and to analyze the existing intervention. The scope and depth of the analysis depend on the project phase and needs.

The involvement of the project team and local project partners is helpful to get an in-depth view and local analysis, and learn about different experiences. Additionally, this first step helps to create awareness about a systematic behavior change and to decide, based on the capacity, available resources and the stage of the project, whether to implement Step 2 or adapt existing interventions to include the new knowledge.

Outcome: Knowledge of behavior change and critical assessment of existing interventions

Step 2: Application of the RANAS steps

In this second step, the project manager decides to make an in-depth analysis in the form of a study on the behavior that needs changing. A new, adapted behavior change technique and interventions have to be developed to tackle the factors identified as influencing the behavior. The newly designed activities have to become part of the project activities and must subsequently be evaluated. This requires longer-term investment and the integration of the activities into the project cycle.

The involvement of the project and local partners is important during the whole process. It is advisable to define a focal person within the project team who is responsible for leading the process.

Outcome: An evidence-based behavior change strategy

Overview of the two steps

Step 1: Understanding the behavior change approach and analyzing the existing interventions

Content	Methodology	Outcome	Time needed	Human resource
Session 1: Basic introduction			0.5 days	
• Why change behavior? • Possible approaches	Workshop with project team and potentially the implementing partners	Basic understanding of key concepts		Project team, possibly implementing partners, thematic adviser *Information & tools:* Annex 1: Behavioral factors and RANAS model Annex 2: Input on behavior change
Phase 1: Identifying behavioral determinants				
Session 2: Identifying behavioral determinants and overview of the RANAS approach			1-1.5 days	
• Identify behaviors to change • Define your target population • Collect information about the contextual factors • Put the collected information in relation to the RANAS Model	Workshop with project team and implementing partners	Knowledge of the RANAS approach Definition of behavior and target population Better knowledge of the interrelations between contextual and behavioral factors		Project team, possibly implementing partners, thematic adviser *Information & tools:* Annex 3: Introduction to the RANAS phases
Session 3: Critical assessment of the project's intervention with regard to behavioral factors			0.5 days	
• Identify present behavior change intervention in the project • Put the collected information in relation to the RANAS model • Critical analysis and identification of adaptation of intervention	Workshop with project team and implementing partners	Critical analysis of existing approach, and identification of potential improvement measures		Project team, possibly implementing partners, thematic adviser *Information & tools:* Annex 4: List of Behavior Change Techniques

Step 2: Applying the behavior change approach

Content	Methodology	Outcome	Time needed	Human resource
Phase 2: Measuring behavioral determinants				
Session 1: Developing a questionnaire				
Follow Step 1 to develop a questionnaire	Project team work in small groups	Developed questionnaire	2 days to develop questionnaire	Project team Supervisor/focal point Adviser *Information & tools:* Annex 5: Practice RANAS questions Annex 6: Structure of the questionnaire
Session 2: Translating the questionnaire (if needed)				
Translating the questionnaire	Small group work	Translated and adapted questionnaire	1-2 days to translate questionnaire if needed	Supervisor, field people knowing well the local language, possibly interviewers
Session 3: Training interviewers, including pilot test				
Understanding the questionnaire: the idea behind each question and the translated key words Understanding random sampling How to collect data (paper, smartphone, etc.)	Training	Trained interviewers	2-4 days to train interviewer and do pilot test	Supervisor plus local partner or interviewer *Information & tools:* Annex 7: Interviewer training Annex 8: Supervisor's checklist

Session 4: Doing the survey				
Data collection	Individual	Collected data	5 days for survey (5-6 interviews per interviewer)	Supervisor, interviewers
Session 5: Data entry and cleaning				
Training about data entry Preparing data	Key person	Capacity build up for data entry Data ready to use for analysis	3-4 days for data entry, depending on data collection 1 day In case of mobile based data collection	Supervisor and person with good knowledge of Excel *Information & tools:* Annex 9: Checklist “Data entry”
Session 6: Data analysis				
Forming a doer and non-doer indicator Doer and non-doer analysis Results with graphs	Key person	Capacity-building on data analysis Results of the study	3-5 days for data cleaning and data analysis depending on sample size	1 Person with good knowledge of Excel and supervisor *Information & tool:* Annex 10: Checklist “Data analysis”
Session 7: Interpreting the data and identifying the main behavior factors				
Presenting the results Identifying main factor to target Common understanding of the results	Group work		0.25 day	Project team and partners

Phase 3: Determining behavior change techniques (BCTs) and corresponding materials and activities				
Session 8: Determining behavior change techniques				
Identifying behavior change techniques	Group work	Measure/option	0.5 day	Project team and partners *Information & tools*: Annex 4: List of Behavior Change Techniques
Session 9: Developing behavior change strategies				
BCT and communication channels Detailed script of interventions	Group work	Defined intervention activities and developed materials	Depending on chosen intervention	Project team and partners, consultant *Information & tools:* Annex 11: Example description of an intervention
Phase 4: Implementing and evaluating promotion strategies				
Session 10: Implementing defined intervention				
Training partners/promotors for implementation Piloting and testing newly designed intervention & scale up intervention	Project intervention		6-12 months of promotion activities	Project team, promoters, partners, NGO, etc.
Session 11: Evaluation (Sessions 3 to 7)				
Adapting questionnaire Training update for interviewers Data collection Data analysis & Discussion of results	Project team	Identified successes and failures	10 days for evaluation	Supervisor and interviewer, data analyst, project team *Information & tools:* Annex 12: Example question about interventions
Session 12: Adapting the strategy				
Critical analysis of intervention	Group work	Defined adaptation	0.5 day	Project team and partners

Stakeholders involved in the different steps

Step 1: It is crucial to include a variety of stakeholders when introducing and analyzing current interventions. The involvement of project staff and partners in project implementation (NGOs, local authorities) is helpful to get a common understanding and a good in-depth analysis of the existing approaches and the context factors. These actors will have greater ownership and understanding of the new behavior change strategy if they are invited to contribute at this stage.

Step 2: These steps can be divided into two main phases: first studying and then developing new interventions. Project staff and local partners have a key role to play in the study. When developing the new intervention, it is important to crosscheck with all relevant stakeholders, get feedback on the proposed intervention and see how best this intervention can be integrated into the pre-existing framework.

3. Recommendations & advice for preparation

3.1. General recommendation for program and project managers

- Behavior change goes beyond the usual tasks of WASH teams. It also requires a high level of openness to non-engineering skills. It is therefore important for WASH teams to dedicate sufficient time and human resources to getting into this new approach. Therefore, do not hesitate to repeat and leave enough time for critical questions and debates.
- Define a focal point at management level to give the topic the necessary importance and ensure follow-up.
- Be aware that the team will require capacity-building.
- Make sure to involve program/project management staff and local partners in the process.
- Allocate sufficient time and resources for Step 2. It isn't just a short-term activity and should be built into the YPO of the project and also be reflected in the budget.
- It is useful to define a focal-point person in the field team to lead the whole process.
- It is advisable not to pack all the sessions into only a few days. It makes sense to do Step 1 as a two-day workshop and to continue with Step 2 later.
- The document "Systematic Behavior Change in Water Sanitation and Hygiene**:** A practical guide using the RANAS approach" published by Eawag, gives a lot of background information and is the basis for the approach.

Box 1: Definitions of key terms

Behavior: Sequences of actions of the target population.

Psychological factors: Psychological factors refer to thoughts, feelings and other cognitive characteristics affecting the behavior and functions of the human mind. These factors can influence how a person thinks and later affect her decisions and relations in daily life.

Behavior change techniques (BCT): The element of an intervention that is thought to change a behavior.

Communication channel: Mode of delivery through which a BCT is brought to its recipients.

Behavior change strategy: Combination of a behavior change technique and a communication channel.

4. Step 1: Understanding the behavior change approach and analyzing existing interventions

4.1. Phase 1: Identifying behavioral determinants

4.1.1. Session 1: What is behavior change?

Objective of the session: Basic understanding of the behavior change approach
Time: 2-3 hours
Material: Pin board, PowerPoint presentation
Participants: Project staff, implementing partners (NGOs, local government, etc.)

Instructions for facilitator:

Collect information about existing experiences of behavior change with the following questions before you start with the theoretical input:

- What are behaviors of your own have you wanted to change?
- Which behavior did you last change?
- What are your experiences with behavior change in your project work?
- Which behavior change approaches do you know?

This exchange will help you to gather people's own experiences and provides some familiar, practical examples to which you can refer throughout the workshop.

Use and adapt the proposed PowerPoint presentation to your context.

Annex 2: Input on behavior change

4.1.2. Session 2: Introduction to the RANAS phase

Objectives of the session: • Knowledge of the RANAS phase • Definition of behavior and target population • Better knowledge of the interrelation of contextual factor and behavior
Time: 3-4 hours
Material: Pen and paper, pin board if available
Participants: Project staff, implementing partners (NGO, local government, etc.)

Instructions for facilitator:

- Work on real cases. Ask the participants to form working groups (4-5 persons) and select the most relevant behaviors to change/tackle in relation to the project.
- Make sure that the different stakeholders are represented in all the working groups.
- The behavior should be selected according to the following criteria:
    - The behavior is of crucial importance to your Wash/project intervention;
    - The project has planned interventions to change this behavior.

Use and adapt the proposed PowerPoint presentation to your context.

Annex 3: Introduction to the RANAS phases

Task 1: Identify and describe the behavior

In this session, the participants are asked to identify the behavior and clearly describe it. It is important to concentrate on the main behavior of relevance to the problem. For example: What is relevant to use of the toilet, and what is part of the behavior? Is it the construction of latrines, the maintenance of latrines or cleaning them? This has to be clarified in the discussion.

The behavior is a sequence of actions by a person and must be described in as much detail as possible. Once the behavior has been identified, the group has to define the start and the end of the behavior along with all the different stages. Look at the example below from Mozambique:

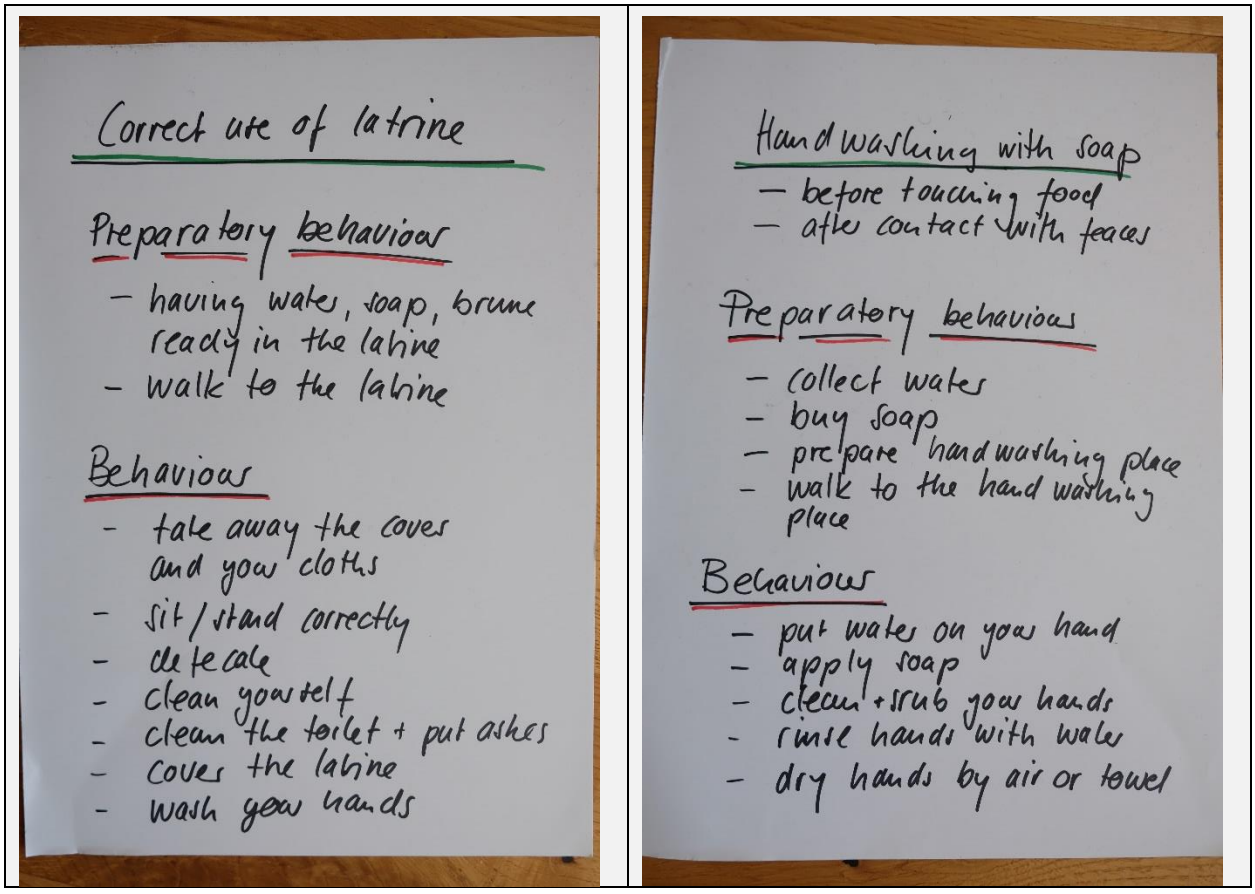


Photo: 1 Example description of behavior

Task 2: Identify the target group for the behavior

It is crucial to define which target group has the greatest leverage to change a specific behavior.

- If you want to target your project activities properly, it is very important to define your target group.
- For each behavior there is a different target group with its own behavioral factors.
- The following question should be asked: Who is the most important actor for changing a specific behavior? For whom should the project prepare its interventions? Which target group is the one with the greatest leverage on the specific behavior of families or the community?

If participants have split into two or three discussion groups for these two tasks, then they should all reconvene with the different solutions and discuss them with the aim of drafting a final description.

Experiences and challenges

Projects often aim to improve hygiene behavior, which involves a whole set of actions (building, using and cleaning latrines, handwashing, safe transport and storage of water, etc.) Discussions help you to gauge how ambitious you should be, select your target groups, and identify and prioritize the most important behavior you want to change.

Challenges:

It is a challenging task to define a behavior, because we all have different definitions in mind. In Mozambique they discussed whether building a latrine and using it constituted one behavior or not. Is cleaning the toilet a separate behavior, or a preparatory activity? The conclusion was that they should focus on use, and that leaving the toilet in a clean condition was part of the right use of the toilet, but daily or weekly cleaning was not. These are the kinds of questions that arise and need to be discussed and clarified by the team.

The definition of the target population gave rise to considerable discussion in Mozambique. Does the head of the family have the greatest influence on the use of the latrine, or do the women who take care of the children and the latrine? At first, the reaction was that the family head has the power to change behavior. Only during the discussion did field workers suggest that the woman of the house may not have full decision-making power, but she does have a greater influence on the use of the latrine, because she takes care of the children and is more interested in seeing the latrine used correctly, as she is responsible for cleaning it.

It was helpful, before discussing the target behavior the project intervention ought to change, to discuss people's own behavior in daily life (e.g. smoking and drinking). This made them aware of the challenges of changing behavior, the need for preparatory behaviors, and so on. Everyone had a practical example to share, and it was useful to be able to refer this link to personal reality during further steps in the RANAS approach.

To address these questions, it was important to discuss behavior in mixed groups of project managers, field staff and staff of implementing partner organizations and public technical services, who have a good understanding of local conditions. This made it possible to take into account different views and allowed a common understanding of the behavior to emerge. In our first pilot country, Mali, we held such discussions in a very small team prior to the introductory workshop. This was done too quickly, which did not allow to build the same common understanding and many questions arose subsequently.

Task 3: Identify contextual factors that influence the behavior:

- Brainstorm as a group about possible hindrances and favorable factors. Further qualitative interviews and observations can be conducted if there is missing information or a lack of clarity
- Be aware that cultural habits play an important role and that it is important to have sufficient information about them.
- Additional information may be collected by observing the target group going about their daily lives, and seeing which people practice the behavior and which don't.
- Be careful to identify not only hindering factors, but also favorable ones.

Context	Description	Examples from countries
Social context	• **Culture and social relations**, e.g. taboos, rites, or norms. • **Laws and policies**, e.g. prohibition of open defecation, water rights, school budget for hygiene supplies, curriculum including WASH behavior. • **Economic conditions**, e.g. household or community wealth. • **Product and service accessibility**, e.g. price of soap, water or infrastructure facilities, availability of soap, reliability of water services. • **Information environment**, e.g. health information shared in the health center or in schools.	**Culture**: Tradition of washing hands without soap in a common vessel before eating (Mali) **Laws and policies**: Integration of hygiene education into the school curriculum (Benin) **Product and service availability**: Availability of soap and slab in remote villages (Mozambique)
Physical context	• **Natural environment**, e.g. climate, seasons, water occurrence or soil condition. • **Built environment**, e.g. well, latrine, handwashing station.	**Natural environment:** Rainy season influencing water availability (Benin, Mozambique)
Personal context	• **Socio-demographic factors**, e.g. age, sex, and education. • **Physical and mental health** of the person.	**Socio-demographic**: Age - small children → difficult to use the latrine

Table 1: Description and examples of contextual factors

Task 4: Identify the relation between the contextual factors and the behavioral factors

- Allocate the respective contextual factors to the behavioral factors, and define if the effect is positive or negative (see table below).
- Be aware that some environmental factors can influence different behavioral factors.
- Discuss whether current project activities influence the identified environmental factors. What kind of activities could be strengthened in the future?
- What kind of information is missing and should be gathered through further qualitative interviews, focus group discussions, etc. to complete the list below.

Please look at the examples on the next page.

Factor	Hindering contextual factors	Favoring contextual factors
Risk factor *Health knowledge* *Vulnerability* *Severity*		**Social:** Integration of hygiene education into the school curriculum (Benin)
Attitude factors *Beliefs about cost and benefits* *Feelings*		
Norm factors *Others' behavior* *Others' (dis)approval* *Personal importance*		
Ability factors *How-to-do knowledge* *Confidence in performance* *Confidence in continuation* *Confidence in recovery*	**Physical:** Availability of soap and slab in remote villages **Personal:** Age: small children → difficulty to use the latrine	
Self-regulation factors *Action planning* *Action control* *Barrier planning* *Remembering* *Commitment*		

Table 2: Example of a table allocating contextual factor to behavioral factors

Experiences and challenges

Projects do not always have the time and capacity to conduct an in-depth analysis of the contextual factors that influence behavior. We mainly focus on technical analysis, and social and organizational or market assessment. Assigning a behavior to contextual factors helps us to better understand the dynamic between the two.

It is also important to realize that negative contextual factors, such as a cholera epidemic, can have a positive impact – for example on hygiene practice – and vice versa.

Challenges:

During the discussion we usually tend to focus on the hindering factors, such as the poor economic condition of the target group, a lack of soap in the village, etc. So it is important also to pay sufficient attention to the favorable contextual factors. For example, the inclusion of hygiene education in the school curriculum has had a positive influence in Benin.

We have realized that we often have a predefined view of what is influencing what and thus forget some of the factors. The framework helps us to complete the analysis in a more systematic way.

The working group mentioned in the previous steps brainstorms all the contextual factors first. The diversity of the group in Mozambique ensured that the analysis was more holistic. This helped to

identify the key issues in the social, physical/technical and personal contexts. The next step identifies the issues that have to be examined in greater detail. In Mali, the influence of the tradition of washing hands in the same bowl or pan without soap before eating was identified as a social factor for which we needed more reliable information from the field through qualitative interviews

4.1.3. Session 3: Critical assessment of the project's existing intervention with regard to behavioral factors

Objectives of the session: • Better knowledge of the interrelation of intervention and behavioral factors • Critical analysis of existing approach and identification of improvement measures
Time: 0.5 day
Material: Pen and paper, pin board if available
Participants: Project staff, implementing partners (NGOs, local government, etc.)

Task 1:

- Identify the various BCTs that are implemented in your project to change the selected behavior.
- What are the messages/content of the intervention?
- Allocate the identified interventions to the behavioral factors (see table below).
- Discuss the results. Are we targeting all factors? If not, which ones are missing and why? How can we adapt the present intervention to influence more different factors and achieve a more holistic approach? What would be the next steps? What effect does the RANAS model have on my future work?
- Introduce the Behavior Change Technique List, and analyze if there are some BCTs which might be useful to adapt the existing intervention.

Annex 4: List of Behavior Change Techniques

Interventions	**Behavioral factors**
Poster with information about diarrhea prevention measures	Risk factor: factual knowledge
Handwashing demonstration at community meeting	Ability factor: how-to-do knowledge
CLTS	Risk factor: factual knowledge Attitude factor: emotion Norm factor: Others' (dis)approval
etc.	

Table 3: Example of table allocating project interventions to behavioral factors

➔ **After these three sessions the decision must be taken if the project should enter the fully fledged RANAS approach by applying Step 2, or not.**

Helpful questions to help you come to a decision:

- Do we have the human capacities and a person who wants to take the lead and be the focal point?
- Have we budgeted for it?
- Can we easily integrate it into the project cycle?

Experiences and challenges

The allocation of the intervention to behavioral factors gives a good indication of how many factors we should target with our project activities. It can be an eye-opener to see that all the interventions are targeting only one or two factors such as the risk factor (e.g. health knowledge) and ability factors (e.g. how-to-do knowledge). This stimulates discussion and opens it up to critically assess the work done and identify some possible adaptations. Additionally, it helps us make a decision about strengthening the project's behavior change approach.

Challenges:

One challenge is that some interventions target several factors – for example, the CLTS approach, which influences the risk, attitude and norm factors. A group discussion is essential to sort this out. The discussion also serves to gain a better understanding of which kind of effect an intervention can have.

This is only a short analysis based on a more qualitative assessment and it is not evidence-based, but it helps start the discussion about behavior change and how to improve the existing intervention without requiring a big study.

5. Step 2: Applying the behavior change approach

5.1. Phase 2: Measuring behavioral determinants

5.1.1. Session 1: Developing the questionnaire

A questionnaire needs to be developed to enable project staff to measure the different behavioral factors within a community. Note, that this is a crucial step that requires a considerable amount of time and effort. Drafting the questions is a key activity in the RANAS approach. The first time you develop a questionnaire it is advisable and necessary to seek external support from an adviser or project person with experience of RANAS or other behavior-related surveys

The development of the questionnaire should be done in a small team with a good mix of people (field staff or local implementing partners to bring in local sensitivities and experiences, the supervisor, and project staff). It is also advisable to have the person in charge of data analysis on board.

Objectives of the session: • A completed survey questionnaire • A defined sampling method
Time: 1-2 days depending on the participants' experience
Material: Computer, pen and paper, pin board
Participants: Project team, possibly implementing partners, study supervisor, person in charge of data analysis

Instructions for work:

- Give a list of questions to the group and ask them to group the questions according to the respective behavioral factors. This gives a quick insight into these specific questions and stimulates discussion.

  Annex 5: List of RANAS questions for the exercise

- Example questions from other RANAS surveys can be used as for inspiration, but be careful to adapt it to your behavior and the local context.
- When formulating questions, always bear in mind your target group, and use their wording and terms.
- Formulate the question as simply as possible, and make sure that the answer categories are credible and workable in the local context.
- As far as possible, use closed questions or open questions with categories to simplify later analysis.

You will find more information in the annex about the structure of the questionnaire, as well as the type of questions you can use.

Annex 6: Structure of the questionnaire

Experiences and challenges

Greater attention was paid to this task than in other surveys, because developing the questionnaire was a key step in the approach. Drafting the questionnaire in a group has built up know-how and created awareness in our WASH teams in Mali, Benin, and Mozambique of the need to formulate questions in a precise way. Additionally, it has allowed us to experiment with new methods of data collection using mobile phones.

Challenges:

The most challenging aspect was formulating the questions in such a way that they elicit the information to be collected with all its nuances, while also being clear and concise in the local language. A key issue was finding answer categories for the scale questions that can be translated into the local languages.

Questions regarding behavior such as defecation are very personal and tricky. In Mali, we had long discussions about how cleaning a baby's behind and defecating should be formulated in the local language so as not to offend the interviewees. Questions regarding behavior and risk factors were already familiar, but questions regarding norms and self-regulating factors are new and need more reflection by the team.

In the first pilot country, Mali, the questionnaire on handwashing was still rather long. The challenge in the other countries was to reduce the questionnaire without losing the added value of the RANAS approach.

The most efficient way to develop the questionnaire was to work in a small group consisting of the project manager, the person responsible for the survey and data analysis, and a representative of the field staff who speaks the local languages and knows the communities well. This helped us to formulate the questions in a simple and culturally sensitive way. At the same time, the project staff became familiar with the questionnaire, which is of great help for the translation and interviewer training.

In our first pilot in Mali, we developed the questionnaire before giving it to the project team, but this is not advisable. A lot of additional discussions were necessary to create a common understanding of

the questionnaire with the team and the interviewers afterwards. The first time a RANAS questionnaire is developed, external support in the field or by Skype is advisable, but the development of the questionnaire has to be done jointly with the team right from the beginning.

As an NGO, we do not want to publish scientifically, so the questionnaire should be as short as possible for its purpose. It helps to define the maximum number of questions you want to ask per factor. Another option was chosen in a project in Pakistan that did not have the capacity to conduct a full RANAS study. There, we integrated some RANAS questions into a KAP survey questionnaire. Depending on how the data will be collected, whether by a questionnaire on paper or using a mobile-based system, special attention must be paid to the formulation of the question and answer categories. Open questions have to be reduced to a minimum, as entering such answers on a mobile phone can be tiring.

5.1.2. Session 2: Translating the questionnaire (if necessary)

If possible, the questionnaire should be translated into the local language. If the local language is not a common written language, it is also enough if only the key words are translated to assure a common understanding of the questions. This work can be done and prepared with local staff and then improved with the interviewers during the interviewer training session. This allows them to become familiar with the questionnaire and avoid misunderstandings.

5.1.3. Session 3: Defining the study zone, size and selection procedure of the sample

Selecting the study zone and size of the sample

The study zone should be representative of the project intervention zone. To be able to define the study zone we should have enough information about the zone with regards to population, number of villages, etc. It is also important to have information about on-going and future project activities to ensure that the survey is carried out in the communities targeted by the planned intervention. This is important in relation to the evaluation, because we want compare the situation before and after the intervention. This requires good coordination with partners and responsible local government.

The size of the sample can be defined as 10% of the population. For simplicity's sake, we advise including at least 100-150 households. If this number does not allow you to cover all the villages in your project zone, you can choose the villages at random, for instance by lottery.

It is up to the project whether it opts for a higher sample than 150 households. It can make sense to integrate the RANAS questions into a normal baseline study where a larger sample is necessary or planned.

Sample selection procedure

Households must be selected randomly:

- Random selection is necessary when the population is too big for everybody to be interviewed.
- Random selection is necessary, because the interviewer's selection may not be representative.
- Methods for selecting households randomly:
    - If available, selection using a numbered list;
    - Use the random route technique (see box below)

Box 2: The random route technique

The interviewer walks around the allocated area/village. She/he chooses her/his way at random, and starts counting the households on the left- and right-hand sides of the road (this should be defined). Sometimes the structure of the settlement makes it necessary to enter a compound to count the households there.

At the fifth household, the interviewer is supposed to ask somebody to participate in the survey. If there is nobody at the fifth household, or the people don't fit the defined target group or do not wish to be interviewed, then she/he should ask people in the sixth, seventh or eighth (and so on) household to participate.

After she/he has carried out the interview, she/he starts counting again.

Five is not compulsory as a number: the survey coordinator can also decide on any other standard number, depending on the area. The number might be lower for a small community; in an extensive community, it may be higher. The number must be chosen so that every household could theoretically be selected for the survey sample. To achieve this, the interviewers should start from a different corner of the area every day. Every interviewer must count in the same way. The random route technique ensures that interviewers don't select households in an arbitrary manner.

5.1.4. Session 4: Forming the survey team

The choice of the interviewers is important for the success of the study. The selection criteria are the following:

- Knowledge of the local languages and conditions;
- Good writing and reading skills;
- Depending on the interview target group, it is important to pay attention to the gender of the interviewer. This can influence how easy it is to discuss certain topics with the interviewees;
- Social sensitivity and good communication skills.

The interviewer can be selected from among the project or partner organization's staff (local animator, etc.). The advantages are that you do not have to recruit people, and they know the project zone and the project. There is, however, also a certain risk. It is not always easy for the project staff to change roles and be completely objective. There is also the danger of distorting the answers, especially during the evaluation study.

If external interviewers are hired, the project staff and the local authorities have to ensure that they are properly introduced to the communities to avoid any conflicts or misinterpretation of the study's objectives.

The interviews should take about half an hour. The capacity of an interviewer depends on the population density and accessibility of the target population. An interviewer can usually conduct 5-8 interviews per day. The number of days can therefore be estimated on the basis of this information and the number of interviewers:

- For example, five interviewers can do six interviews per day → 150 interviews per week.

5.1.5. Session 5: Training the interviewer

Objectives of the session: • Trained interviewers • Questionnaire translated, if necessary • Questionnaire piloted in the communities
Time: 3 days
Material: Computer, pen and paper, pin board, questionnaires, possibly smartphones depending on the collection mode.
Participants: Project staff, study supervisor, interviewers

The content of the RANAS questionnaire is special, and it is therefore important to train interviewers properly to ensure good data collection. The training should be as interactive as possible and provide enough time to do role plays and practical exercises using the questionnaire.

The training includes the following topics:

- Short introduction to the RANAS approach and the aims of the study;
- Discussion of the questionnaire and the different types of question;
- Translation of key words for common understanding;
- How to use the questionnaire (special attention and further training is necessary if a smartphone-based system is used, which is not yet familiar to the interviewer);
- Role play to encourage familiarity with the questionnaire;
- Information about household selection (random route technique);
- Organizational information (time plan, logistics, remuneration, etc.);
- Pilot test of the questionnaire in a village:
    - Each interviewer does one or two interviews with a person from the target group. This allows the interviewer to train in real conditions, but also to check the questionnaire and see if some of the questions are not well understood and need to be adapted or improved. A final version of the questionnaire is then drafted based on the interviewers' feedback.

You will find further information regarding interviewer training in the annex.

Annex 7: Interviewer training

5.1.6. Session 6: Data collection and entry

Data collection

The data collection and entry depend very much on the chosen methodology. The data collection can be done with a classical questionnaire on paper or with smart phone based survey.

HELVETAS has made very good experiences in using smart phone based survey tools. It has reduce the work and improved the data quality of the survey. Additionally interviewer are more motivated using these devices for surveys.

Box 3: Smartphone-based data collection

Information and communications technology (ICT), such as mobile survey tools, can facilitate field-level data collection. Some providers have created systems designed for use in challenging and remote areas with weak and unreliable internet connections. Data can be collected through the Android-based smartphone app, both on- and offline. When the user then accesses an internet connection, the data is automatically uploaded to the cloud-based data management and analysis portal in a usable format. This eliminates costly and time-consuming data entry, and creates the prospect of managing all project data remotely.

HELVETAS has entered into a smartphone data collection partnership with Akvo for surveys and monitoring.

Different providers offer different solutions, and each organization has to choose the best solution for its needs. Here are a few further links: www.akvo.org, www.mwater.co, home.magpi.com,

Whichever option is chosen, the supervisor has to ensure that data collection is done correctly during the survey. It is advisable that he/she check the online or paper questionnaire every evening to avoid recurrent interview mistakes. This saves a lot of time during data analysis. For example, for the question, “How many times do you wash your hands?” some interviewers in one of the pilot countries wrote a figure and others wrote out the number in word form. The figure is much easier to handle during analysis, and the written-out number had to be reformulated as figures.

It is important to plan the study timeframe for the interviews well and to take account of market days, farming seasons and special holidays, etc. to avoid any delays or unexpected surprises.

Annex: 8: Checklist for the supervisor

Data entry

If the smartphone-based option is chosen, the data is already available in electronic form and can be transferred into Excel, which is a big advantage.

With a paper-based questionnaire, the data has to be entered in a prepared Excel sheet. This can be done by project staff or outsourced. It is important that the person in charge of data entry is well trained to avoid mistakes or additional work during data analysis. The best option is for the person in charge of data analysis to be responsible for the person doing the data entry too.

Depending on the length of the questionnaire and the simple size this can take some few days.

Annex 9: “Data entry**”** checklist

Experiences and challenges

Because the survey was of particular importance, greater attention was paid to training the interviewers, and this paid off in terms of the quality of the data collected. It was important to realize that local people can understand and answer relatively sensitive questions.

Collecting data with smartphone-based system simplifies both the data collection and the data entry steps. It also helps to supervise the interviewer and if the data centralized and linked to Google Maps. Although some initial investment is required to purchase the smartphones, ultimately you gain in data quality, there is no cost for printing questionnaires, and data entry takes less time.

Challenges:

The sample selection can be tricky. The Mozambique project is led by the local government. At the time of the baseline study, the local government had not yet defined the future intervention areas. This

caused a situation in which the intervention based on the study was not necessarily applied in the study area, and this hampered the subsequent evaluation of the intervention.

During the planning phase, it is important to take account of the seasonality of household workloads, local events, and the gender composition of the interviewer team. The Mali project team initially chose only male interviewers, because they could move around on motorbikes. The composition of the interviewer team was changed when they realized that the questionnaire's target interviewees were women. This had an impact on logistics, because the women could not ride motorcycles or stay overnight in the villages.

Although the interviewers were trained, sometimes the answers were not entered in the same way. If the study supervisors did not react immediately, this caused a great deal of additional work in data cleaning later.

The questionnaires were not fully translated; we only focused on translating the main keywords, as most of the data collectors could not read the local languages. Translating the questionnaire went well with the interviewers in Mali, because it deepened their understanding of the questionnaire and was part of the interviewer training. In Mozambique, the translation was done with the help of the local partners and the group of staff who participated in drafting the questionnaire, because it had to be translated into different local languages.

The length of interviewer training also depends on the collection mode. More time has to be allocated if a mobile-based data collection system is being used for the first time. We found in Mozambique that using mobile phones to collect data can be a motivating factor for interviewers. In remote areas, however, gaining access to electricity to recharge phones can be a challenge.

To reduce the work and cost, we reduced the sample size to a minimum of 150 households in Benin and Mali.

The survey supervisor has an important role to play and should react immediately if there is an inconsistency in responses. This allows a lot of time to be saved when entering and cleaning data.

5.2. Phase 3: Determining behavior change techniques (BCTs) and corresponding materials and activities

5.2.1. Session 7: Data analysis

To identify which behavioral factor is most decisive for the performance of the behavior, we have to compare the non-doers and the doers regarding these factors. Identify the biggest difference between doers and non-doers for a particular factor, and that is the one you will have to address with your intervention.

We apply a basic estimation with a calculation program like Excel, which is accessible for all projects. If there is already excellent knowledge within the team about other statistics programs like SPSS, this can be used, but it is not necessary.

For the data analysis, there are three steps to follow:

- Cleaning and preparing the data;
- Dividing the sample into doers and non-doers (see example in the annex);
- Calculating the mean score of the doers and non-doers for each factor.

The person doing the analysis should be familiar with Excel and will need a short introduction to the analytical procedure, based on the checklist for data analysis.

Annex 10: "Data analysis" checklist

5.2.2. Session 8: Interpreting the data and identifying the main behavior factors

Once you have analyzed the data, the main results should be presented in a simple way (for an example, see Figure 2 below) to the project team and the relevant partners. It is not necessary to explain the whole process of data analysis to the team. Besides analysis of the factor, any additional information should be presented that helps to better understand further differences between doers and non-doers (see Figure 3 below).

The project team can make a first joint analysis with the person in charge of data analysis before sharing the results with the partner. If the team is small this can be done altogether, as it has a learning effect.

First step

Two main questions have to be asked to interpret the results regarding behavioral factors:

- For which factor does one see the greatest differences between doers and non-doers? (See red circle in the graph below.)
- For which factor are the scores of doers and non–doers the lowest? (See blue arrow in the graph below.)

Second step

Interpret the additional information regarding the behavior and environmental factors as well as the socio-economic data.

- Are there any relevant differences between doers and non-doers regarding the socio-economic situation or personal contextual factor (education, income, age, etc.)?
- Are there any relevant differences between doers and non-doers regarding the physical contextual factor (e.g. the observed infrastructure condition such as the availability of latrines, handwashing station, etc.) which are linked to the behavior?
- Are there any relevant differences between doers and non-doers regarding the social contextual factor (ethnicity, tradition, etc.)?

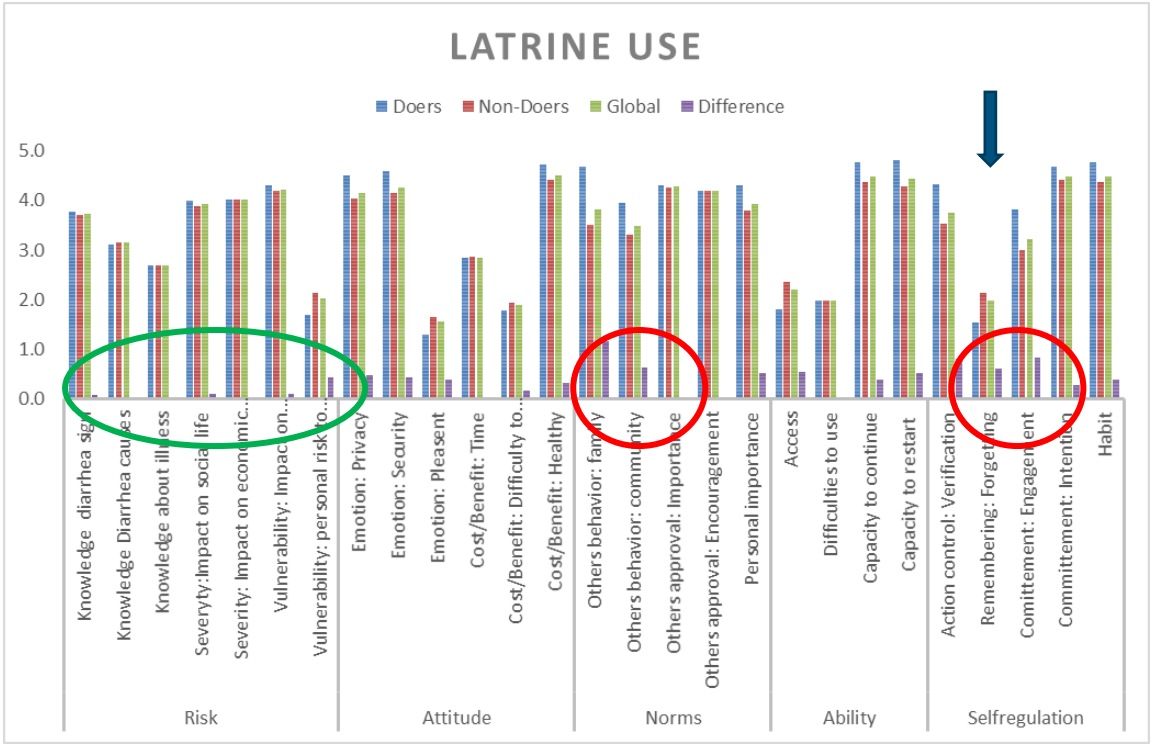


Figure 2: Graph of the results for the behavioral factors of the doer and non-doer analysis in Mozambique

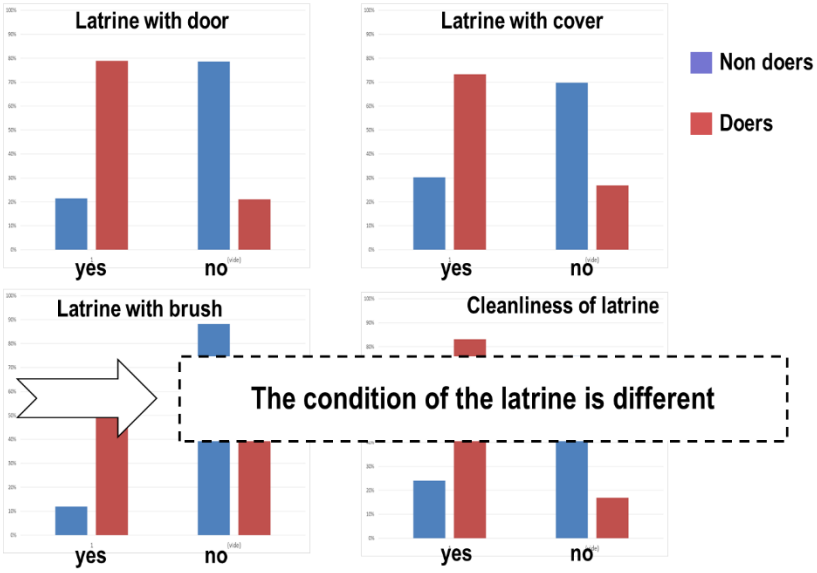


Figure 3: Graph of the results on the condition of the latrine in Mozambique

Conclusion of the analysis in Mozambique:

- **Risk factors**: There is no big difference between doers and non-doers → **no action is necessary**
- **Norm and self-regulation factors**: There are some big differences between the factors "others' behavior", action control, remembering and engagement → **these are the factors to target.**
- **Condition of latrine:** Differs between doers and non-doers → this might have an influence on use.

It is important that the data is interpreted and discussed together by the project team, as well as with the concerned stakeholders. This leads to a better joint understanding of the results and the conclusions. External support for this discussion can easily be provided remotely.

Experiences and challenges

The data analysis can be done using Excel and require no statistical know-how. Doing the whole data analysis on our own allowed us to build capacity for data management within the team. This is also helpful for further monitoring and evaluation work.

Challenges:

The cleaning and analysis of the data is a full-time job involving several days' work for one person. The time needed should not be underestimated; this work cannot be done in one or two hours alongside all the other daily tasks.

In Mozambique, data collection was done using mobile phones for the first time. This significantly reduced the workload for data entry, but some of the answer categories were not properly defined, causing additional work during the data cleaning process.

Finding a person who has knowledge of Excel and likes to play with numbers is not always easy, therefore capacity-building must be factored in.

With the RANAS approach, you calculate the difference between doers and non-doers and not the percentage of a certain factor in the whole population, for example the percentage of people who like

the smell of soap. This is new, and it took time for the team in Benin and Mozambique to understand the logic.

The analysis can be tricky. High score and high difference do not necessarily mean that this factor has to be tackled, but it has to be looked at individually and linked to the question. For example, in Benin the non-doers had a high score compared to the doers regarding the question about perceived vulnerability in relation to their actual behavior. The first reaction was that we should address perceived vulnerability; it was only on closer examination that we realized this was telling us that the non-doers already had enough knowledge about the risk they were taking.

A color code for the different types of question is of great help and reduces mistakes if the data is entered into Excel manually.

Although one person does the data analysis, it is important to have a second person who has some basic knowledge and can act as a sparring partner by taking a critical view. This is especially important for the work of coding open questions.

The definition of the cut-off level between doers and non-doers should be discussed in the project team and not simply decided by the data analyst. Adaptations can then be made in the case of too low a level of doers or non-doers.

A clear and step-by-step instruction for the data cleaning and analysis were developed for all pilot countries. After the data cleaning and the first analysis, the work was crosschecked by another person to eliminate mistakes.

The result of the analysis has to be discussed in the group. They should bear the corresponding question in mind to avoid misinterpretation. Additionally, it helps to have a good common understanding of the results when developing behavior change techniques in the next step.

5.2.3. Session 9: Determining behavior change techniques and communication channel

Objectives of the session: • Define behavior change technique • Identify communication channel • Describe behavior change intervention
Time: 1 day
Material: Computer, pen and paper, pin board
Participants: Project team, partners

Don’t fall back into your old behavior! This is also valid for project staff. Experience has shown that even after clear analysis we tend to return to our normal messages and intervention.

It is important when choosing the right BCT to focus only on the factors identified in the previous step. As a first step you can use Table 4 below and fill in the two first columns:

- The BCT list is a source of inspiration (see Annex 4) and helps to identify possible interventions. The list contains a variety of potential BCTs grouped under each behavioral factor.
- Mark the BCT which could be potentially be used for your behavior, and fill in Column 3 of the table.

Example for latrine use in Mozambique		
Today's situation	Tomorrow's situation	How we can achieve it
What non-doers think about the behavior	What we want the target individuals to think and feel about the behavior tomorrow:	How we will achieve this (BCT)
Risk factor: There is no significant difference between doers and non-doers	No change required	No intervention required
Attitude factors It is not safe and there is not enough privacy to use a latrine.	I feel safe using a latrine. I have privacy when using my latrine.	BCT 8: Describe positive feeling when using latrine
Norm factors: Not many of my family use the latrine. Not many of the community use the latrine.	Most of my family members use the latrine. Most of the community uses the latrine.	BCT 9: Inform about other's behavior BCT 10: Prompt public commitment
Capacity factor: It is difficult to access the latrine.	It is easy to access the latrine.	BCT 15: Provide instruction BCT 20: facilitate resources BCT 21: Organize social support
Self-regulation factors: I do not check if the latrine is clean. I do forget to use the latrine. I am not committed/motivated to use the latrine.	I check the latrine's condition. I always remember to use the latrine. I am committed to maintaining and using a latrine.	BCT 36 Agree a behavioral contract BCT 10 Prompt public commitment

Table 4: Table to analyze the factors to be changed and allocate appropriate BCTs

- Discuss and brain storm in the group about how to adapt BCTs to your behavior and context using the additional information you gained from the contextual factors and experiences.
- Be aware that one behavior change technique can address a different factor.
- When choosing the behavior change technique, bear in mind your human and financial capacities.
- Once you have discussed the possible BCT, start to write a script for the intervention including the communication channel (see Table 5 below).

Communication channel = the mode of delivery through which a BCT is brought to the recipients

The following communication channels can be used for your identified BCTs. Some BCTs are more effective if you use interpersonal communication channels. These BCT generally require personal guidance and direct contact with the receiver.

Mass-media communication channels:

- Print media: newspapers, brochures, leaflets, stickers, paintings
- Audiovisual media: radio, television, megaphones
- Songs, folk drama and theatre, concerts, rallies, parades, cinema shows
- Internet

Interpersonal communication channels:

- Group communication
- Community meetings
- Small-group training sessions
- Mobilized social networks

Person-to-person communication:

- Home visits with promoters
- Opinion leaders
- Peer-to-peer communication
- From teachers through children to parents

Example for latrine use in Mozambique		
BCTs	**BCT description**	**Communication channel**
BCT 9: Inform about other's behavior	Inform the public about how the behavior is performing Give a small flag to households maintaining and using their latrine	Community meeting
BCT 10: Prompt public commitment BCT 36: Agree a behavioral contract BCT 21: Organize social support	Publicly commit to using and maintaining the latrine, as well as supporting their neighbors to do so and sign up on a list	Community meeting
BCT 15: Provide instruction	A participative exercise is then organized to draft a checklist for a well-maintained latrine and explain how to do this	Community meeting
BCT 20: facilitate resources	Invite private service provider to present their slab products and do their marketing Households that use and maintain their latrine get a price reduction voucher for a slab	Community meeting

Table 5: Description of identified BCTs and communication channel

Once the main activities have been defined, a detailed script for the intervention with the actors and the timeline has to be developed (see Annex 11).

Annex 4: List of Behavior Change Techniques

Annex 11: Example description of an intervention

Experiences and challenges

This step is essential, because it both supports and forces you to define action based on the results of your study and the catalog of BCTs. The catalog of BCTs is enriching and opens up discussion about new intervention options.

Additionally, it helps to analyze the interventions completed in a project to see if they actually tackle the target factors. Even if no study has been done, the catalog can be used to assess the present intervention of a project and to identify possible gaps.

It is important for project teams to realize that existing interventions can be used, but the main task is to ensure the right content. For example, in Benin a theater play addressing norm issues about handwashing was developed; beforehand, health risk had been treated as the main issue.

Challenges:

For the project team, it is a challenge to choose the right BCT to target the identified factors. Although we assessed and identified the factors to tackle, we tended to fall into our old behavior and plan interventions as we are used to doing, such as explaining risk. This was the case in Benin and Mozambique when the team was first asked to propose an intervention for handwashing that tackled the norms.

The choice of BCT has to take into account the project and local resources as well as the area to be covered. It is a difference if, as in Mali, a partner NGO or, as in Mozambique, governmental staff implement the new intervention.

It makes sense to take time to identify existing activities and assess them in the light of the study results. There might be some intervention which will need only very little adaptation.

It is important to let local field staff brainstorm possible BCTs and to take time to describe the intervention in detail to ensure correct understanding of the approach. Coaching is needed to ensure quality and to avoid falling back into old patterns of behavior.

5.3. Phase 4: Implementing and evaluating promotion strategies

5.3.1. Session 10: Implementing a defined intervention

The project can now implement the defined and tailor made intervention in their project. It is important that the interventions are timely good planned taking into account seasonality, work load etc. of the community. The interventions are implemented for a certain period (at least 6-12 months) before an evaluation takes place.

Here are some pieces of advice for the implementation:

- Build capacity within your partner organization or your own project promoters to implement the new intervention. Make sure that they understand the content and the planned goals of the intervention.
- Always carry out a first pilot implementation in one of your communities. This has two advantages. First, it helps you see if your new designed intervention is well received and understood by your target communities. Second, you can use this opportunity to invite representatives of your partners as part of their training, and then use their observations as critical assessment. If necessary, you can still make adaptations before scaling up.
- Ensure that your promoters implement the intervention correctly. This means that you should check that the interventions are well interpreted, and that the promoters do not fall into old behavior and apply the same discourse as before.
- Follow up on the first activities in the villages in private.

Experiences and challenges

This step shows the full range of possible combinations and obliged the project team to clearly describe the behavior change campaign. In Benin, all these steps were done before a new project phase and were helpful when planning the capacity and resources needed for the behavior change strategy for the new project.

Challenges:

The choice of communication channel has a strong influence on the sustainability of the intervention. The challenge is to find a good balance between the credibility and effectiveness of the communication channel and locally anchored structures. For example, the question in Mali and Mozambique was whether a local NGO or the governmental structure should be used as interpersonal communication channel.

Cost is another issue which needs consideration right from the beginning in the choice of the communication channel.

When introducing a new approach, we expect new and fancy solutions. The first reaction of the project team was disappointment that we ended up with a household visit and a theater play as communication channels after all the effort put in to the analysis and survey.

In all three countries, both interpersonal communication, such as community meetings and household visits, and mass communication, such as theater plays and posters, are used as communication channels in the project. Enough time has to be planned to discuss the different communication channel options. This helped the team to realize what had already been done in the right way and to build on these resources.

The task for the project team was to identify which of these communication channels should be used to apply the BCT identified in Session 9. This also helped when estimating the cost, as these were well-known activities.

5.3.2. Session 11: Evaluating the intervention

After an implementation period a follow-up survey of the intervention helps to understand if the activities were well received and if the envisaged change has occurred.

The survey is a panel survey, and we want to compare the answers of the same people before and after the intervention. This means that the interview has to be done with the same people as in the baseline survey. The same questionnaire must be used to analyze how the behavioral factors have changed over time. Additional questions are included to check whether the interventions were delivered as intended: Did the target group receive the BCT? Did the people like or dislike it? What can they remember about the intervention?

To simplify the questionnaire, questions about the socio-economic situation that proved irrelevant in the first questionnaire can be left out in order to reduce the size of the questionnaire, if there have been no bigger changes in the project zone and questions. For example, the questions about the risk factor were left out in Mali, because there were no significant differences between doers and non-doers regarding this factor.

The data is analyzed in the same way as for the first survey by comparing the change in behavior of doers and non-doers, and the target behavioral factors, taking account of the additional information on the intervention.

Once you have the data you can compare it to your baseline survey.

Annex 12: Example question about interventions

5.3.3. Session 12: Adapting the strategy

The work is not finished when the data has been analyzed. It is an on-going process. Using the results of the follow-up study, a critical analysis must be carried out of the interventions and how they should be adapted for future activities.

For example, the evaluation in Mali showed that the intervention was able to increase handwashing practice from 14% to 48%. A clear change was observed at the level of the norm factors, which were one of the target factors. The effect on self-regulation factors was not so great.

This has led to a discussion about how best to improve the intervention to address the self-regulation factor and achieve better results in future.

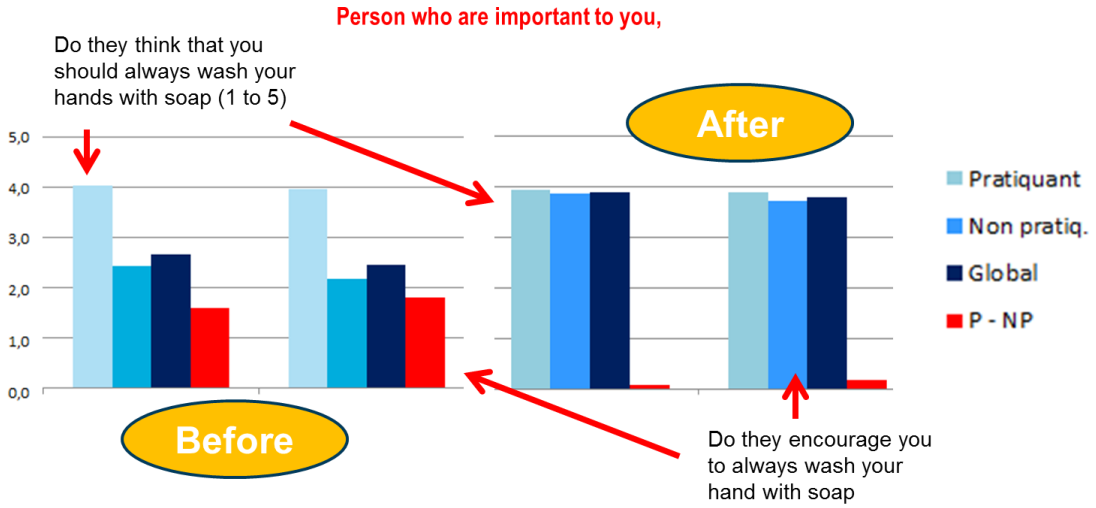


Figure 4: Norm factor before and after intervention in Mali

Some guiding questions, which should be asked during the analysis of the result in the team:

- Did the target person receive the interventions?
- Which intervention did they like best?
- Did the target factors change?
- What do we have to adapt in our interventions?

Once this analysis has been completed, an action plan should be drawn up that takes account of the following questions:

- What needs changing in the designed interventions?
- Do additional interventions need to be developed? → Repeat Session 9.
- To allow for follow-up on the improved interventions, some data needs to be collected in future and it must be optimally linked to the project monitoring system.

6. Annexes

Annex 1: Behavioral factor and RANAS model

Annex 2: Input on behavior change

Annex 3: Introduction to the RANAS phase

Annex 4: List of Behavior Change Techniques

Annex 5: RANAS exercise questions

Annex 6: Structure of the questionnaire

Annex 7: Interviewer training

Annex 8: Supervisor's checklist

Annex 9: "Data entry" checklist

Annex 10:"Data analysis" checklist

Annex 11: Example description of an intervention

Annex 12: Example question about interventions