EVALUATION REPORT

EVALUATION OF THE WASH SECTOR STRATEGY "COMMUNITY APPROACHES TO TOTAL SANITATION" (CATS)

Final Evaluation Report

MARCH 2014

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Preface

The purpose of this evaluation was to evaluate UNICEF's experience in understanding and implementing Community Approaches to Total Sanitation (CATS), with a particular emphasis on the period from 2008 to the present. It was to do so by examining the strengths and weaknesses of its application in UNICEF programming and by analyzing how it connects with and builds upon related sanitation approaches.

This evaluation takes place as UNICEF nears 7 years of its corporate commitment to the CATS. Since the emergence of the community-led total sanitation approach (CLTS) in the early 2000s, UNICEF has been an ardent supporter of community based sanitation programming, leading to adopting CATS as the corporate sanitation strategy in 2008. UNICEF and partners have since gained critical experience in its implementation. The partners have included governments, other development agencies, national institutions, and, most importantly, the men, women, and children of all communities seeking to develop and prosper. UNICEF feels that the CATS programming is at an inflection point. A strong evaluation can meet three global needs: to enable evidence based decision making for the managers of active CATS programs and those considering whether to begin programs; to contribute to global learning so all sanitation advocates can reflect on their programs in light of the CATS evidence; and to meet accountability expectations to all stakeholders that UNICEF will critically examine the effectiveness and efficiency of its major programming strategies.

The UNICEF HQ Evaluation Office commissioned this independent global evaluation in December 2012. The evaluation was conducted by a partnership of Hydroconseil SA (France), ECOPSIS (Switzerland) and the Water, Engineering, and Development Center (WEDC) of Loughborough University (UK). The team leader was Mr. Bruno Valfrey of Hydroconseil. Other key team members were Rebecca Scott and Andy Cotton (WEDC), Julie Aubriot and Na'a kin Pintado (Hydroconseil), and Beatrice Keller, Derko Kopitopoulos, and Hans Spruijt (ECOPSIS). We appreciate their hard work to make sense of a WASH strategy that takes many forms in varied contexts yet is asked to respect a critical set of core principles.

The evaluation methodology included an extensive document review, five country visits, an on-line survey and webinars, four regional office visits, and 10 key informant interviews. All told over 200 persons contributed to the data gathering phase, excluding the many dozens of community members and local authorities who also contributed during the country visits. An external expert reference group made major contributions at both ends of the process, notably in helping improve the inception report and the final report. They brought their individual and institutional expertise from the Gates Foundation, DFID, the World Bank, and Plan USA, and their help is greatly appreciated.

Whole-hearted thanks go to UNICEF staff across the organization for their engagement in the evaluation, and even more for their support for CATS. Special thanks are offered to the team in the WASH Section of Program Division in UNICEF NY (notably Sanjay Wijesekera, Director, and Therese Dooley and Louise Maule, Technical Specialists), and to the regional WASH advisors and WASH staff in UNICEF country offices, in particular those regions and nations that hosted the evaluation team visits. . The WASH staff at all levels spent untold hours in document searches, mobilization, networking, brainstorming, and reviewing reports. We have rarely seen such a level of interest, support, and appropriation of the results.

Readers of the report may wish to pose questions or learn more. If the questions or comments are about the evaluation contents, methods, findings, and recommendations, please write to the Evaluation Office at e-mail address evalhelp@unicef.org. If the questions or comments are about UNICEF and WASH, and how CATS will or should evolve in the future, please write to [XXX who?]. Readers are also invited to visit the UNICEF website (Unicef.org) to investigate the full range of actions and outputs of the Evaluation Office or the WASH team.

Colin M. Kirk
Director
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Acknowledgements

The evaluation team would like to express their appreciation and gratitude to all those who contributed their valuable time and expertise to this evaluation and shared their knowledge of the hygiene and sanitation sector and of CATS, in particular. We would especially like to express our sincere thanks to: the Evaluation Office and the WASH Section / Toilet Team at UNICEF headquarters in New York; the UNICEF Country Offices' teams and the Regional Sanitation Advisers who participated in the webinars, the online survey and the country visits; UNICEF's Government and Non-Government partners in India, Mauritania, Mozambique, Nepal and Sierra Leone; and, last but not least, the Reference Group and all the sector specialists interviewed during this evaluation as key informants.

Abbreviations and acronyms

CATS	Community Approaches to Total Sanitation
CLTS	Community Led Total Sanitation
GLAAS	Global Analysis and Assessment of Sanitation and drinking-water
EAPRO	East Asia and Pacific Regional Office
ESARO	East and South Africa Regional Office
FGD	Focus Group Discussion
HEP	Health Extension Program
KAP	Knowledge, Attitude and Practice
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
ODF	Open Defecation Free
PATS	Pakistan Approach to Total Sanitation
PHAST	Participatory Hygiene and Sanitation Transformation
ROSA	Regional Office South Asia
SLTS	School-Led Total Sanitation
ToC	Theory of Change
TSC	Total Sanitation Campaign
WCARO	West and Central Africa Regional Office
WEDC	Water, Engineering and Development Centre
VERC	Village Education Resource Centre
WSP	Water and Sanitation Program
WSS	Water Supply and Sanitation
UCLTS	Urban Community Led Total Sanitation
UNICEF	United Nations Children's Fund

A. Executive summary

A.1. Objectives and methodology

The evaluation was designed to answer the following questions:

Table 1: CATS global evaluation matrix

Overarching questions and objectives
Outcome objective: What are the results achieved by CATS (output and outcome levels) and what is the quality of evidence validating these results?
Effectiveness objective: What are the key social and technical factors that can explain the success or failure of CATS in a given country/community context?
Efficiency objective: What are the key financial and managerial factors that maximize the efficiency/value-for-money of CATS? How can they be optimized?
Sustainability objective: What are the key factors required at country/community levels to improve the adherence to new ODF behaviors created by CATS?

1. Design and inputs
• To what extent are costs of CATS well-documented and predictable?
• In which ways has UNICEF worked to ensure a satisfactory enabling environment?
• What are the key elements currently taken into account to define a CATS intervention at country level?

2. Implementation process
• What are the financial aspects and how are they taken into account in the implementation process?
• How is the M&E framework put in place and managed during implementation?
• How have CATS interventions been initiated at country, sub-country and community levels?
• How has the enabling environment been taken into account during implementation?
• How have CATS interventions been successfully adapted to national/local contexts?
• To what extent have the social norms approaches been used in implementing CATS?
• How is the sustainability / reinforcement issue taken into account in the CATS process?

3. Outputs
• What is the cost of reaching the different outputs of CATS?
• How is CATS data reported to UNICEF nationally and at a global level? What is the basis of the evidence and what is the quality and reliability of the reporting?
• What are the main CATS program achievements and how are they measured?
• How sustainable are the main outputs and achievements of a CATS intervention?

4. Outcomes and sustainability
• Under what conditions is CATS efficient and how could this efficiency be improved?
• How is post-certification data collected and key indicators monitored in the medium term?
• What are the main impacts of CATS interventions (including unintended ones)?
• How sustainable are the outcomes? How is sustainability reinforced in the post-certification phase?

The methodology consisted of the following:

a. Hiring an evaluation team through a competitive bidding process;

b. A preliminary period of investigation to determine what data could be available; finalization of an evaluation design including matching expected data against information needs. This inception period included a literature review of CATS and CLTS documentation across organizations and at different scales of programming, in different

regions. It also included the development of a theory of change guiding CATS programming, as a basis for finalizing the evaluation questions and methods;

c. Inputs from over 200 persons directly involved in CATS implementation (60% UNICEF staff, 40% counterparts and partners at country and global level) via an online survey available in English, French, and Spanish;

d. Key informant interviews with 11 external experts knowledgeable about CATS approaches and UNICEF's role in the deployment of CATS;

e. 10-14 day case study visits to 5 nations (India, Nepal, Mozambique, Sierra Leone, and Mauritania) by 2 persons from the evaluation team, supplemented by national consultants. These visits included meeting key informants in government etc, field visits, and 1-2 half day seminars with community, NGO/CSO, and government representatives. The 5 nations were selected for the breadth of ecologies, partnership arrangements, overall CATS approaches (e.g. SLTS in Nepal), policy contexts, and cultural contexts;

f. Webinars with UNICEF staff on CATS sustainability issues in French and English, and on Social norms and CATS (English); the webinars were facilitated by the evaluation team;

g. Intensive engagement with UNICEF HQ [Evaluation Office and WASH section] to provide quality assurance and oversight over the whole evaluation process;

h. Quality review of the inception report and the final report drafts by a panel of 5 external experts drawn from major WASH organizations, all of which are familiar with CATS and with evaluation methods.

The methodological limitations include lack of data within the literature review in some areas, unbalanced participation in the survey and potential representativeness issues with the 5 case study nations and, within them, the field sites visited. Mitigation measures were taken but some findings are more certain than others.

A.2. Main achievements of CATS

In the context of the recent evolution of the sanitation sector, CATS can be seen in a two-fold way: as a move from technically-based supply-driven approaches towards behaviour-change, demand-driven approaches; and also as a recognition of the centrality of the adoption of a new social norm around ending open defecation as a key issue to be addressed, with impact on and linkages with other sectors (health, education, etc.).

CATS successfully contributed to shift the sanitation sector towards demand-driven and not directly subsidized approaches.

Our evaluation shows that CATS has given a new momentum to rural sanitation in the 50+ countries supported by UNICEF. This new momentum has translated into a change in how rural communities regard sanitation, invest into it, commit to new behaviors around ending OD – and eventually improve their living conditions.

The CATS principles are now shared by most of the countries where CATS has been deployed, with a relatively high degree of ownership, at all levels, from central to local governments. UNICEF and its partners have successfully advocated CATS principles and managed to influence other key development partners.

Compared with the situation before CATS, that was characterized by the predominance of supply-driven, heavily subsidized and low-efficiency programs, **this is a dramatic and positive change**. UNICEF is now recognized by Governments and development partners as a major actor of change in the sanitation sector.

A.3. Strengths and weaknesses

The findings for many of the evaluation questions are often context-specific. However, we have been able to identify uniformity in the findings from a number of questions. These are categorized as 'strong' or 'weak'[1] and are presented in terms of the results chain; we also note areas that are neither 'strong' nor 'weak' but which we believe are of sufficient importance to be highlighted as areas for concern.

A.3.1. Design and inputs

UNICEF's analysis of enabling environment factors and subsequent structuring of programmes in relation to sector blockages is strong. CATS programme design is well-aligned with national WASH sector policy and strategy; UNICEF is also prominent and pro-active in policy development.

A.3.2. Implementation process

Success in implementing and adapting interventions is variable. The rationale for geographic targeting of CATS programmes of work in specific districts is strong; geographic targeting aligns with stated objectives of the programme, notably in terms of equity, remote or economically and socially marginalised groups.

The tools and methodology used by UNICEF to support its national and regional counterparts are appropriate. Results can be seen in the field, with new communities declaring themselves ODF in a regular way.

CATS is innovating with respect to implementation: one example is cross-sectoral links with other sectors (and especially health); another example is the successful deployment of SLTS in some countries and the role played by children.

The capacity to accommodate different hydrogeological and ecological contexts is relatively weak. This concerns problems arising both when latrine types are over-standardized by governments (an implementation issue) and when there is insufficient support to improve the most basic latrines constructed by the households themselves (a sustainability issue).

As measured against a 'no hardware subsidy' criterion we rate the CATS approach to the use of financial subsidies as being strong. This does have sustainability and equity implications with regard to hardest-to-reach communities and the ultra-poor populations.

We have looked at the extent to which CATS programmes explicitly employ the social norms approach in planning and implementation stage and the significance of behavioural and social change in the process. We find that this is variable across the board. SN form part of programme planning but are not explicitly used across the range of CATS implementing partners. However there are across the country studies a number of examples of good practices that can be considered as consistent with the SN approach.

If a majority of the dimensions of the enabling environment have been successfully addressed by CATS intervention in most countries (especially the overall policy orientation, the partnerships, the focus on local authorities, the importance granted to methodology and capacity building), three dimensions have been given less consideration in contrast: developing the supply side, experimenting innovative financing mechanisms and engaging more strongly with the private sector.

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[1] This is based on a scalar approach starting from the country programme analysis and building up additional evidence from the other methods (online survey, webinars, key informant interviews, etc.).

A.3.3. Outputs

We found that programme efficiency in terms of the output costs of CATS compared with other approaches used in the same contexts was strong. This is not based on a detailed financial audit; overall, documentary and informant evidence indicates that CATS output costs are consistently lower than other approaches.

In terms of the lapse time from triggering to completion of the output stage (that is, the time between triggering and declaration of ODF as a measure of the success of the programme planning timeframe) we found that CATS performance is strong. Using the measure of ODF declaration, results are achieved quickly.

A.3.4. Outcomes

CATS achieves fast results as a whole in reducing OD and encouraging the construction of latrines. Figures speak for themselves: at global level, an estimated 24 million people abandoned open defecation since 2008 as a direct result of the intervention of CATS.

CATS has gone to scale quickly in most countries; and this rapid scaling up appears to be an important source of motivation for the CATS partners, including Governments.

There are a set of positive unintended/unexpected outcomes such as women (economic) empowerment, physical safety, community confidence, health improvement. Very few implementers (8%) mention negative outcomes of CATS, which would be unintended anyway. This aspect could constitute an area for further research work.

A.3.5. Sustainability

Sustainability (and especially continuous adherence to the ODF new social norm) is currently a key concern in CATS; our findings relate to both the long and short-term.

In the long term, actions that support and develop and enabling environment are fundamental to CATS. We have found that the influence of UNICEF, as indicated by changes to government policy, strategy and programming approaches that have either been planned or implemented as a result of CATS is strong. We are confident that had UNICEF/CATS "not been there" then changes "would not have happened" to the extent they have.

The evaluation found a data gap in terms of the slippage in ODF. Nevertheless there are a number of areas of concern in relation to short-run sustainability of CATS. Reinforcement activities are essential in preventing a regression back to OD but the capacity and resource needs receive insufficient attention within current programming for CATS. Whilst latrine construction is not a direct output of CATS programming, problems with affordability and durability of latrines is a contributory factor to slippage.

Achievement of ODF status through CATS brings programmes to the end of one phase (ODF certification) and the start of the next phase (post-ODF achievement of sustainable sanitation and stabilization of the new social norm). Insufficient attention is given to the post-certification phase where the benefits gained through the first phase can be secured, consolidated and sustained in the longer-term.

A.3.6. Data and M&E framework

The certification process and the criteria attached to it vary from one country to another; but there is a set of core principles that are rather consistent (no more OD, existence of latrines and hand washing facilities, etc.).

The monitoring of CATS implementation and the integration of CATS into the wider national framework for M&E is strong and adds support to the development of the enabling environment. However this national M&E system should capture significant items that are

needed to develop more global lessons and make adjustments, such as budgets and costs information, as well as information regarding human resources.

However there are areas of concern in relation to data capture post-ODF certification; for instance, in a majority of countries it was not possible to assess the extent of slippage due to the lack of systematic monitoring of: continued adherence to ODF; continued use of associated hygiene facilities; sustained practice of adopted behaviours, and the extent to which communities/households adopt additional actions.

There are widespread quality control concerns as M&E efforts are not always well supervised or counter-checked in a systematic manner. As a conclusion the data are mostly reliable but with some potential gaps.

B. Context of this evaluation

Content of this chapter:

Why this evaluation was commissioned; how the methods and tools were selected and developed; how the evaluation was processed and what are its limitations

The evaluation team meeting a community in Madhya Pradesh, India

B.1. Rationale behind this evaluation

Community Approaches to Total Sanitation (CATS) was officially adopted by UNICEF in 2008 to guide its interventions in the hygiene and sanitation sector. It is a major shift compared to previous approaches developed and supported by UNICEF which has moved from supply-driven, facility-oriented programmes targeting thousands of beneficiaries per country per year to a totally new demand-driven, community-led approach targeting an average of tens or hundreds of thousands of beneficiaries per country per year.

The development of CATS is now at a turning point: large programmes were implemented in South Asia and this approach was introduced in other regions, notably in sub-Saharan Africa. Maturity of CATS programmes are very different in Asia and Africa – in Asia some CATS-like initiatives have been running for more than 10 years while CATS in Africa is relatively recent (less than 5 years) – but spreading quickly. Over the last five years, many stakeholders (including central governments and partner NGOs or agencies) have been engaging with or are aware of the "total sanitation" approach and some countries are in a position to adopt CATS principles as a key component of their (rural) sanitation sector strategy.

The UNICEF Executive Board now wants to evaluate CATS and its possible roll-out in more UNICEF-supported country programmes. At this stage an evidence-based evaluation is needed to acknowledge the efforts made to date, assess the impact and contribute to global learning to be fed into the design of future interventions. After 5 years of developing the CATS concept and implementing CATS programmes, this corporate evaluation is a very important moment to look back at what has already been done, draw lessons and suggest possible adjustments in the way CATS programmes are designed and implemented.

The scope of this evaluation is stated in the Terms of reference:

The evaluation will examine, as systematically and objectively as possible, the effectiveness, efficiency, sustainability and outcomes of the efforts in CATS supported by UNICEF. While it will be based in national and sub-national level experience, it is expressly called upon to deliver global level findings. [...] True impact level results need not be considered or treated in this effort. This effort will focus on issues related to achieving successful implementation at-scale. The main purposes of the evaluation are:

1. *To enable evidence-based decision-making: to link attained CATS results back to the inputs, activities, and performance by UNICEF and other stakeholders, and thereby to determine any changes needed to make national partners and UNICEF more effective at CATS programming and to guide decisions about scaling up or not of the strategy;*

2. *To contribute to global learning: to make available to the global communities interested in WASH, Education, and other topics the understanding about effective hygiene[2] programming that will emerge, in order that they may alter the programs they support in light of the CATS evidence;*

3. *To promote accountability: to verify the accuracy of claims made about CATS performance, and to examine the reliability of data used to assess CATS performance, in order to assure internal and external stakeholders of the accuracy of the evidence that is presented and the efficiency of the program they support.*

The Terms of Reference provide a detailed description of UNICEF's expectations for this evaluation and notably the four key evaluation areas (effectiveness, efficiency, sustainability and outcomes) that the Consultant[3] is asked to examine and the key questions in those four

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[2] Although hygiene is not a central dimension of CATS (see core principles) and therefore of this evaluation.

[3] In this report, "the Consultant" refers to the HYDROCONSEIL-ECOPSIS-WEDC consortium, specifically established for this evaluation. The consortium is led by HYDROCONSEIL.

areas. Compared to a more classical project/programme evaluation, the consultant understands that relevance and impact[4] of projects and programs carried out under the umbrella of CATS are not considered as key areas for this evaluation (even if the relevance of CATS is indirectly assessed). The Consultant also understands that "value for money" is a secondary aspect of this evaluation – even if this dimension needs to be properly documented and assessed whenever it is possible to do so.

B.2. Key questions of the evaluation

For the purpose of this evaluation the consultant has developed an evaluation matrix[5]. This matrix has been used by the evaluation team to re-organize the questions listed in our Terms of reference and develop new (more generic) evaluation questions. For each of the 18 main evaluation questions, the matrix offers a series of 'sub-questions' that will guide the development of survey tools. These sub-questions are coming either from our Terms of reference, key informants interviewed at inception phase, the literature review or the consultant team's own experience. For each evaluation question the consultant offers a list of 'indicators' – or at least ways of providing a measurable answer to the question, and details which sources of data / tools could be mobilized during execution phase.

Table 2: Main evaluation questions (overview of the matrix)

Overarching questions and objectives of the evaluation
Outcome objective: What are the results achieved by CATS (output and outcome levels) and what is the quality of evidence validating these results?
Effectiveness objective: What are the key social and technical factors that can explain the success or failure of CATS in a given country/community context?
Efficiency objective: What are the key financial and managerial factors that maximize the efficiency/value-for-money of CATS? How can they be optimized?
Sustainability objective: What are the key factors required at country/community levels to improve the adherence to new ODF behaviors created by CATS?
1. Design and inputs
To what extent are costs of CATS well-documented and predictable?
In which ways has UNICEF worked to ensure a satisfactory enabling environment?
What are the key elements currently taken into account to define a CATS intervention at country level?
2. Implementation process
What are the financial aspects and how are they taken into account in the implementation process?
How is the M&E framework put in place and managed during implementation?
How have CATS interventions been initiated at country, sub-country and community levels?
How has the enabling environment been taken into account during implementation?
How have CATS interventions been successfully adapted to national/local contexts?
To what extent have the social norms approaches been used in implementing CATS?
How is the sustainability / reinforcement issue taken into account in the CATS process?

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[4] There are very few impact assessments of CLTS and CATS programs. Results from one of the main on-going impact evaluations of CLTS programs (financed by the Bill & Melinda Gates Foundation in Mali) were not available at the time this evaluation report was completed (December 2013).

[5] See inception report, final version, May 2013.

3. Outputs
What is the cost of reaching the different outputs of CATS?
How is CATS data reported to UNICEF nationally and at a global level? What is the basis of the evidence and what is the quality and reliability of the reporting?
What are the main CATS program achievements and how are they measured?
How sustainable are the main outputs and achievements of a CATS intervention?

4. Outcomes and sustainability
Under what conditions is CATS efficient and how could this efficiency be improved?
How is post-certification data collected and key indicators monitored in the medium term?
What are the main impacts of CATS interventions (including unintended ones)?
How sustainable are the outcomes? How is sustainability reinforced in the post-certification phase?

B.3. Overview of the evaluation process

B.3.1. A three-phase evaluation

The evaluation is organized in three consecutive phases:

Figure 1: Overall organization of the evaluation

Inception	Execution	Delivery
Objectives of each phase		
Define the scope of the evaluation and confirm the evaluation framework, implementation approach and selection of countries	**Implement the data collection** through direct interviews, web blog, country visits, workshops. Analysis of results and external verification of findings	**Prepare** all necessary reports, respond to feedback from UNICEF and prepare workshop feedback session
Main tasks and activities		
Develop evaluation conceptual framework, conduct literature review, refine scope and questions to focus evaluation, define work plans and tools, confirm criteria for country selection, confirm deliverables and schedule.	Interview selected key informants. Engage externally through web blog. Obtain feedback on benchmarks. Conduct country visits including workshops. Analysis of results and obtain external feedback on first findings.	Preparation of draft report for Steering Committee, preparation of material for workshop and participation in 2 web seminars.
Deliverables		
1. Inception Report	**2. Progress Reports**	**3. Final Report with Annex Power Point Presentation**

Source: HYDROCONSEIL-ECOPSIS-WEDC, Technical Proposal to UNICEF (revised)

B.3.2. Inception phase

Given the complex nature of this evaluation, the inception phase has been given exceptional attention (and time) by the Consultant, UNICEF Evaluation Office and the Reference Group. The objective was to make sure that the Consultant reaches a full understanding of CATS, builds a relevant conceptual and analytic framework to address issues listed in the Terms of reference and develops all the necessary tools to implement the execution phase.

The inception phase included a kick-off visit to UNICEF's headquarters; comprehensive literature review; development of a knowledge base on Social Norms and the Theory of Change; semi-structured interviews of key informants; collection of basic data on the implementation of CATS at country level; development of criteria for selecting the countries to be visited; second visit to UNICEF's headquarters following the submission of the draft inception report, in order to review and discuss the comments received by the Consultant.

The final version of the inception report was accepted by UNICEF in early May 2013.

B.3.3. Execution phase

According to the methodological approach developed in the inception report, various complementary tools have been deployed during the execution phase (May-October 2013):

a) Online survey

This survey aimed at UNICEF staff and other actors who are directly involved in CATS implementation in the 50+ countries where the approach is used, to build a global view of CATS implementation and challenges in various contexts. This survey has been run in September and October 2013 and collected inputs from more than 218 respondents who originated from 45 countries in all UNICEF's six main intervention regions. 60% of the respondents worked for UNICEF at country, regional or headquarters levels.

b) Webinars

The two webinars aimed specifically at UNICEF's staff involved in CATS implementation. They focused a group discussion on selected topics that either arose from the evaluation findings for more in-depth discussion or appeared to lead to different point of views between countries or specialists. This forum enabled time-bound and structured virtual meetings with UNICEF staff and other key informants representing a large number of CATS programmes in an effective and efficient manner. They took place in October and November 2013.

c) Country visits

Five countries (India, Nepal, Mozambique, Sierra Leone and Mauritania) have been selected during the inception phase of the evaluation, as representative of the actual deployment of CATS worldwide and served as case studies for a more in-depth assessment of CATS implementation at country level. Each country was visited during two weeks by two members of the evaluation team assisted by national consultants. Each visit was prepared closely with the UNICEF country office which also assisted the consultants during the visit to organize the field visits, collect the relevant document, mobilize the key partners, etc.

As planned in the protocol developed by the consultant and approved by UNICEF, the evaluation team mobilized several complementary tools to carry out the country visit:

1. **Vast document reviews**. All the relevant documents related to UNICEF's CATS programs in each country were collected, as well as national documents linked to sanitation (policy and strategy papers, recent evaluations, etc.);

2. **Individual meetings with key partners and stakeholders** at national and sub-national level. The most relevant actors of the sector were met and interviewed, on the Government side as well on international agencies side and other NGOs;

3. **Community field visits**. In each country the consultants visited at least five communities targeted by the CATS program(s), representing different stages of the CATS implementation (ODF, triggered but not yet ODF, no longer ODF, etc.);

4. **Sub-national workshops**. Local administration and a number of implementing partners attended these workshops and provided their feed-back on their experience with CATS. A significant part of the workshops was dedicated to group working on specific topics (related to the 18 evaluation questions). These workshops provided some very interesting feed-back on the main topics of the evaluation;

5. **National workshops** took place at the end of each visit. They enabled the consultant to present the early findings of the country visit and have a discussion with national stakeholders to confirm or amend the country-related major findings.

Figure 2: Countries selected for the country visits
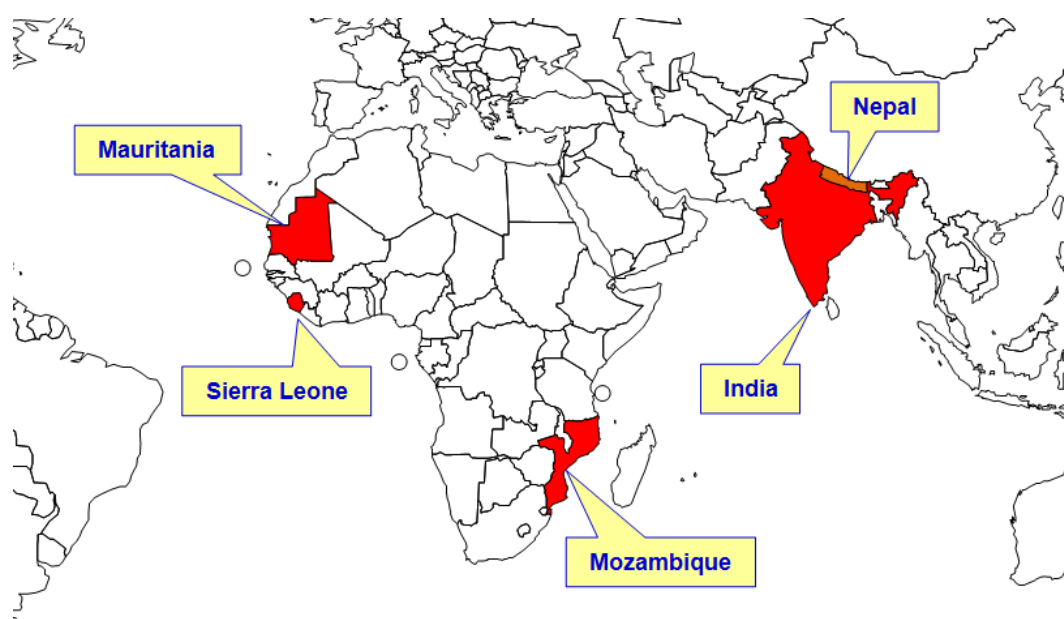
d) Semi-structured interviews

The semi-structured interviews aimed at sanitation specialists outside of UNICEF and having a particular experience with CATS and the general issues of community sanitation. These interviews consist of guided discussion between one evaluator and one key informant. They were organized between the end of September and the beginning of October 2013. Ten key informants in total were interviewed by the consultant, who conducted a content-based analysis of the main topics and questions raised by the interviewees.

B.4. Methodological limitations

The methodological limitations of each of the tools used as part of this evaluation are described and discussed in detail in Annex F4 of this report. All of these limitations (summarised in the table below) were discussed with the UNICEF Evaluation Department during various meetings[6] and mitigation measures were taken.

Table 3: Main methodological limitations

Category	Methodological limitations	Mitigation measures
Literature review	Due to the large number of documents collected (180-200), the evaluation team focused on two specific areas: academic literature and the documentation produced by UNICEF. Consequently, the literature review may have missed lessons learned and findings from other organisations that have implemented CATS programmes.	This limitation was addressed by the evaluation team through the semi-structured interviews and the online survey, as well as during field visits, where other stakeholders implementing CATS programmes were interviewed and specific documentation was collected and analysed.
Case studies / country selection	Countries were selected for the case studies using a matrix based on information provided by UNICEF. The data used to populate the matrix was information provided by UNICEF COs to UNICEF HQ; in some cases, the data was insufficient or incomplete, which might have affected the countries' final score.	The evaluation team addressed this limitation throughout the selection process by systematically gathering the missing information from other reliable sources of information whenever possible.
Case studies / methodology	The methodology was based on an extended visit to a relatively small sample of sites where CATS programmes are being implemented (4 to 5 communities per country), which enabled qualitative data collection and validation. However, it provided no basis for statistical inference. The selection criteria for the field visits were intended to ensure different contexts were covered, but were not intended to create a properly representative or stratified sample.	During each of the country visits, in addition to the information gathered from the field visits to a sample of communities, the evaluation team also obtained general information on CATS programmes from UNICEF CO teams and implementing partners.

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[6] Notably the meeting held in Avignon (France) from 7 to 9 October 2013 between the evaluation team, the Evaluation Department and the WASH section.

Category	Methodological limitations	Mitigation measures
Online survey	1) In a very limited number of cases, questions were misinterpreted by the respondents. 2) The online survey was aimed at individuals and was not designed to get an "organisation-wide viewpoint". In addition, it was intended for UNICEF staff, as well as non-UNICEF respondents. 3) The survey included more than 50 questions. Some respondents did not answer all of these. 4) There is unbalanced geographical representation.	1) The data collected through these questions has been used with extreme care. Detailed analysis of complementary questions helped identify any misunderstandings. 2) Minor inconsistencies have been identified in specific countries and taken into account. 3) The number of respondents for each question has been systematically indicated in the report. 4) Data has been systematically disaggregated to ensure the reliability of data.
Webinars	The webinar on social norms was not held in French. Therefore, English-speaking countries are more strongly represented in the qualitative data collected and in the concrete examples provided by the participants.	This limitation has been taken into account in the use of webinars as a source of information in this evaluation report.
Semi-structured interviews	Due to time constraints, the evaluation team was very careful in the selection of respondents. While it was initially planned to use the same template for all interviews, conversation guidelines were actually adapted to the respondent's background / specific area of expertise.	Semi-structured interviews were analysed using qualitative methods. The evaluation team took only recurrent topics into account in the report.

C. History and progress of CATS

Overview of this chapter:

Historical background of CATS and links to CLTS; analysis of CATS' nine principles; basic data on the progress of CATS at global level

Newly built latrine in a recently ODF certified community. Adrar region, Mauritania

C.1. Brief history of the adoption of CATS

C.1.1. Historical approach of UNICEF to sanitation

UNICEF has a long history of implementing WASH activities (since the 1960s) and especially hygiene and sanitation projects, with special focus on rural areas, health institutions and schools; in 2004, the WASH sector represented 12% of the total expenditures of UNICEF[7].

It is not the purpose of this evaluation to assess what the situation was before the adoption of CATS; however it seems interesting to summarize what was the shape of UNICEF's contribution to the hygiene and sanitation sector before the new strategy was adopted in 2006. Three main features of pre-CATS interventions in sanitation were the following:

- Mostly about subsidizing latrines in rural areas, health centers and schools, it included the direct delivery of construction materials, the training of local artisans/masons and the setting up of village-level committees;

- Directly linked to water supply interventions; there were no conceptual framework and objectives specifically related to hygiene and sanitation. Prevalence of open defecation was not used as a criterion to select beneficiary communities;

- Budget-wise, WASH expenditures were mostly on water supply; number of people benefitting from UNICEF's sanitation interventions (i.e. getting a latrine) was on average in the range of tens of thousands per year in all concerned countries.

C.1.2. The CLTS approach

The Community-Led Total Sanitation (CLTS) approach was pioneered around 2000 by Kamal Kar and VERC (a local NGO partner of WaterAid Bangladesh) in the Rajshahi District of Bangladesh[8]. It quickly spread to India, Indonesia and South Asia in general and then progressively to Africa. It was later conceptualized by Kamal Kar and Robert Chambers from 2003[9] to around 2008[10], leading to a very stable set of principles and practices aiming at eradicating open defecation in the communities. CLTS can be defined as follows[11]:

> *"Community Led Total Sanitation (CLTS) is an innovative methodology for mobilizing communities to completely eliminate open defecation (OD). Communities are facilitated to conduct their own appraisal and analysis of open defecation (OD) and take their own action to become ODF (open defecation free). At the heart of CLTS lies the recognition that merely providing toilets does not guarantee their use, nor result in improved sanitation and hygiene. [...] CLTS focuses on the behavioral change needed to ensure real and sustainable improvements – investing in community mobilization instead of hardware, and shifting the focus from toilet construction for individual households to the creation of open defecation-free villages. By raising awareness that as long as even a minority continues to defecate in the open everyone is at risk of disease, CLTS triggers the community's desire for collective change."*

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[7] UNICEF water, sanitation and hygiene strategies for 2006-2015, E/ICEF/2006/6, page 5.

[8] Source: www.communityledtotalsanitation.org/page/clts-approach. Very similar definition can be found on Wikipedia (http://en.wikipedia.org/wiki/Community-led_total_sanitation).

[9] Kamal Kar (2003) Subsidy or Self-Respect? Participatory Total Community Sanitation in Bangladesh. IDS Working Paper 184. Kamal Kar authored many other papers with IDS in the following years.

[10] Kamal Kar with Robert Chambers (2008) Handbook on Community-led Total Sanitation. IDS and Plan International. This handbook was translated in many languages (French, Spanish, Portuguese, Hindi, Bengali, Khmer, Arabic, etc.) and became a reference document on CLTS which significantly contributed to promote the approach in many new countries including in parts of Africa.

[11] Source: www.communityledtotalsanitation.org/page/clts-approach

C.1.3. Adoption of the total sanitation approach by UNICEF

UNICEF started to experiment with CLTS and community based approaches in the years following the adoption of its new global WASH strategy for 2006-2015 which was officially approved by UNICEF's Executive Board in 2006[12]. At that stage the CATS acronym and concept does not appear, the new strategy only states "These approaches will not depend on household subsidies, but rather will encourage community-based approaches for 'total sanitation' that seek to eliminate the practice of open defecation, while enabling the poorest, including female-headed households, to build their toilets without undue duress[13]".

The 2006 strategy expresses the dismay that sanitation coverage hardly progressed in the decade before. Implicit in this is that earlier followed project-driven approaches, notably of subsidizing household latrines, had not been effective to step up sanitation coverage to reach the MDG for sanitation. Providing toilets did not guarantee their use and did not largely result in improved sanitation and hygiene. Household subsidies stifled household and community initiative, at the best leading to uneven adoption, and leaving problems with long-term sustainability and only partial use. In addition, continuing open defecation was not addressed in the rest of the community. The new strategy already pointed out changes in UNICEF's approach to human rights-based and community-based approaches and refraining from supply-driven and subsidy-driven approaches,[14].

Figure 3: Old approaches vs. new approaches according to UNICEF

Old Approaches	New Approaches
Building Toilets	Changing Social Norms
Individual/family	Social/Community
Health Message Focused	Economic, Social, Health, Disgust
Top – Down & Externally Driven	Community led – Internal, demand driven
Didactic	Participatory – Natural & traditional leaders
Technologies predetermined	Local technologies – Community capacity
Subsidized	Rewards – Pride – Celebration
Don't mention the S*** word	Talk shit – Feces, Poo, Kaka, toilets, latrines

Source: UNICEF, 2011, "CATS 101" (PowerPoint presentation)

C.1.4. Towards a new approach – the birth of CATS (2008)

UNICEF in a strategic planning meeting in 2008, bringing together sanitation practitioners, came up with the Community Approaches to Total Sanitation (CATS) concept, which is an umbrella term used by UNICEF sanitation practitioners to encompass a wide range of community-based sanitation programming. This meeting was a global and cooperative exercise involving UNICEF WASH teams but also major international partners such as WSP, the BMGF, Plan International, USAID, CARE… and resource persons including the early promoters of CLTS (Kamal Kar).

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[12] UNICEF water, sanitation and hygiene strategies for 2006-2015, E/ICEF/2006/6, page 15.

[13] UNICEF water, sanitation and hygiene strategies for 2006-2015, E/ICEF/2006/6, page 15, § 54.

[14] The 2006-2015 strategy exactly says: "shifting responsibilities and resources to lower levels [and strategies] to be guided by a rights-based approach […] particular attention to be given to capacity building […] to ensure new services are sustainable […] including participation by communities and households (especially women and children) in programme/project planning, design, implementation, operation and maintenance […] and support technologies that are in the means of communities and households to operate and maintain".

All CATS programmes share the goal of eliminating open defecation; they are rooted in community demand and leadership, focused on behavior and social change, and committed to local innovation. CATS can be applied through a wide range of methods, such as Community-Led Total Sanitation (CLTS – see above for a more comprehensive definition), School-Led Total Sanitation (SLTS), Total Sanitation Campaigns (TSC)[15] – and other methods. The meeting resulted in 9 key principles which would guide UNICEF's sanitation programmes globally and these principles became known as CATS.

Figure 4: The CATS 9 core elements or principles

1	CATS aim to achieve 100% open defecation free (ODF) communities through affordable, appropriate technology and behavior change. The emphasis of CATS is the sustainable use of sanitation facilities rather than the construction of infrastructure.
2	CATS depend on broad engagement with diverse members of the community, including households, schools, health centers and traditional leadership structures.
3	Communities lead the change process and use their own capacities to attain their objectives. Their role is central in planning and implementing CATS, taking into account the needs of diverse community members, including vulnerable groups, people with disabilities, and women and girls.
4	Subsidies – whether funds, hardware or other forms – should not be given directly to households. Community rewards, subsidies and incentives are acceptable only where they encourage collective action in support of total sanitation and where they facilitate the sustainable use of sanitation facilities.
5	CATS support communities to determine for themselves what design and materials work best for sanitation infrastructure rather than imposing standards. External agencies provide guidance rather than regulation. Thus, households build toilets based on locally available materials using the skills of local technicians and artisans.
6	CATS focus on building local capacities to enable sustainability. This includes the training of community facilitators and local artisans, and the encouragement of local champions for community-led programmes.
7	Government participation from the outset – at the local and national levels – ensures the effectiveness of CATS and the potential for scaling up.
8	CATS have the greatest impact when they integrate hygiene promotion into programme design. The definition, scope and sequencing of hygiene components should always be based on the local context.
9	CATS are an entry point for social change and a potential catalyst for wider community mobilization (which can include other health and education based interventions).

Source: UNICEF, 2011, CATS 101 – an introduction

SLTS, combining CLTS with improving WASH in schools, was pioneered by UNICEF in Nepal in 2006. It capitalizes on the leading roles that schools play in mobilizing teachers, students and parents in triggering social change within the community. SLTS is different from CLTS because the target group is not the community itself, but all the communities within the same school 'catchment' area – the link being the children attending the same school. This approach is being implemented in several countries such as Nepal and Sierra Leone.

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[15] Field Note CATS, 2009 and UNICEF Evaluation Office, CATS Evaluation Terms of Reference, September 2012

The Total Sanitation Campaigns (TSC) were pioneered in India and Myanmar and are additional national and sub-national communication campaign efforts that UNICEF supports as part of CATS to accelerate country efforts to reach the sanitation MDG. The Government of India renamed their ongoing rural sanitation programme as the Total Sanitation Campaign in 1999. Total Sanitation referred to the inspirational intent to achieve full sanitation coverage in all districts. Initially, TSC had nothing to do with CLTS which came later on.

CATS is based on nine basic principles (see Figure 4 above) which were developed and evolved independently with regard to the CLTS principles[16]. Seven of the nine basic principles of CATS are similar or identical to CLTS principles. Principle N°4 may or may not be identical to CLTS principles, depending on how subsidies are applied in a specific program. Two principles – one aimed at government buy-in from the outset to enhance effectiveness of the approaches (N°7) and one towards scaling up and the integration of promotion of hygiene behavioral change (N°8) – are additional to CLTS and are perceived by UNICEF as substantial differences between CLTS and CATS.

UNICEF also aims at supporting communities to climb up the sanitation ladder for all households to have access to sustainable sanitation facilities. UNICEF together with WHO, in charge of reporting world progress in sanitation to the UN General Assembly, collects data to determine access to improved sanitation facilities (Joint Monitoring Programme). Implementation of CATS as the overall sanitation strategy of UNICEF has impacted on the way JMP reports progress on access (or non access) to sanitation – introducing new categories (OD) and making the open defecation issue more central (from 2008 onwards).

The historical relationship between CATS and CLTS is a rather complex one. At country level, Government and implementing partners do not always establish a clear distinction between CLTS and CATS, as CLTS is the main modality of CATS programs in the field – and UNICEF has gradually become since 2008 the main implementer of CLTS, demonstrating that it was possible to scale up an approach that was still in a pilot phase, especially in Africa. It is worth mentioning that UNICEF has not tried to 'brand' country level programmes as CATS – especially where Government has taken a leading role.

However the two approaches are different, as CATS encompasses more elements than CLTS itself and represents a broader approach to the hygiene and sanitation sector. In this respect, UNICEF successfully incorporated the key (and most interesting) elements of CLTS into a new approach that transcended the limitations of the earlier stages of CLTS.

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[16] For the available documents related to this period, the evaluation team was not able to assess what was exactly in 2008 the level of formalization of what are currently known as the CLTS principles. It seems that both sets of principles were developed more or less at the same time, which would explain the overlap.

C.2. Progress of CATS at global level

Main (and most recent) results of CATS worldwide are presented in the last edition of the "Toilet Talk" newsletter published in June 2013, which appears to show substantial progress in the implementation of CATS (see selection of graphs below).

Figure 5: Countries where CATS programs are being supported by UNICEF
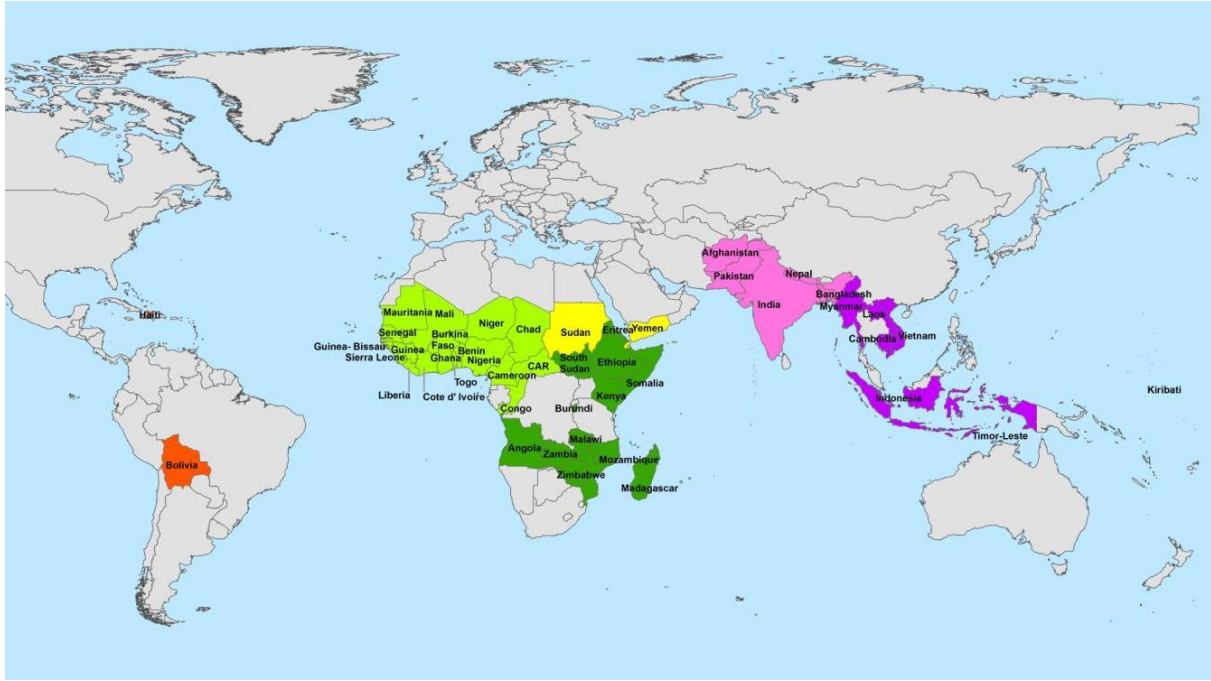
Source: UNICEF, 2011, "CATS 101" (PowerPoint presentation)

CATS has spread quickly from 2008 until now. At present, UNICEF reports that CATS is being rolled out in 53 countries (among the 90 WASH-active countries), with claimed ODF status directly reaching close to 37,000 communities, almost exclusively in rural areas at the moment, representing an estimated population of 24 million. Indirectly reached population is estimated at 92 million (of these, 84 million in India, 4 million in Bangladesh and 3 million in Nepal). In terms of direct ODF population that can be attributed to CATS interventions, Africa represents 48% (in 34 countries) and South Asia represents 48% (in only 5 countries).

Figure 6: ODF population per region as a result of CATS intervention

CATS ODF Population per Region*
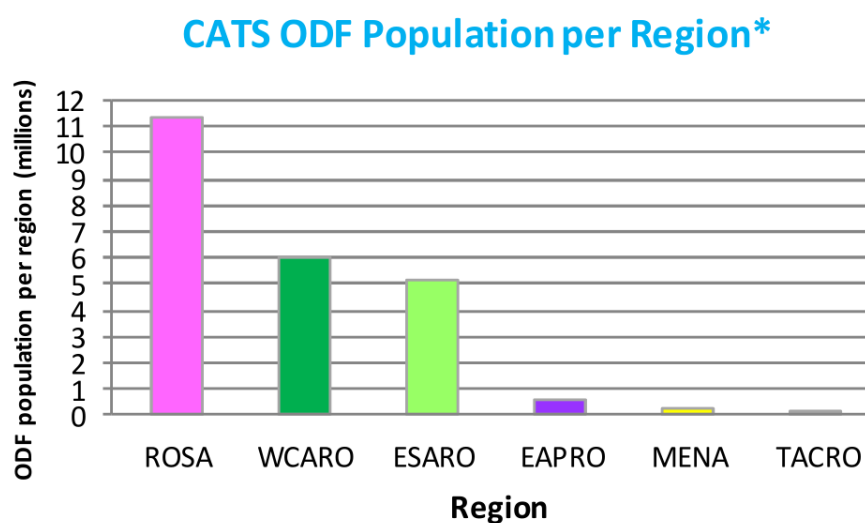
ROSA = South Asia, WCARO = West and Central Africa, ESARO = Eastern and Southern Africa, MENA = Middle East and North Africa and TACRO = Latin America and Caribbean

Source: UNICEF, June 2013, Third edition of the "Toilet Talk" newsletter

Figure 7: Top 10 CATS countries by % of total ODF population and % of country population living in ODF communities

TOP 10 CATS COUNTRIES by population living in ODF communities*	TOP 10 CATS COUNTRIES by % of country population living in ODF communities*
1. Pakistan 7,459,551	1. Sierra Leone 19.22%
2. India 2,556,034	2. Mauritania 13.48%
3. Ethiopia 2,042,735	3. Guinea Bissau 13.04%
4. Nepal 1,200,000	4. Eritrea 7.43%
5. Nigeria 1,157,800	5. Kiribati 6.40%
6. Sierra Leone 1,128,018	6. Malawi 4.47%
7. Kenya 950,000	7. Pakistan 4.30%
8. Malawi 666,500	8. Zambia 4.08%
9. DRC 622,335	9. Nepal 4.01%
10. Mali 584,927	10. Mali 3.81%

Source: UNICEF, June 2013, Third edition of the "Toilet Talk" newsletter

D. Conceptual framework: what CATS is and how CATS works

Overview of this chapter:

This chapter analyzes the conceptual background behind CATS, and especially the 'social' norms approach and the Theory of Change

Latrine and shower built by a dweller in an ODF community. Maravia District, Mozambique

D.1. Moving from providing facilities to changing behavior and growing evidence around open defecation as the central issue

The literature review conducted by the Consultant[17] during the inception phase led to an overview of the challenges that the hygiene and sanitation sector is currently facing and the specific challenges CATS is trying to respond to as a new approach. To better understand the added value of CATS, an important first step is to assess where hygiene and sanitation currently stand, what are the most recent trends and issues and in which ways CATS responds to those recent trends and issues.

As recalled in chapter B, for many years, sanitation programs were based on supply-driven approaches putting subsidies at the center of the process (and issues around behavior change around hygiene or social norms in the background). Historically the integration of individual rural sanitation projects were the consequence of a national vision to provide equal service to all citizens with high quality service, contributing to health, environmental, economic opportunities and social protection. These efforts began many years ago (about 30 or 40 years ago, depending on the country) with drinking water projects. Considered as an essential need for human health and economic development, drinking water service has been addressed in priority. For technical considerations of water quality and optimization of resources, drinking water is by definition a *collective* service.

However, despite significant efforts made on drinking water projects the entities responsible for the projects and services soon realized how difficult it would be to meet the objectives of health and human development. Something important was missing: water supply alone does not prevent the development of diseases: sanitation and hygiene is needed.

While interesting technologies have been developed, and the effort and commitment of the engineers is worth a high recognition, the story was still not ending. Besides methodologies, obviously new methodologies were needed. A major change happened 10-15 years ago with more focus on the demand side, a new trend from which emerged a growing interest of the sanitation community for community-based approaches in general, interest based on the first results that quickly highlighted the potential of this new approach.

Sanitation has been high on the international development agenda since 2008 (International Year of Sanitation) and a global move towards new approaches is underway. Ending open defecation is now at the very heart of sanitation approaches not only for UNICEF but for the whole WASH community. The call for action launched by the United Nations Deputy Secretary General at the last World Water Day (21 March 2013) was a perfect illustration of this global move. The Deputy Secretary General urged the development community to focus even more on sanitation and he declared: "Ending open defecation is key to fighting poverty and disease while pursuing attainment of the Millennium Development Goals. The call to action aims to focus on improving hygiene, changing social norms, better managing human waste and wastewater, and completely eliminating, by 2025, open defecation, which perpetuates the vicious cycle of disease and poverty[18]."

The positive impact of ending open defecation is more and more recognized for child health and stunting improvement and as a critical factor to reduce mortality of children under the age of five[19]. Growing evidence has been gathered recently that demonstrate the

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[17] Detailed literature review is annexed to this report.

[18] Press conference by Deputy Secretary-General to launch call for action on sanitation ahead world water day, Department of Public Information, News and Media Division, United Nations, New York, 21 March 2013.

[19] Ending open defecation, not by evidence alone, The Water Blog, World Bank, 03/04/2013.

significance of eradicating open defecation – a significance that goes beyond the "sanitation" sector as such. It implies a new way of "living together" for so many communities around the world and has deep implications for social organization. It also has a lot to do with other sectors such as health and education in general, child welfare and early child development in particular[20] – establishing a clear link between CATS and UNICEF's core mandate.

In the context of the recent evolution of the hygiene and sanitation sector, CATS can be seen in a two-fold way: as a move from technically-based supply-driven approaches towards behavior-change, demand-driven approaches; and also as a recognition of the centrality of open defecation as a key problem to be addressed not only to the benefit of the sanitation sector. Here lies the true novelty of CATS: it is a double paradigm shift that goes beyond what is normally considered as the perimeter of the sanitation sector.

As such the introduction of community-based approaches as a new overarching framework for the development of universal and sustainable sanitation, are to be considered as a critical step that was deeply needed in order to address a situation that was not showing good results. A new way of looking at the issue, a new sharing of responsibility between households, communities and governments, was needed.

D.2. CATS as a means of creating a new social norm around open defecation: using a theory of change to understand how CATS works

D.2.1. Rationale for using a theory of change

Theory of Change[21] (ToC) refers to a variety of ways of developing a causal model linking programme inputs and activities to a chain of intended or observed outcomes, then using this model to guide an evaluation. Even if ToC is more commonly used in impact-oriented evaluations[22], the Consultant thought it could be a useful tool to develop a conceptual framework to better understand CATS, given (1) the complexity of the approach (or the approaches); (2) the fact that CATS is built on a systematic analysis of the way a community (individually and collectively speaking) can adopt a new behavior regarding open defecation; and (3) the fact that CATS programming follows a certain number of key steps in a certain order, assuming that a causality chain has been clearly identified and following in terms of programme design and process.

D.2.2. How CATS creates a new Social Norm

Applying a Theory of Change (ToC) to a CATS programme intervention in a given community essentially means that following-through CATS programme-based inputs[23] with the right enabling environment **will create a new Social Norm of no open defecation**. This new Social Norm will bring about and be reinforced by a change in individual and collective preferences, actions, behaviors and enforced formal or informal regulations/sanctions at local level – resulting in an ODF community.

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[20] See in the blog post above the link established between stunting and defecation in the open.

[21] Also referred to as programme theory, programme logic or theory-based evaluation.

[22] This conclusion is coming from our (rather comprehensive) literature review on this specific topic.

[23] UNICEF programmes identify their own way to implement CATS, as they follow the Nine Core Principles. These guide the level of input, attention to the enabling environment and processes adopted.

The adoption of this new Social Norm can be measured through the proxy indicator of the core achieved outcome: ODF status both achieved and sustained through family and individual action in a given community[24]. If ODF status is sustained after a given period of time – the Social Norm can be considered by UNICEF to be 'stabilized'.

In some countries, the CATS programme will include hygiene promotion elements in order to achieve improved rates of hand washing. This can be measured through proxy indicators, which may include: availability of water, availability of soap or ash. These indicators (and any developed around sustained use of safe and hygienic latrines) will be based on the certification criteria adopted by the national government, criteria which can vary significantly from one country to another (even if core indicators remain consistent across countries).

For the specific purpose of this evaluation, the consultant developed at an earlier stage of the evaluation process a comprehensive ToC that would be able to capture and explain the main features of CATS as explained in the documents produced by UNICEF and especially the WASH section[25]. As represented in Figure 8 that follows, the ToC can be viewed as requiring a set of programme inputs (1) and processes (pre-intervention, intervention and post-intervention follow-up) that are based on the Nine Core Principles of CATS. If these Principles are broadly followed, the adoption and practice of the new Social Norm will result (2). As well as the outcome of an ODF community (3), the associated requirements of an enabling environment (4) and attention to risks and assumptions (5) can be identified.

For the purpose of this evaluation, where a Social Norms approach to CATS is **explicitly** adopted, an understanding of *how*, in *what form* and *why* this is achieving a change in community expectations for sanitation may be sought (through speaking to UNICEF or government staff and through documented reports such as L3M Bottleneck analysis report). The evaluation team will not however ask community members directly about the adoption of Social Norms. Evidence of the influence of Social Norms on expectations *within* communities will only be through direct observation of the outcome indicator (ODF status), unless information is both freely and clearly expressed by community members (this specific aspect will be a challenge in designing and conducting the country visits).

A change in Social Norms is **implicit** to the CATS approach, but not all of UNICEF's CATS country programmes **explicitly** refer to a Social Norms approach. The evaluation will seek to identify the extent to which following "good-practice" through aligning CATS programmes to the Nine Core Principles – as far as is appropriate within a given country programme – may be *"necessary, but not sufficient"* to achieve the desired output of ODF status **and** the longer term outcome of sustained sanitation practices and behavior change.

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[24] The monitoring of this proxy indicator implies the existence of a shared definition of what the ODF status (see discussion in Chapter H) and how to monitor it.

[25] Information from the literature review was completed by meetings in New York and a specific conference call.

Figure 8: CATS as a means to create a new Social Norm around Open Defecation

(1) Inputs

| Pre-intervention **Enabling environment** Training / Resources | **Intervention** Identification of potential communities / regions Pre-triggering / Triggering / Advice / Hygiene Promotion Recognition / Certification / Celebration | **Post-intervention Follow-up support** Advice, Monitoring of usage & quality |

(2) Process of change: achieving a new Social Norm (SN) of ODF

| **OD** (cultural practice) | Pre-existing normative beliefs and attitudes | Awareness Recognition New behavioural expectations | Change in collective / individual preferences Collective and individual action | **ODF** New Social Norm (fragile) | Reinforcement of Social Norm (from fragile to stable) | Stabilizing / normalizing the Social Norm |

(3) Outcome & indicators

Core Principles of CATS adopted throughout the process

Core outcome: *Changing societal and individual expectations about open defecation*

Key indicator: ODF status achieved through family/individual action to build latrines, adopted by the whole community

Secondary indicators: *Hand washing (after defecation); Use of safe, hygienic latrines*

(4) Enabling environment (key aspects), reflecting stages in the process of change

Policy & institutional environment Partners Financing	Local gov't / authority support	Equity-, gender- & rights-based Quality advice & facilitation	Equity, gender- & rights-based Natural leaders	Sanctions in place Local leader engaged	Technical advice Local capacities	Products and tools Finances M&E
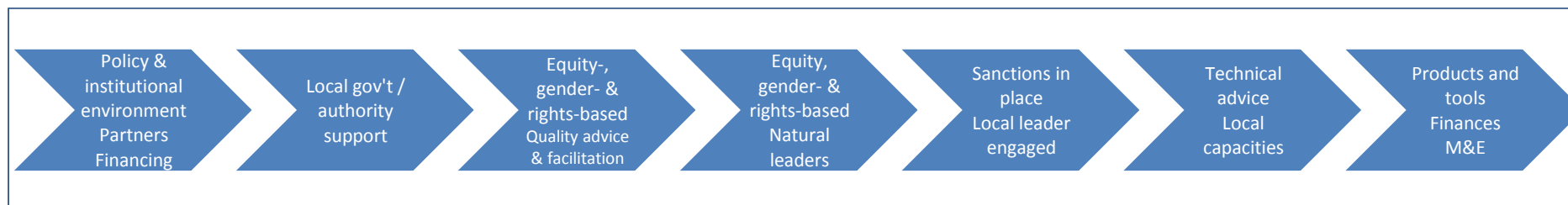
(5) Assumptions and risks (key aspects), reflecting stages in the process of change

Quality and adequacey of resources / skills / knowledge	Local (community / gov't) leaders support the intervention	Community fully engaged in triggering (equity considered)	Individual (natural leaders) and collective (community / leadership) support Action follows	Sanctions encourage / ensure collective and individual action	Environmental and ecological suitability (e.g. security, economics, water resource/supply protected)	Accessible resources (funds, transport, skills , etc.) and appropriate technical options

E. Dimension 1: outcomes

Overarching evaluation question:

What are the results achieved by CATS (at output and at outcome levels)?

Hand washing device in an ODF community. Maravia District, Mozambique

E.1. Main achievements of CATS programs

E.1.1. CATS contributed to achieve fast results in reducing OD

The year in which the CATS programs started to be implemented varies from one country to another, from 2008 (official launch of CATS from UNICEF's point of view) until very recently for the "late adopter" countries. Differences are also significant between Asia – where OD-oriented programs (including early stages of CLTS) have been implemented since the early 2000s – and Africa – where reducing OD is a relatively new concept in most countries.

However, in the 50+ countries where CATS is currently being implemented, all evidence leads to the conclusion that CATS contributed to achieving fast results in reducing OD and encouraging the construction of latrines at a large scale. At global level, 24 million people abandoned open defecation as a direct result of the intervention of CATS since 2008[26]. Examples of these fast results can be taken from Mauritania, Sierra Leone and Nepal:

- In Mauritania the CATS program actually started in 2011 after a brief pilot project (in the Trarza region) conducted in 2009-2010. At the time of the visit of the consultant in Mauritania (July 2013), over the 5,540 villages in the entire country, more than 1,500 villages had been triggered and 1,113 had been declared ODF – this means that the CATS program achieved to certify ODF 21% of the villages at national level within less than 3 years – a result that few partners would believe in back in 2011;

- In Sierra Leone, at the time of the consultant's visit (August 2013), the CATS program covered 6 of the 12 predominantly rural districts in the country. The rate of ODF-certified communities had reached 55% out of the 6,212 target communities in the 6 districts – a result attained after only 3 years of CATS implementation. It is worth noting that other development agencies (AfDB, DGIS) cover the 6 remaining districts.

- In Nepal as a consequence of the introduction of CATS (mainly SLTS) 748 village development committees and 6 municipalities have been declared as ODF areas by March 2013. Five districts (Kaski, Chitwan, Tanahun, Myagdi, and Pyauthan) have achieved 100% sanitation coverage and have been declared ODF.

This is also confirmed by the online survey: 51% of the respondents (CATS practitioners for most of them) indicated that ODF status had been achieved in more than 50% of the triggered communities in less than 6 months from triggering.

The rapidity of CATS in achieving those two results (reduction of ODF and construction of latrines) and going to scale after a brief pilot phase has been confirmed by all key players including the Governments and constitute a major achievement – and also a very important source of motivation both for UNICEF and its partners at national level.

It is worth underlying that this achievement of CATS can be measured in terms of reducing OD and building of latrines, but also in terms of how fast the ODF objective can be expanded to a whole country, especially when Government buy-in is high and when the CATS principles are adopted and translated into national and more local policies/strategies.

E.1.2. CATS contributed to re-orient Governments and policies towards demand-led approaches

One of the main features of the pre-CATS situation in most countries was the predominance of supply-oriented, largely centralized and heavily subsidized approaches – this is especially true in almost all African countries, where CLTS programs first started being implemented at

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[26] See Section C.2 and the third edition of the "Toilet Talk" newsletter (June 2013).

very small scales only from 2006-2007, after being piloted by a few NGOs. Before 2008, the typical situation was that little national attention was given to stand-alone sanitation initiatives; in most countries the sanitation 'programs' were components of predominantly water-oriented programs[27] (notably in terms of budget). The behavior dimension was largely ignored or little consideration was given to it. Open defecation was not a key topic in the sector. Most sanitation programs or components focused on providing latrines for free (or at a very high level of subsidy) to a limited number of households.

The introduction of CATS led to a significant policy shift towards demand-led approaches in general and more significantly towards reducing levels of open defecation. It is widely recognized by all sector partners that the intense advocacy work that accompanied the first CATS pilot projects led to new country policies and strategies giving more attention to those new topics – and that UNICEF played a very significant role in convincing and enabling governments to make this shift. In many 'CATS' countries CLTS or the total sanitation / community-based approach in general is now considered as the dominant (and sometimes the only) strategy with regard to rural sanitation, with policy/strategy documents re-oriented to reflect that focus[28]. After several years of efforts many Governments are now fully committed to implementing the main CATS principles and this commitment itself is one of the major achievements of CATS – although there are still competing models (CATS and subsidized approaches) at implementation level.

E.1.3. CATS contributed to align partners towards policies aiming at ending open defecation

Pre-CATS situation is often characterized by a large range of approaches – from CLTS and therefore "CATS-compatible" approaches to supply-driven latrine construction programs. To a large extent, UNICEF succeeded in aligning development partners towards programs matching most of the CATS principles, reducing open defecation being the new paradigm of rural sanitation. This alignment of development partners typically followed two dimensions: a policy/strategy dimension – the other development partners support CLTS or CATS as being a main orientation of the new policy – but also a more operational dimension – other partners adapting their intervention to scale up the CATS intervention in regions or districts that were not initially targeted by UNICEF (for instance because of a lack of resources). These cases of "institutionalized" diffusion of CATS are documented and discussed in section F.4.

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[27] For Africa, see AMCOW, 2008, *Can Africa afford to miss the sanitation MDGs?* Cf. also the work done by OECD DAC to separate water and sanitation budgets in ODA flows – see WEDC-HYDROCONSEIL for EUWI Africa, 2010, *Mapping EU Support for Sanitation in Africa*, where ODA towards sanitation is estimated at 35% of total ODA flows for water and sanitation – and even less if considering only basic sanitation.

[28] During the inception phase (January-March 2013) basic data were collected and compiled on a sample of 56 countries where CATS programmes were active. For 37 countries reliable information was provided regarding the integration of CATS principles in the national policy/strategy. Out of those 37 countries, CATS principles were considered as partially or fully integrated in the national policy/strategy for 27 (i.e. 73%) of them.

> ### *"Aligning for Action" of all stakeholders active in the sanitation sector in Nepal*
>
> The key complementary tools creating positive values for the CATS approaches in Nepal include "Aligning for Action" and national Sanitation Master Plan. Aligning for Action bred a culture of coordination, gave regional directors power who before had little say over the development initiatives. Thanks to the grown willingness and readiness of the development agencies to work together, joint plans, joint implementation and joint monitoring happened. The 'Joint-effort' in many districts became instrumental in giving the sanitation initiative a speed and hence to declare a village and district Open Defecation Free.
>
> The solid example for how 'Aligning for Action' complemented the Community Approaches for Total Sanitation is the Dang district. While the district's several schools implemented School Led Total Sanitation and the influence was stretching across villages to villages, 'Aligning for Action' stepped into the district to bring together stakeholders who set a broader vision and placed efforts with a greater force. 'Aligning for Action' has created similar effects in several districts of the Mid and Far Western region. However, its implications have not yet reached beyond the country.
>
> *Taken from the Nepal case study*

An interesting example of this specific achievement of CATS is provided by the case of Mauritania, where UNICEF managed to convince the Government to re-align two of the major sanitation programs (one funded by the French Development Agency and the EU and the other one funded by the AfDB) which were in the appraisal phase when CATS was introduced in the country and which did not initially consider following the CATS principles. To achieve the 're-alignment' both the policy/advocacy efforts (see previous paragraph) and the flexibility of CATS in terms of principles played an important role. As a result, CATS (or CATS-compatible programs) are currently implemented in the entire country. Another good example is provided by Nepal, where UNICEF has managed to convince the Government to align a majority of actors and improve coordination in the sanitation sector (see box above).

E.1.4. CATS contributed to enlarge the "sanitation" field and to give children a more important role

Another very important achievement of CATS programs was to promote a new way of looking at rural hygiene and sanitation, putting less emphasis on the hardware dimension and enlarging the field of sanitation to new issues such as open defecation in particular and hygiene-related behavior and health issues in general. As a result, the 'sanitation' sector from a CATS perspective is much more connected to other sectors such as health or education. In most CATS programs, children especially play a major role through specific programs (SLTS) or through community-based (CLTS) interventions – both in the triggering process and in post-triggering follow-up. This includes forms of interventions where schools are the entry points and the main vehicle to promote total sanitation at the level of the community, like in the case of the Nepal CATS program. CATS contributed to promote at scale the innovation that children should be included in sanitation initiatives and that WASH interventions should systematically be linked to schools.

E.2. Main constraints for implementing CATS

While CATS can deliver quick results, UNICEF teams and implementing partners have identified a number of constraints for implementing the approach. Some constraints are purely operational ones; other constraints are often linked to the enabling environment of the sector, especially when CATS is not understood properly and/or perceived as going 'against' what has been the mainstream approach in the sector for many years.

Figure 9: Main blockages during CATS implementation
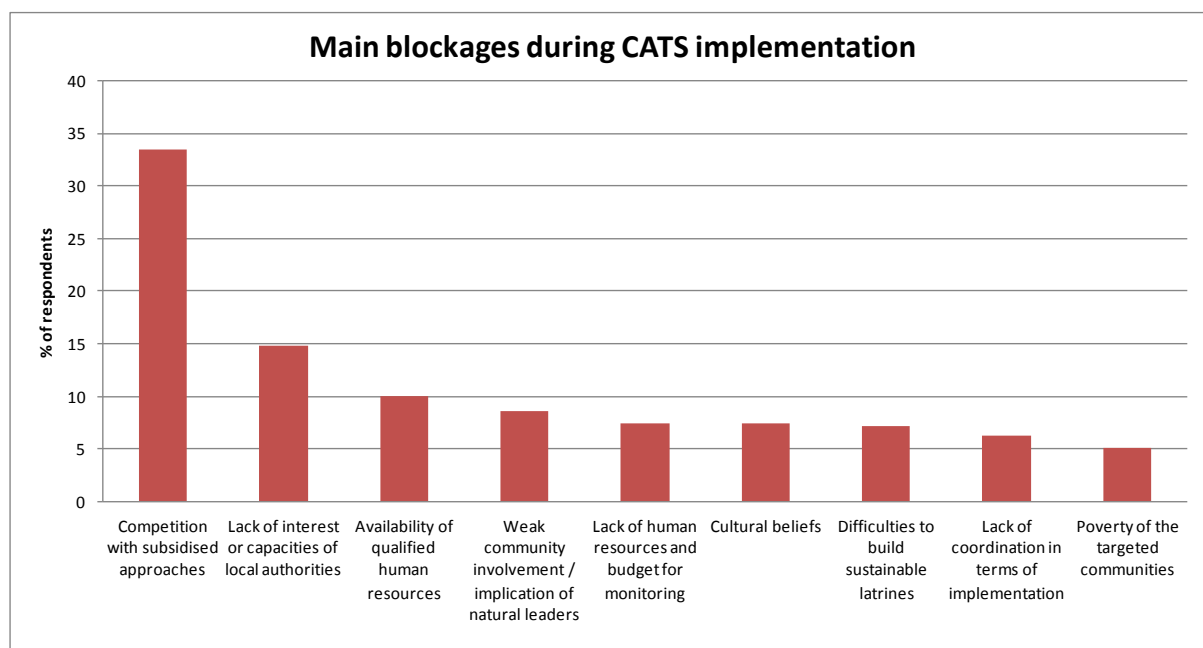
Source: Online survey, question 10. Methodological note: after content analysis similar answers have been regrouped by categories. Only the most significant answers (indicated by more than 5% of the respondents) are shown on this graph

E.2.1. An approach more suited to rural contexts

The evaluation confirmed that CATS is an approach that is well adapted to rural areas and within rural areas, rather small communities (although there is no clear rule about how small a community needs to be – feedback from UNICEF's teams and field-level implementers suggests that adequacy of CATS is more related to the type of community and its social cohesion than to the population per se). Very few cases of implementing CATS in urban and periurban areas are documented in both the literature and UNICEF's program documents – and UNICEF itself has little history of working in urban areas.

According to CATS implementers, the main reason for the inadequacy of CATS in urban or periurban contexts is the lack of strong traditional leadership. Higher levels of mobility, knowledge and exposure to sanitation messages within the households can also explain why the triggering does not achieve the same level of awareness-raising in urban areas and does not lead to a collective decision to end open defecation and to build latrines. Those reasons were put forward by the participants in the webinars and in the workshops organized during the country visits; however they remain rather theoretical considering the very limited extent of actually implementing CATS programmes in urban areas.

E.2.2. The limits of the no-direct subsidy policy

Implementing CATS in the presence of other (non-UNICEF) subsidized sanitation programs (either in the neighboring communities or even within the same community) has proven to be a major constraint for UNICEF and its implementing partners (including the Government).

This is especially true in countries where UNICEF's policy/advocacy work under CATS has not led to a clear alignment (or no to any alignment at all) of major development partners and Government towards adopting CLTS/CATS as the mainstream (or preferred) approach for rural hygiene and sanitation and where direct subsidy is still predominant[29].

National workshops held during the country visits in Africa have shown that in countries where competing approaches still coexist (subsidized and CATS-compatible approaches), UNICEF's strategy is logically to be as flexible as possible, and to intensify the work on the enabling environment and/or adapt the programming to target areas where communities have not been recently exposed to subsidized approaches.

The specific case of India – where the sanitation program has been subsidized at national level right from the beginning – shows that it is still possible, even if quite difficult, to instill CATS principles into an overall subsidized framework[30]. The constraint is actually higher where there is a "patchwork" (especially at regional/local level) of subsidized approach and non-subsidized approach (be it CATS, CLTS or other approaches).

E.2.3. Availability and affordability of materials

A given community has to build latrines in order to meet the ODF certification criteria. In the absence of subsidy or direct support to households for the construction of facilities, the availability of materials required to construct more durable latrines beyond very simple structures using locally-available materials (for instance in remote areas) can therefore be a major constraint in the implementation of CATS, as well as the affordability of those materials (for instance when the community is affected by high level of extreme poverty).

In some communities, despite the use of solidarity mechanisms within the community as a result of the CATS intervention, some households simply cannot afford to build a latrine – this phenomenon is reinforced in specific contexts where building the latrine requires digging in rocky soils at a rather high cost or to the contrary in sandy soils (where the pit needs a minimum quantity of bricks/cement not to collapse). It is also exacerbated where extreme seasonal weather (rains, storms, cyclones, etc.) result in the collapse of simple structures made using locally-available materials.

E.2.4. Creating the capacity to implement a new approach

CATS has the potential to expand quickly and achieve results in a very short timeframe. However, CATS (and especially the dominant component of CATS which is CLTS) is a rather new approach in many countries which requires a substantial amount of specialized training to create the required capacity (a good proxy of the required capacity is the number of trainers and facilitators trained at national level, but it can also be expressed in terms of hygiene specialists, social mobilization and communication experts, M&E experts, etc.).

Implementing CATS also consumes a lot of resources, both human and financial and can be a logistical challenge, especially in countries where the density of the rural population can be very low as it is the case in Mauritania or in Mali or very hard to reach (mountainous areas, etc.). Both central and local governments do not have the necessary resources (both financial resources and human resources; when human resources exist, they usually do not have the required skills to implement community-based approaches) for creating such a

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[29] For instance in Senegal and Burkina Faso.

[30] See F.1.7 for further discussion on this point.

capacity. The capacity in general has been mentioned as a very important constraint for the implementation of CATS by a majority of the respondents to the online survey.

This challenge is even more acute in India, given the size and population growth. Despite the strong commitment of the Government, in particular at lower (district and village) level the implementation pace of CATS programs hardly cope with the population growth, due to the limitations in the human and financial resources that can be made available.

E.3. The flexibility of CATS in overcoming implementation constraints

CATS is a flexible approach by nature. At country level, UNICEF teams (and their implementing partners) respond to implementation constraints by a number of corrective actions; among those actions training in particular and capacity building seem key to overcome the constraints, as shown in the figure above:

Figure 10: Ways for CATS programs to address identified blockages
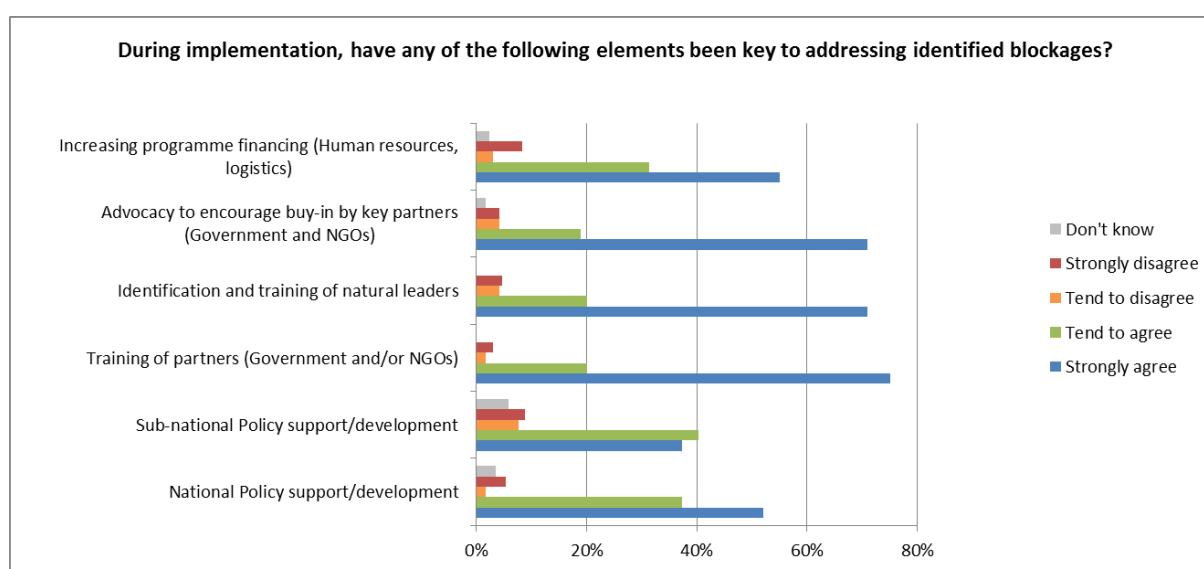
Source: Online survey, question 20

Regarding implementing constraints, it seems interesting to make a distinction between the constraints that UNICEF has been successfully addressing in the implementation of CATS programmes – especially by building the necessary skills and capacities at the level of the local authorities, the national governments and the implementing entities – in all CATS countries UNICEF has dedicated a substantial part of its financial resources to build those capacities which were an absolute pre-requisite to the scaling up of CATS. Some constraints are more outside of UNICEF's control: for instance the financial resources that national and local governments can dedicate to CATS, which play a major role in reinforcing the sustainability of the overall approach. Another interpretation that can be drawn from the graph above is that policy and resources are less important in overcoming constraints in the implementation phase; they should already have been addressed in the advocacy and design phases as part of cultivation of the enabling environment.

E.4. Criteria for success/difficulties

E.4.1. What can predict the success of CATS in a community?

Determining the criteria that could predict the success of CATS is a complex issue, as many factors can contribute to the 'success' of CATS at various levels (at the level of the community itself, but also at a broader level). Main criteria are related to: the enabling environment, the geographical/environmental conditions, the way CATS is being implemented (quality of triggering, etc.) or other factors directly linked to the community itself such as social cohesion (this specific point will be discussed in section G.2.2).

When asked which factors can accurately predict that CATS effort in a given community will not succeed, CATS practitioners highlight two factors directly linked to the community mobilization: the interest and commitment of natural leaders and the participation in the information sessions and workshops, as shown in the figure below. On the other hand, inappropriate geographical/physical conditions is regarded as a less important predictor.

Figure 11: Predictors of CATS success in a community

In your experience, are any of the following factors accurate predictors that the CATS effort in the community will not succeed?
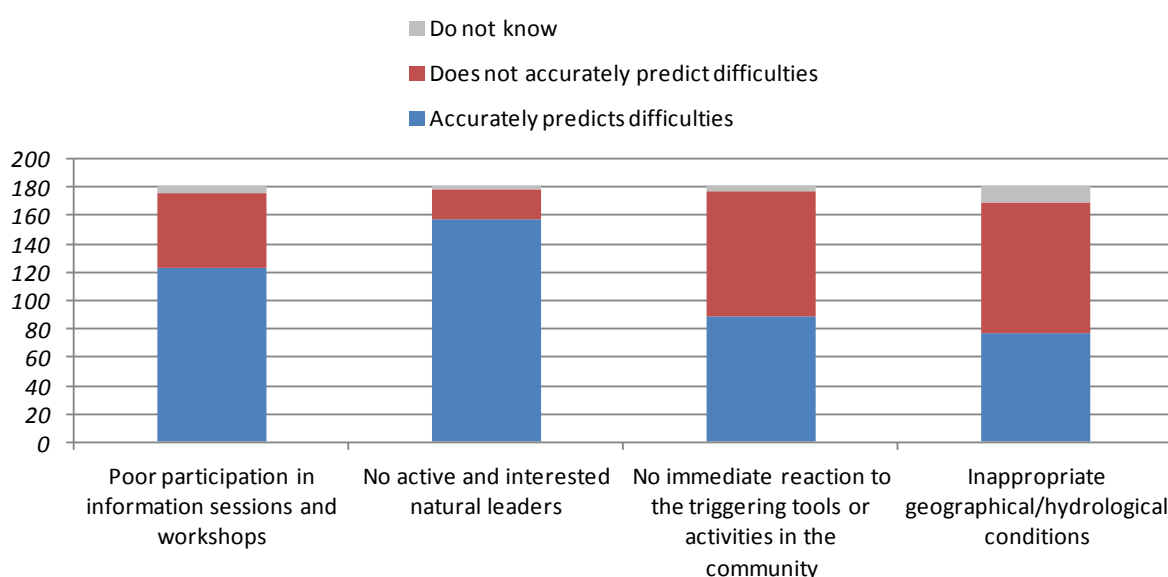
Source: Online survey, question 18

E.4.2. Criteria of success related to the implementation

According to CATS implementers (UNICEF teams and implementing partners)[31], the main criteria for success during the implementation are the following ones:

- Quality of triggering[32] – the tools and steps used to trigger the community can vary a lot in terms of quality and level of efforts within the same country or within the same group of communities, depending on who is implementing the CATS program; the quality of triggering is related to the capacity issue highlighted in § E.2.4);

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[31] The criteria below were spontaneously listed by the participants during the webinars.

[32] This was clearly established in the Roll-out evaluation of CLTS in West and Central Africa, 2011.

- Involvement of local leaders (in the broad acceptation of the term: chiefs, mayors, "natural[33]" leaders, head of health committees, school administration, etc.); the quality of the leadership is considered as very important and implementers observed that CATS can fail when the leadership is too weak or fragmented between various groups;

- Effective enforcement of community by-laws (formal or informal ones), would the by-laws be related to the obligation of building a latrine or to the commitment to end open defecation practices (Sierra Leone provides a good example of that);

- Effective and on-going monitoring of household behavior by local/natural, WASH committees and local authorities / implementing partners (including the government as it is the case in several countries); this last criterion is recognized as one of the most challenging one, as resources are often a limiting factor.

E.4.3. Criteria of success related to the enabling environment

A major criterion for success in terms of enabling environment is the **overall political commitment and oversight at national level**. The success of implementing CATS is not only related to the adoption of CATS principles by the 'sanitation sector' and their translation into key policy or strategy documents. The adoption and the promotion of CATS is intimately linked to the political willingness to recognized open defecation as a major issue in rural areas and to make open defecation the primary objective of sanitation interventions. Despite the substantial and continuous advocacy work done by UNICEF and its strategic partners in most of the CATS countries, this specific point has proven to be difficult in a few countries where governments are reluctant to question their supply-driven and subsidized approach to sanitation and to recognize open defecation as a major issue.

Involvement of local authorities is considered as a key element of the enabling environment and one element the CATS programs have been successfully dealing with in all countries. This involvement however requires a strong political commitment and is therefore directly related to the previous one. In the design of most CATS interventions this involvement goes beyond a simple support to CATS, as local government officers are systematically involved in all key steps of CATS – the certification of course but also quite often the selection of communities and the triggering process. In a few countries (e.g. Mozambique or Mauritania) a gap has even been observed between the local levels of government and the national level: local levels of government show a better understanding of the difficulties encountered in the field and are building a substantial knowledge around possible solutions tested and used by implementing partners, while the national level administration (Ministries in charge of sanitation, hygiene, health, etc.) has no clear mechanism to systematically learn from this experience built at local level.

Again the Indian case is rather specific, due to the size of the country and rural sanitation challenges. Local governments may be responsible for hundreds of thousands of inhabitants, if not millions. The Indian constitution is clear about decentralized approach, where the Municipality ("Gram Pachayat") is formally and officially in charge of sanitation. Thus the gap between central and local levels are less significant than in more centralized countries.

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[33] A comprehensive definition of a "natural leader" can for instance be found in Kamal Kar, 2010, Workshops for CLTS, A Trainer's training guide, WSSCC / CLTS Foundation: "Natural Leaders are the ones who emerge spontaneously during the process of triggering and post-triggering stages. These are the people who take the lead role in cleaning up the community and in ending OD, as they best understand the meaninglessness of constructing a few more latrines rather than eradicating OD. They are the ones who really get charged up from the entire process, want to stop OD with immediate effect and jump into action, involving the community / neighbourhood in eradicating the practice. They could be schoolboys or girls, young men or women, elderly people, religious leaders or formal/informal leaders of the village or community. Often these Natural Leaders don't stop after the community achieves ODF status but carry on with their efforts, addressing other common needs of the community like food security, livelihoods, education or protection from natural calamities."

E.4.4. In terms of environmental/geographic conditions

CATS has proven over time to be a very successful approach to end open defecation (sustainability of the OD status will be discussed later in this report) and to quickly boost rural sanitation by encouraging a massive adoption/construction of latrines. In a majority of the countries, the rapid adoption of CATS is encouraged by the capacity of the approach to deliver quick results. However CATS has its own limitations and specific or locally difficult conditions can considerably reduce the success of CATS or even lead to failure. If those conditions are usually well known by implementers, lessons learnt on the limitations are difficult to consolidate and do not influence the approach at a more national/global level. As a result, appropriate adaptations to the process and/or the construction methods are not yet apparent because not systematically documented.

The first difficult condition is directly linked to the physical and especially the hydrogeological context. No-direct subsidy to household is considered as a key principle of CATS; which can make it very difficult – or in some cases simply impossible – for the households to build latrines at a reasonable cost in flood-prone areas, rocky or sandy soil areas or areas where the water table is too high. During the early deployment of CATS in a country or region, these areas are often excluded from the selected areas and communities are not triggered or abandoned after a first unsuccessful attempt (examples: Mali, Mauritania, Mozambique. Many implementers share the opinion that more work on the technical standards together with targeted subsidies are unavoidable to help reach the households build latrines and reach the ODF status in such areas.

Scaling up is difficult in specific contexts: highly populated and vast countries (e.g. Nigeria), countries presenting very remote and scarcely populated areas with very small communities (typical example being Mauritania, but it is also the case in Northern Mali, Northern Niger and many other sub-Saharan countries – or mountainous areas in Nepal or India) or to a lesser extent urban areas. In the first case the limitation factor is the amount of financing that is required to scale up the approach; in the second case it is more the marginal cost of reaching small communities that is the limitation.

E.5. Unintended or unexpected outcomes

E.5.1. Positive outcomes

All stakeholders recognized the positive impact of CATS programs (and of ending open defecation) on the health status of targeted communities. This idea is also supported by most health officers interviewed during the evaluation. However, there is very little hard evidence (or very fragmented pieces of evidence) to support this direct positive impact of ODF on the health status of the population, at least not in the framework of CATS programs – in the absence of health indicators in the existing M&E systems[34] - or the absence of link with overall health statistical framework. Very few cases are properly documented in the literature

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[34] In Mauritania, the CATS pilot project (in the Trarza region) was conducted by the Ministry of Health – at a time when the Ministry in charge of water and sanitation was reluctant to experiment non-subsidized approaches. The evaluation report of the pilot project states that "between 2008 and 2009 [the pilot was implemented in 2008] the prevalence of diarrhea dropped by 36.4% in only one year. Other factors probably need to be taken into consideration, but it seems clear that CLTS contributed significantly to this evolution". In India an assessment of the communities recipient of the total sanitation award conducted in 2011 by the Ministry of Drinking Water and Sanitation also showed decline of water-borne diseases as well as "impressive reduction of maternal mortality".

either[35] even if many scientific studies are ongoing in the prospect of establishing and understanding the relationship between health and sanitation.

Communities are reported as having gained greater confidence in talking about sanitation-related topics, which is supported by an increase in collective awareness of the issues. Related to this is a sense that communities are making more connections between WASH activities (including water supply) and recognized health outcomes. When SLTS is a component of the CATS intervention, women and children are taking more of a lead role in WASH activities. This does not mean they do more WASH-related "labour" but rather that they have become more central to the discussions, sharing of messages and ideas, as well as encouraging on-going OD status in the community.

A commonly documented unintended outcome of CATS is the empowerment of women, as they systematically play a major role in the implementation of CATS and especially the social mobilization that goes with it, as natural leaders or together with the natural leaders when they are men. A good example of this outcome is provided by the case study in India:

The impact on women of the social mobilisation processes triggered by CATS programmes in Bondaguda village (Simliguda block, Koraput district, Odisha state)

The social mobilisation processes led to the reorganisation of women's groups and solved water problems in the community. Situated at the top of a hillock, water scarcity had always been a problem for the village and it was the women who had the arduous chore of fetching water from nearby springs and other sources. Now, every house in the village has a roof-top rainwater harvesting structure. This water is used for household purposes.

In addition, there was a place in the village where, until recently, women were not permitted to climb and sit on the dais. However, as a result of the women's groups leading the sanitation work [CATS] in the village, they have been able to break this tradition of 'no place' for women, which is a major achievement. They can now organise their own meetings and address the outsiders sitting on the dais. Moreover, the women's groups have also successfully banned the consumption of liquor in the village.

Adapted from the CATS evaluation India case study, pages 20-21

Physical safety was very often mentioned during focus groups with the communities during this evaluation. People no longer having to go into the bush to defecate is recognized and appreciated within communities as increasing physical safety by reducing the risk of encountering snakes and attacks on women (the last point being specifically mentioned). This outcome may seem anecdotal but it is a very important aspect from the point of view of the communities themselves – and an argument they are sensitive to during triggering.

E.5.2. Negative outcomes

One unintended negative impact could be that families who are resistant to adopt ODF status may become excluded (banished or subject to penalties) from their community where the rules about latrine construction and open defecation are strictly enforced. While this potential

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[35] As an example of the few references found in the literature, see Dean Spears, 2012, *Sanitation and open defecation explain international variation in children's height: Evidence from 140 nationally representative household surveys* and Dean Spears, 2013, *The nutritional value of toilets: How much international variation in child height can sanitation explain?* – where the author states that "The number of people defecating in the open per square kilometer linearly explains 65 percent of international variation in child height".

negative outcome was systematically mentioned by practitioners during the country case study workshops (especially at local level), there was no evidence that families have actually been excluded, it clearly exists as an 'ultimate penalty' in communities. More generally, there is no evidence that extreme exclusion phenomenon documented in recent publications[36] actually occurred in communities targeted by the CATS programs.

All in all, only 8% of the respondents in the online survey have mentioned negative outcomes as a result of CATS implementation (72% were certain there was no negative outcome and 20% did not know about the issue – Question 46). Only in 9 countries[37] the number of respondents could indicate the existence of negative outcomes without mentioning specific example of such outcomes. Further investigation (beyond the scope of this evaluation) would be required to determine the exact nature of those negative outcomes.

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[36] See for instance: Bartram, J., Charles, K., Evans, B., O'Hanlon, L., and Pedley, S., (2012) Comment on community-led total sanitation and human rights: should the right to community-wide health be won at the cost of individual rights?, Journal of Water and Health 10(4) pp. 499-503

[37] Pakistan, Afghanistan, Bolivia, Burundi, Ghana, Haiti, Malawi, South Sudan, Solomon Islands and Zambia.

F. Dimension 2: efficiency

Overarching question:

What are the key social and technical factors that can explain the success or failure of CATS in a given country/community context?

Self-built latrine in an ODF community in Sierra Leone, and use showing a hand washing device

F.1. UNICEF's contribution to create an enabling environment for scaling-up

## F.1.1. Importance of scaling up in CATS

Scaling up is regarded as a key dimension of the CATS approach, as it is indirectly suggested in the seventh core element of CATS. There are several reasons for that: (1) scaling up is the best indicator of full buy-in of the CATS principles by the government; (2) the rapidly increasing number of triggered (and certified) communities is a condition for spontaneous diffusion of CATS; (3) economies of scale can be met (for instance regarding the training costs); (4) last but not least, UNICEF may have the necessary financial resources to cover the costs of a pilot phase but may not always have to resources to implement CATS in a few regions/districts within a country.

Beyond the actual implementation of CATS in the field at local or community level, **UNICEF has been remarkably successful in almost all countries at creating an enabling environment for potential scaling-up**, even if all aspects of the enabling environment (as defined in the inception report) have not been given the same attention by UNICEF?.

F.1.2. Overview of main obstacles to scaling up CATS

Before analyzing the way in which CATS addresses the various dimensions of the enabling environment, the online survey provides an overview of the extent to which each dimension is seen as an obstacle to the scaling up of CATS (see below). Given the nature of the respondents (majority of UNICEF WASH country teams and partner implementing NGOs, Government counterparts) it gives a good sense of how CATS practitioners perceive those obstacles. Two obstacles are significantly considered as more severe than others: the lack of support for CATS at national level and the existence of subsidy-based projects. On the other hand, the cost of CATS for households, the cultural dimension (entrenched beliefs or traditional practices) and the geographic / environmental conditions are considered as medium obstacle or not an obstacle at all (total score on those two categories higher than 60%). More than 25% of the respondents consider that policies and strategies are "not an obstacle"; it seems linked to the fact that in a majority of the countries UNICEF has already successfully dealt with this specific dimension of the enabling environment for scaling up.

Figure 12: Main obstacles for scaling up CATS from the point of view of practitioners
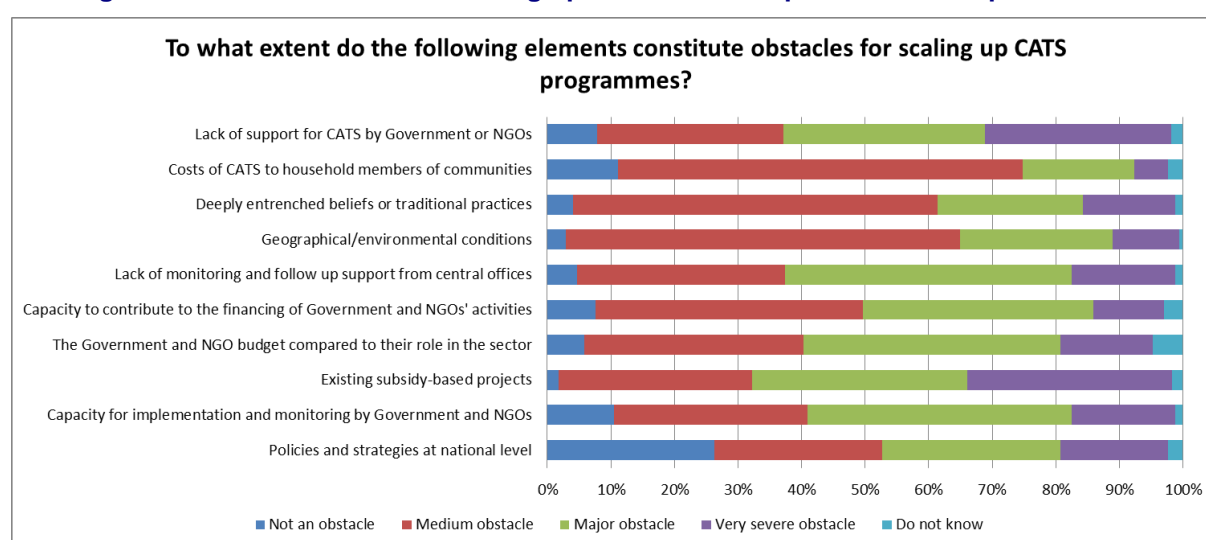
Source: Online survey, question 33

F.1.3. Policy, strategy and direction

The first and obviously most important challenge for the adoption of CATS is related to the **overall policy orientation of the sanitation sector**. It is important to remember that five years ago when CATS started to be rolled-out in UNICEF pilot countries, open defecation was not considered as a major issue in the sanitation sector (it was even a taboo in some countries) and that governments were reluctant to consider non-subsidized and behavior change-oriented approaches. CATS-compatible approaches were only piloted by a few NGOs in a limited number of countries and communities. The substantial advocacy work conducted by UNICEF at an early stage of CATS (and still ongoing) led to re-orienting the policies and strategies at local and national level. CATS principles – mostly under the form of CLTS – have now been included in a majority of the sanitation policies that have been developed and adopted after the International Year of Sanitation in 2008, as well as in national programs[38]. In some countries UNICEF's efforts even led to the adoption of a national OD objective (for instance in Mauritania – no more OD in 2025).

F.1.4. Institutional arrangements and partnerships

Institutional arrangements and partnerships have played a major role in the way CATS programs have dealt with creating an enabling environment (for more details see F5 and annex J3). A very important feature of the institutional arrangements set up by CATS programs is the **focus on local authorities and partnerships at the closest level to communities themselves**. This focus has profoundly modified the historical balance in the sanitation sector where local authorities and local partners were not usually (or very little) involved in government-led sanitation programs. UNICEF has also paid a lot of attention to partnerships with non-State entities such as NGOs, religious associations, etc.

Another important feature is the idea promoted by CATS to encourage **cross-sector partnerships** involving not only the government body formally in charge of sanitation[39] but also government entities/ministries in charge of health, education, social mobilization, etc. and the civil society organization involved in sanitation and social mobilization. UNICEF managed this multi-sector dimension of CATS by promoting existing WASH task forces or setting up specific task forces at national as well as at regional or local levels. The country case studies offer interesting stories about the fact that it was in the framework of CATS programs that the Ministry of Health was actually participating in a sanitation program (in countries where sanitation is not part of the mandate of the Ministry of Health).

F.1.5. Program methodology and implementation capacity

The third major contribution of CATS is related to **creating the necessary capacity for the implementation of CATS at all levels** – policy, planning and M&E at central level, more implementation-related capacities at regional and local levels. UNICEF heavily contributed to train facilitators and trainers, beyond what was needed to implement UNICEF-financed CATS programs. Capacity building actions carried out by CATS programs also included country visits or country exchanges, workshops, preparation and dissemination of guidelines (for instance UNICEF translated the Kar/Chambers CLTS guide into French as early as in 2009), etc. This 'generosity' of UNICEF with regard to capacity building contributed to create quickly a critical capacity in the sector and to open the door to the adoption of CATS

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[38] Adoption of CATS/CLTS in national programs is well documented by the case studies conducted in the framework of this evaluation – see for instance the PRONASAR in the case of Mozambique.

[39] Even if significant efforts have been made to establish a clear leadership in the sanitation sector – following the recommendations of the Sharm El-Sheikh declaration of the African Union in 2018 – it is far from being the case in all the countries and the institutional responsibility of sanitation is often shared by several government bodies, especially as far as the hygiene dimension of the sector is concerned.

principles by governments and other partners – a *necessary* condition for scaling up. However this same condition may not be sufficient for reaching the full range of scaling up potential. As shown in India[40] for instance, the cascading Trainer of Trainer (ToT) approach to develop the capacity of local government at all levels is appropriate, but needs more rigor in its application to assure quality at scale.

F.1.6. Other dimensions of the enabling environment

Compared to the efforts deployed in relation to policy, institutional arrangements and implementation capacity, UNICEF spent relatively less efforts on the other dimensions of the enabling environment and especially the private sector participation, the financing mechanisms and the supply side, except for the monitoring and evaluation dimension (which is discussed in more details later in this report – see chapter H).

As the general orientation of CATS programs was to encourage the construction of low-cost latrines by the households themselves, less work and effort has been dedicated to the availability of products and the involvement of the private sector – in other words, **the supply side of the market**. If the challenge facing households around durable materials for latrine construction is widely acknowledged, UNICEF's efforts have been more oriented towards ensuring improved traditional latrines are acceptable within the national standards, than in making durable materials for latrine construction more locally available. A lot of thinking is ongoing within UNICEF on how to integrate CATS and other more supply-focused approaches (labeled 'CLTS+' in some countries such as Mozambique or Mauritania) such as sanitation marketing but in a majority of countries this is still at an experimental phase[41].

On the other hand India has "overcome" the supply chain challenge by heavily subsidizing the construction of household facilities (through awards after works completion). This has given the households the means to access local markets and build higher quality facilities[42], despite the drawbacks of this approach (higher technical standards, slow pace, etc.).

On the **financing dimension of the enabling environment**, in line with CATS principles, efforts have been focused on making room for a debate at national level on the subsidy issues – the two main topics being the over-dependence of the sanitation sector on subsidies and the need to divert available financial resources from subsidizing hardware towards social mobilization. Even if the implementation of most CATS programmes are still dependent on UNICEF funding, UNICEF has been successful in convincing some governments to partially take into consideration the costs of CATS in the national budget, as a first step towards the financial sustainability of the program – for instance in Mauritania the intervention of CATS led to including a sanitation line in the national budget for the first time (although the amount remains limited). In Mozambique, UNICEF has advocated for the Ministry (MOPH) to assign dedicated water and sanitation budgets to the Districts.

However, there are quite a few examples in CATS programs of experimenting innovative or alternative financing mechanisms (such as revolving funds or micro-credit[43]) at community or higher level. Village Savings and Loans Associations are documented in the Sierra Leone case study; in Nepal districts where village-managed funds are collected to support poor families or in India where some communities merge all financial awards in a community-

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[40] See also "Building the Capacity of Local Government to Scale Up Community-Led Total Sanitation and Sanitation Marketing in Rural Areas", WSP, April 2010.

[41] WSP has gone through the same process a few years ago and has been supporting "Total Sanitation and Sanitation Marketing (TSSM)" programs in several countries such as India and Indonesia.

[42] In India the provision of the subsidized award is conditioned by the quality of the facility, according to local standards. While this condition implies technically more sustainable facilities it also has unforeseen consequences on the sustainability of the ODF status, and on scaling up capacity and pace, as it sets up technical standards that are relatively high, especially from the household point of view.

[43] On the financing mechanisms see for instance pS-Eau, 2012, *Financing sanitation in sub-Saharan Africa*.

managed fund for supporting poor families. But this evaluation has not found any evidence that such mechanisms have yet been successfully scaled-up.

Private sector engagement is widely recognized as a key aspect of the enabling environment of CATS. Private sector actors can intervene at various levels: in the CATS implementation itself (a few CATS programs rely on private actors as implementers) and at a more local level – masons, latrine builders, actors of the supply chain providing materials or hygiene-related items. However engagement with the private sector is far from being systematic: in most cases it is assumed that the private sector will play its supply role and there is no specific component of the CATS intervention aiming at strengthening private operators. This aspect is often linked to the choice of relying on households' know how and resources to build their own latrine, and the also the option of not imposing any technical standards that would require more sophisticated skills in terms of construction[44].

If the way CATS is currently being implemented does not address the supply side in a systematic manner, UNICEF has recently (2011-2013) intensified its thinking around the sanitation marketing approach (SanMark) and how it could complement CATS. UNICEF believes both approaches could mutually reinforce each other. Several SanMark training sessions have been organized in 2013 and specific SanMark programs are currently being designed and ready for implementation. Not much can be analyzed yet regarding this last development of CATS; however, it seems that reconciling SanMark (which is basically a supply-side, technology-oriented approach) with CATS (which is essentially a demand-driven approach) has a great potential, especially in terms of addressing the limitations of CATS with regard to sustainability (see last chapter).

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[44] CATS does not exclude the development of locally-adapted latrine models. A few examples were reported to the evaluation team – but this does not seem to be a major trend in the way CATS is implemented.

F.1.7. Strategizing the way CATS is scaled up

Figure 13: Example of strategy developed by UNICEF in the State of Rajasthan (India) to scale-up CATS within a 5-year period by addressing key aspects of the enabling environment
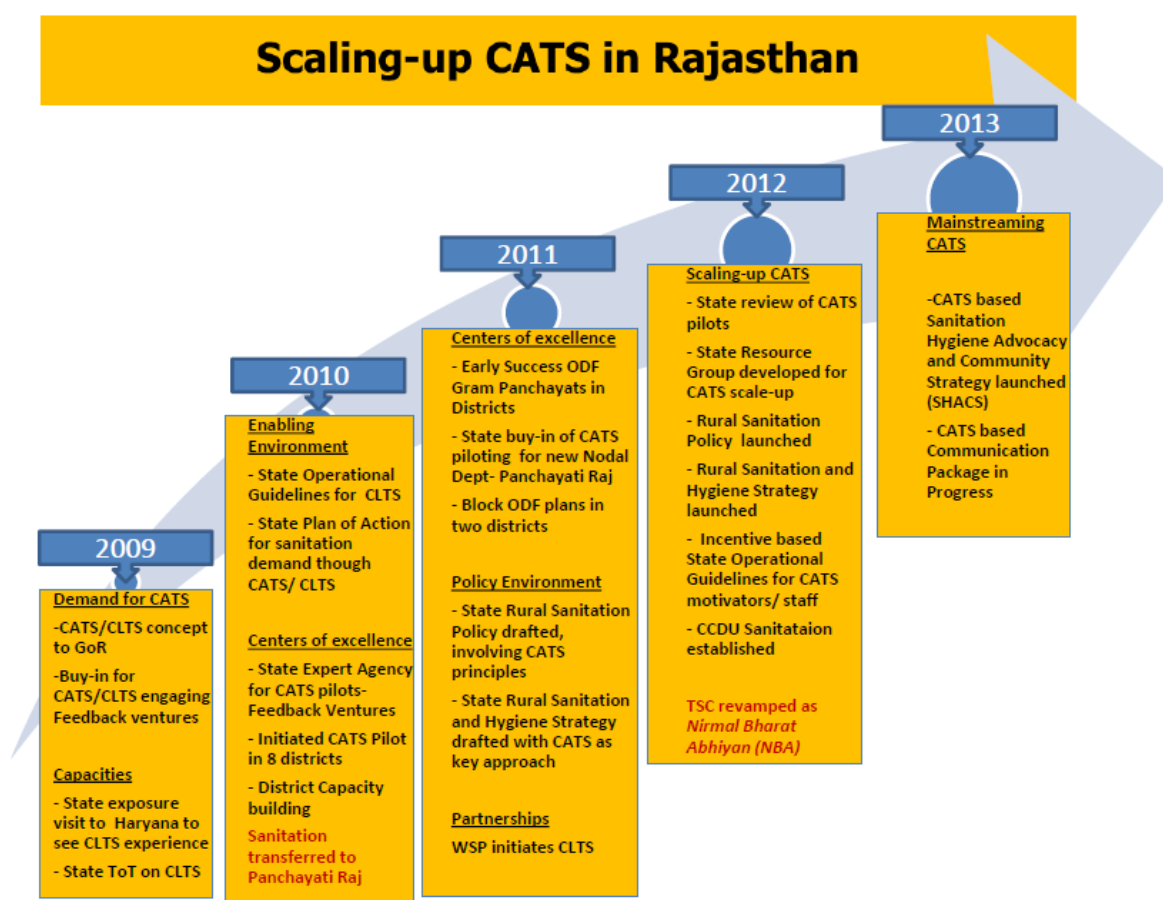
Source: Power-point presentation slide from Rajasthan UNICEF State Office

The example from Rajasthan (see above) illustrates another interesting dimension of how CATS envisages scaling-up – especially in a country like India where UNICEF does not finance directly CATS programs but concentrates on providing the Government with technical support and new ideas on how to implement programs (for instance with less subsidies). Shifting to CATS requires a considerable effort to change thinking, tools and old program implementation habits; it also requires addressing one by one all the dimensions of the enabling environment for scaling up. Instead of proposing a "package" that would fix all the sector limitations at the same time (which would be in contradiction with the ToC approach anyway), **CATS is presented as an adaptive approach and offered more like a toolbox to the Government**. Using this principle, UNICEF has been successful in strategizing (at both global and country levels) its approach to the enabling environment, focusing on the key aspects in a logical order. In this respect, time and flexibility are key ingredients for success and the structural capacity of UNICEF to implement and re-orient programs over a reasonably long period of time has proven to be very successful.

F.2. Costs and financial competitiveness of CATS

Actual costs of CATS are extremely difficult to document and to compare from one program to another and from one country to another. The first reason is the absence of common framework for costing and reporting CATS programs. Secondly, because of the nature of costs related to the implementation of CATS – almost no hardware but training, capacity building (e.g. preparation and dissemination of guidelines and training / social mobilization material), running costs of national and local governments, service contracts with NGO or private operators, costs related to advocacy, communication, knowledge management, etc. – mostly executed directly by UNICEF country offices. Lastly, the type of institutional arrangement varies a lot from one country to another (ranging from UNICEF being a direct implementer of CATS to technical assistance and institutional support to governments directly implementing CATS – such as it is the case in India).

Recent evaluations[45] did not pay sufficient attention to analyzing the costs of CATS and only rough figures are currently available, indicating that the cost of implementing CATS (under its main modality – CLTS) currently ranges from 5 to 15 USD per capita[46] all included to reach the certification stage – but excluding the investment of the households in the construction of their latrines. Most data originate from Africa, which introduces an important bias, as costs might be very different between African and Asia.

More global assessments such as the WASHCost project[47] do not provide specific insights into the cost of implementing CLTS, because of the methodology used[48] and the focus on cost-effectiveness. Inclusion of CATS and CLTS in national programs should lead to more accurate figures in the future (and over a longer period), but relevant assessments were not available yet at the time this evaluation was conducted.

Compared to formerly used approaches, CATS shifts the financial requirements from latrine construction (or subsidies for construction materials) to resource mobilization, capacity building, monitoring and following-up of community-driven actions. In this respect, **one of the most interesting outcomes of CATS is to mobilize local resources for sanitation** – as the costs of all latrines constructed under CATS (including labour) being born by the households themselves. It is unfortunate that costs supported by the households are rarely documented and reported/monitored as it would probably demonstrate the strong leveraging effect of CATS – one dollar spent by a CATS program is likely to trigger 2 or 3 dollars spent by the household (or the community) on sanitation and hygiene, making community-based approaches such as CATS the most competitive approaches in the sector.

"CATS is a low cost but not a no cost approach" – as captured by one of the key informants. An interesting point is that UNICEF succeeded with CATS to demonstrate that many issues related to rural sanitation (and first of all, ending open defecation) can be addressed at a reasonable cost that can be partially covered by existing resources at local level – for instance local authorities budget – when it is impossible for them to finance a more 'classical' subsidy-based latrine construction programme. There are examples highlighted in the case studies of local authorities triggering more communities than initially targeted, drawing on their own financial resources.

Lastly, there is a concern raised that the total cost of CATS is not 'visible' yet – the total cost being related to sustaining the ODF status in the certified communities over the long term, which potentially includes a follow-up that is usually not budgeted at the moment. Linked to

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[45] Including, the recent evaluation of the one-million initiative in Mozambique.

[46] The roll-out evaluation of CLTS in West and Central Africa estimated this cost at 4 USD/capita. Early assessment of the CATS program in Mali indicated that the cost was around 8 USD/capita. Recent feasibility studies – Mauritania, 2012; Ghana, 2011-2012; Senegal, 2013 used 12-14 USD/capita as a first estimate.

[47] IRC, June 2013. Hygiene promotion. How effective is it? How much does it cost? WASHCost Infosheet 5.

[48] Especially because the WASHCost project looks separately at latrine construction and hygiene promotion.

that concern is the issue of 'hard to reach' communities – be it for strictly geographical reasons or for reasons related to the difficulties encountered in terms of social mobilization, leading for instance to the failure of the first triggering attempts. Marginal cost of reaching such communities is comparatively high, and unit cost per community is very likely to be higher compared to the easier to reach or more receptive communities, if the long-term objective is to declare ODF a whole district within a country – or a whole country – however this issue of marginal cost is not at all specific to CATS.

F.3. Financial (and other) incentives

In all countries where CATS is being implemented, UNICEF follows the general principle of not directly subsidizing the households or the communities as a whole for the construction of their latrines. In this respect, India is not an exception to this principle, as UNICEF is not involved in delivering subsidies under the CATS program[49]. The situation is of course very different depending on which component of CATS is predominant in the country programme: in the case of SLTS, school sanitation facilities are often partially subsidized, as well as other equipments related to hygiene behavior (hand washing equipment for instance).

Financial incentives, however, are used in many countries at all stages of the implementation of a CATS program, would it be at the level of the households, at the level of the community itself or outside of the community, at the level of the local or central government. The case studies and the documentation on CATS programs carried out in other countries provide a good overview of the financial incentives most frequently used.

Regarding capacity building (training sessions, field visits, etc.): CATS programs usually cover all the costs related to capacity building activities, creating an incentive for government officers, regional/local/community leaders and sometimes other development partners (especially NGOs) to participate (for instance in Mauritania, training and "kickoff" workshops represented 5% of the total budget of the CATS program from 2010 to 2012).

In most countries, UNICEF's CATS programs budget covers a substantial part of the running costs (especially fuel and daily subsistence allowances) of the governmental agencies or services involved in the implementation or follow-up of the activities in the field, especially at local and regional level. Although those costs are normally part of any UNICEF program, covering them has proven to be instrumental in the success of CATS implementation. In a majority of countries UNICEF also finances equipments for the government agencies involved in the implementation of the program (computers, motorcycles, etc.).
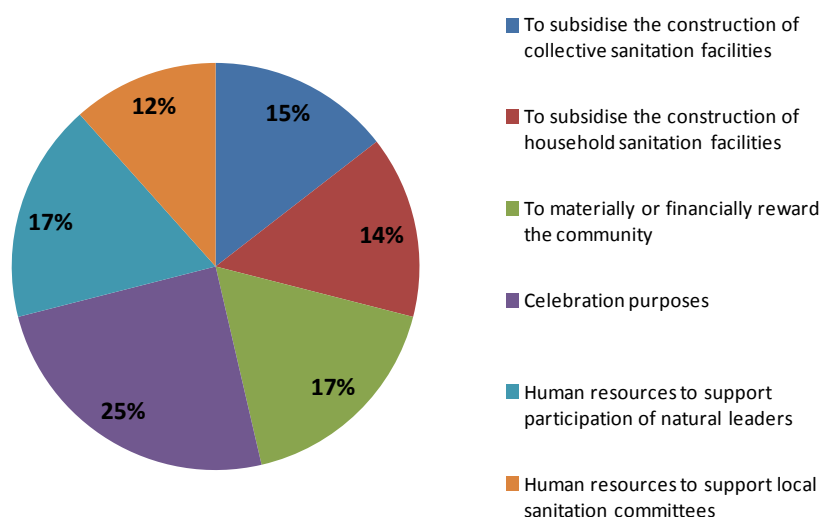
At community level, local leaders do not normally benefit from any financial incentive, even if some indirect costs related to their mobilization can be covered by UNICEF; most implementing partners have recognized the importance and the necessity of including in CATS budgeting those costs, in the post-triggering phase but also in the follow-up phase (as it is difficult to keep up the motivation of leaders after the certification). Those mobilization costs can be indirectly provided by other programs (for instance when community leaders are also involved as social mobilizers by health programs).

Certification ceremonies represent a substantial portion of the total cost of CATS programs – for instance in Mauritania they represented 17% of the overall cost of CATS

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[49] "UNICEF is not involved in delivering financial incentives either to the communities or to the individuals as such under the CATS programming in India. The role UNICEF playing is in the CATS demonstration programs which are primarily showcasing the ways to facilitate the community action for achieving open defecation free status. The support is mostly through a technical assistance which mainly consists of support for capacity building through training programs, exposure visits, innovative ideas and sometimes engagement of specialized agencies" (India case study, final version, November 2013, page 26).

implementation[50]. Ceremonies are identified as the predominant financial incentive in the CATS programmes by the respondents to the online survey (see figure above), although they have more than a financial dimension – their psychological dimension (recognition and pride for the community; diffusion of the new social norm) also plays a very important role. Certification ceremonies can have a strong impact on the local economy, especially in small communities and they therefore constitute a financial incentive as such.

Figure 14: Use of subsidies or financial incentives in CATS programs

Legend:
- To subsidise the construction of collective sanitation facilities
- To subsidise the construction of household sanitation facilities
- To materially or financially reward the community
- Celebration purposes
- Human resources to support participation of natural leaders
- Human resources to support local sanitation committees

This question had 53 respondents

Source: Online survey, question 24

Collective rewards[51] are used in a minority of countries (according to the online survey, in 17% of the cases). They can take many different forms: money (best example is the Clean Village Award provided by the Government of India at national level), hygiene kits to households, bicycles, mobile phones, small funds for women groups, etc. There is no clear evidence that rewards can improve the efficiency of CATS programs. To the contrary, they have been identified as counterproductive in some countries such as in Mozambique where they have been completely abandoned: "Such "rewards" became well known about in advance and expected by communities, contradicting the "no-subsidy"' principle of CATS and influencing communities to move towards immediate quantitative results[52] rather than adopting more durable, embedded behaviour change".

All in all, financial incentives are not the only important dimension in the efficiency of CATS programmes. However, it is a solid financial dimension to the overall approach. Without it the programmes would not work. Financial incentives do create positive momentum for bureaucracies and leaders. In this respect, it has contributed to substantially change the way money is spent in the hygiene and sanitation sector, demonstrating that considerable results can be achieved with a more reasonable investment per capita (see F.2) and– more important – that money can be focused on the software components of the programs – capacity building, communication, social mobilization, etc.

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[50] Unfortunately Mauritania is the only country from which the evaluation team managed to properly document detailed costs of CATS implementation over a significant period of time (3 years).

[51] The Indian approach includes rewards provided at household level.

[52] Some families were waiting to see rewards to individual households on completion of their latrine, rather than when ODF was achieved at community level, which interferes with the overall approach.

F.4. Diffusion mechanisms (ODF status or social norms around OD)

CATS can diffuse outside of the perimeter initially envisaged in the program. From the country level assessments and especially the workshops involving CATS practitioners, three different diffusion mechanisms are usually distinguished:

- Institutionalized diffusion: this mechanism covers the situations where UNICEF creates the institutional conditions to encourage national governments or major development partners to adopt CATS principles and to invest in CATS-compatible programs;

- Organized / encouraged diffusion: when diffusion is included in the program objectives, using key moments in the CATS cycle to reach neighboring communities to engage in triggering activities, with or without external support;

- Spontaneous diffusion: when CATS intervention in a given community triggers actions in the neighboring communities towards adopting new social norms and reaching ODF status, in an unintended way and without any external support.

The extent and the scale of the three forms of diffusion are difficult to assess as they are rarely explicitly included as objectives during the program design (especially the two last forms). It is therefore rarely possible to measure any scaling-up effect in terms of diffusion.

Diffusion of CATS has been mentioned in almost all the countries surveyed during this evaluation (for instance to the question "have you seen evidence of replication of CATS elements outside of targeted areas of the programme (spontaneous diffusion), 57% of the respondents to the online survey replied "yes"). However if the mechanisms of this diffusion are sometimes documented (and usually well known by implementing partners), the extent of this diffusion is never measured as the corresponding indicator is not included in the M&E system developed by UNICEF – and the indicator itself would be difficult to determine as all the communities reached by the diffusion effect have normally not been triggered by the CATS program (and therefore are not included in the M&E system).

Diffusion is poorly documented in the literature, including the project documents. From the cases documented by UNICEF and discussions at country level during the workshops, three mechanisms of spontaneous diffusion can be identified and described:

- First (and apparently most common) mechanism is directly linked to the **strong involvement of the natural leaders**, especially when their influence goes beyond their own community. In Mozambique for instance, the limited extent of spontaneous diffusion is explained by the fact that "(…) the influence of traditional leaders remains strong within their community, but does not extend much beyond this perimeter, which limits their ability to convince other communities to adopt similar actions or behaviors". It highlights one aspect of CATS which is to extend social mobilization beyond the targeted communities themselves, to trigger a level of mobilization and involve more influential natural leaders (be they elected representatives of a local authority or members of a religious association like documented in the Mauritania case study);

- A majority of countries insisted on the **role played by schools and children**, as many children attending to school from smaller neighboring communities. In this case the spontaneous diffusion effect can be largely unintended and informal – children going to an ODF school influence their parents and therefore the natural leaders in the communities where they come from – or deliberately institutionalized in the countries where SLTS is a significant part of the CATS programs. This second modality is very well documented by the case of Nepal where the Government decided to implement SLTS in all the 75 districts of Nepal;

- Many UNICEF staff and CATS implementers mentioned the **key role played by the certification ceremonies** in the spontaneous diffusion of CATS. Each ceremony sheds a lot of attention on the certified communities, and CATS implementers usually make sure that regional or national leaders/authorities are invited[53], as well as neighboring communities (even those which were not targeted nor triggered) – and natural leaders of neighboring communities can get the necessary inspiration and motivation from the achievements of the first certified communities to the point that they decide to trigger their own community without waiting for an external intervention. In this respect, certification ceremonies can be seen as a mixed example of spontaneous and organized diffusion. Competition (in the positive sense of the term) between communities plays a role in spontaneous diffusion – together with the pride of natural leaders to take community matters into their own hands without external support.

If spontaneous diffusion effect can strongly contribute to the efficiency of CATS programs, it is not completely and formally integrated in the strategies developed at country level. In this respect, to allow CATS programs to fully benefit from the contribution of the spontaneous diffusion effects, and turn what is largely unintended at the moment to something that would be intended and encouraged, at least two aspects should be improved:

- **To build a knowledge base of all best practices** regarding organized and spontaneous diffusion of CATS, at country level and also at global level. UNICEF staff and CATS implementers have a lot of knowledge that is not properly documented or not documented at all – as the focus is more on achievements and certified communities only. Documenting observed cases could allow UNICEF to have a better understanding of the mechanisms at work in the diffusion process and therefore influence the way CATS programs are designed and budgeted;

- **To include spontaneous diffusion effects in the M&E system** – which would mean for instance to systematically monitor all communities at the level of a district or a region, in order to report not only on the communities that have been formally targeted and triggered, but on all the communities in a given area, including those that could be and/or have been reached through spontaneous effects. This orientation would allow UNICEF to follow a line of thinking that has been observed in several countries: to set targets not only in terms of a number of ODF communities, but also in terms of reaching an ODF status at the level of a territory or an area – that would guide the strategy for deploying CATS in the most efficient way and for targeting the first communities to be triggered in order to encourage diffusion.

F.5. Institutional arrangements and partnerships

F.5.1. A diversity of arrangements adapted to national contexts

Institutional arrangements designed to ensure CATS implementation differ consistently across countries. Implementation may be ensured either by the national or local authorities or by subcontractors (NGOs in most of the cases). A brief illustration of the diversity of arrangements (from the 5 case studies) is provided in annex J3.

In Mauritania, CLTS is implemented through the National Directorate of Sanitation (DNA) at national level, which plays a major role in policy setting and coordination of government-led projects and programs. The Regional Directorates of Hygiene and Sanitation are responsible

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[53] In Mali, UNICEF made sure that the Minister in charge of Sanitation attended the first certification ceremonies in the pilot area back in 2009 (Kati district, Koulikoro region). The same strategy was adopted in Mauritania as well as in many other countries. In Mauritania, the importance of the certification ceremonies is reflected in the breakdown of costs – the ceremonies represent 25% of the total budget of CATS.

for rolling out and monitoring CLTS programs. This institutional arrangement has been instrumental in developing CLTS ownership in the country.

In Mozambique and Sierra Leone, to the contrary, while the implementation of CATS is driven by national and local sanitation departments, it is actually achieved through outsourcing contracts with NGOs or local private firms specialised in community mobilization. These implementers sign Programme Cooperation Agreements (PCA) by which they agree with UNICEF on the way to implement the program and performance-based outcomes.

In Nepal the Sanitation Master Plan has made CATS its central focus so as to motivate and guide national initiatives toward 'total sanitation' status. The principles of the Master Plan and its implementing guidelines are compatible with the global principles of the CATS. Nepal's key five ministries, Ministry of Urban Development, Ministry of Local Development, Ministry of Education, Ministry of Finance and Ministry of Health and Nepal's Planning Commission have approved the elements of the Master Plan and have pledged their support.

In India UNICEF is a long time strategic partner of the Ministry of Drinking Water and Sanitation (MDWS) at all levels (national level and 14 states where it has direct presence). It works on variety of issues – though competing at grassroots level – with other ministries related to health, education, women and child development, etc. UNICEF has helped and collaborated with the MDWS to design and develop a National Sanitation, Hygiene Advocacy and Communications Strategy. This is accepted by the national government and so has been adopted by majority of the states in the country.

F.5.2. Strong partnerships at all levels, not only central government

Partnerships between UNICEF and local authorities take different forms and may be more or less formalized. In India, partnerships established in the different Federal States vary greatly from one State to another and may include support for the development of guidelines or for design and implementation of different models of supply chain, to training of staff responsible for CATS implementation. There is therefore a degree of flexibility in the implementation of CATS depending on the specificities of the institutional model within each country. The lack of prescriptive institutional model allows great flexibility for CATS, which is undoubtedly one of its main strengths and a good way to ensure efficiency.

Strong partnerships at all levels are a prerequisite for CATS programs implementation and success. Structured partnerships at the central level allow boosting ownership and implementation of the approach. In Mauritania, ownership of CLTS by the national authorities has been the very basis of rapid deployment of the approach at the national level; the goal being now to achieve ODF nationally by 2020. In this context, capacity building of institutional partners, either through support for the implementation of policies, development of guidelines, or training is important. In Nepal, UNICEF role is to support and build capacity of WASH coordination committees at the central, district and local level. In Mozambique, while UNICEF maintains a good level of institutional relations with the DNA at the national level (and at Provincial level through the DPOPH), UNICEF may need to give greater attention to the coordination and institutional linkages at sub-national (Locality and District) levels to strengthen their capacity to manage, facilitate and monitor WASH programmes beyond the life of the One Million Initiative programme.

F.5.3. Importance of partnerships with non-State actors

Engaging with non-State actors can also be a strong factor of success. In the Islamic Republic of Mauritania, involvement of religious leaders and organisations is an important asset for raising awareness of communities on sanitation and hygiene, making a link between hygiene-related issues (such as open defecation) and the cultural habits and beliefs, historically and strongly rooted into the Islamic culture. Local radios have also successfully been involved in Mauritania in order to spread messages among communities. Overall, the involvement of other governmental departments such as health, education,

women and child development is instrumental. In Nepal, the private sector is playing a growing role in terms of providing construction materials. This is less the case in India, mainly because the reward-based approach is channelled by the Government.

G. Dimension 3: effectiveness

Overarching question:

What are the key financial and managerial factors that maximize the efficiency/value-for-money of CATS?

A natural leader proudly showing the ODF certificate of his village. Maravia District, Mozambique

G.1. Evidence for social norms change on OD after CATS interventions

G.1.1. Are social norms a key aspect of CATS implementation yet?

Integration of social norms theory in CATS is an ongoing process. While UNICEF staff recognize the importance of addressing behaviors within CATS, the language of 'social norms' is not widely used. The most commonly used vocabulary is still that of 'behavior change' (coming from older methodologies) which is significantly different as it refers to *individual* behavior change when the 'social norms' concept aims at changing *collective* behavior through the adoption of a new social norm (influencing individually and collectively held expectations) around ending open defecation.

Few staff have been trained in social norms theory, approaches and application – which may lead to a level of misconception or misunderstanding about what influence it has, or can have, on programs. There is a sense that changing social norms is still not at the forefront of thinking of most of UNICEF's WASH staff – so neither is it reflected in the thinking of UNICEF's government counterparts. Attitudes and resulting actions are still based on past approaches, with UNICEF "*not always fully on-board with the new approach… we are still counting latrines in the back of our minds*" (One participant in a Webinar). Analysis of online survey responses (see figure below) confirms that UNICEF staff recognize the importance of social norms, even if country case studies show that they might not be fully taken into consideration during program implementation in the field.

Figure 15: Integration of social norms in CATS programs
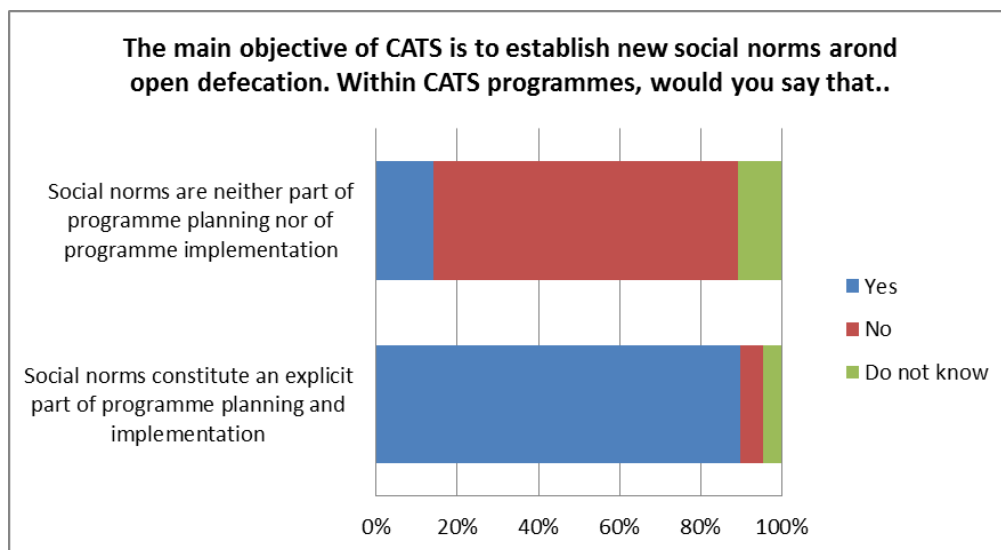
Source: Online survey, question 25

As a result, the evaluation team observed what can be considered as an **intermediary situation** where all the segments of CATS programming and implementation have not been influenced by the concept of social norms in relation to the elimination of OD yet (although some may argue that the processes used in CATS programmes – particularly CLTS – if correctly carried out, by their inherent nature can trigger social-norms change in the participating community. See next section), which has substantial consequences on the sustainability dimension (see next chapter) and also on other dimensions (notably the design

of the CATS programs and especially key steps such as the triggering phase[54] or the certification process). The indicators currently used by CATS programs to set targets and to measure achievements are typical CLTS indicators (ODF status, number of certified communities, number of latrines, existence of hand washing equipment, etc.) which only take into account the change in social norms aspect to a limited extent. Moreover, those indicators are rarely measured after the certification phase. As detailed in this sub-chapter (and later on in the 'sustainability' chapter) the capacity of UNICEF CATS programs to measure a change in social norms is under construction, which can explain the level of fragmentation of the evidences gathered during this evaluation.

G.1.2. Evidence of social norms change on OD

Evidence of social norms change can be observed as soon as the triggering activities has taken place (whether it be in a community or in a school), at the very beginning of the CATS intervention. UNICEF staff and CATS implementers report frequently that when triggering is really effective (see below, G.2) and involves all local and natural leaders, behaviors change can start very quickly, even before the first latrines are actually built and before the community is ready to be certified. However, if a change in individual behaviors is a pre-requisite to a wider collective change, it does not constitute a change in social norms yet – it is more frequently seen as a positive reaction of the community to the messages delivered during the triggering phase (disgust, transmission of feces, cost of no sanitation, etc.). Anyhow, it is probably from these first seeds of change that the new social norms will grow stronger – which makes very important to identify and document those first changes – and take action in case they cannot be observed in the community after the triggering.

Figure 16: Perception of the adoption of a new social norm around open defecation
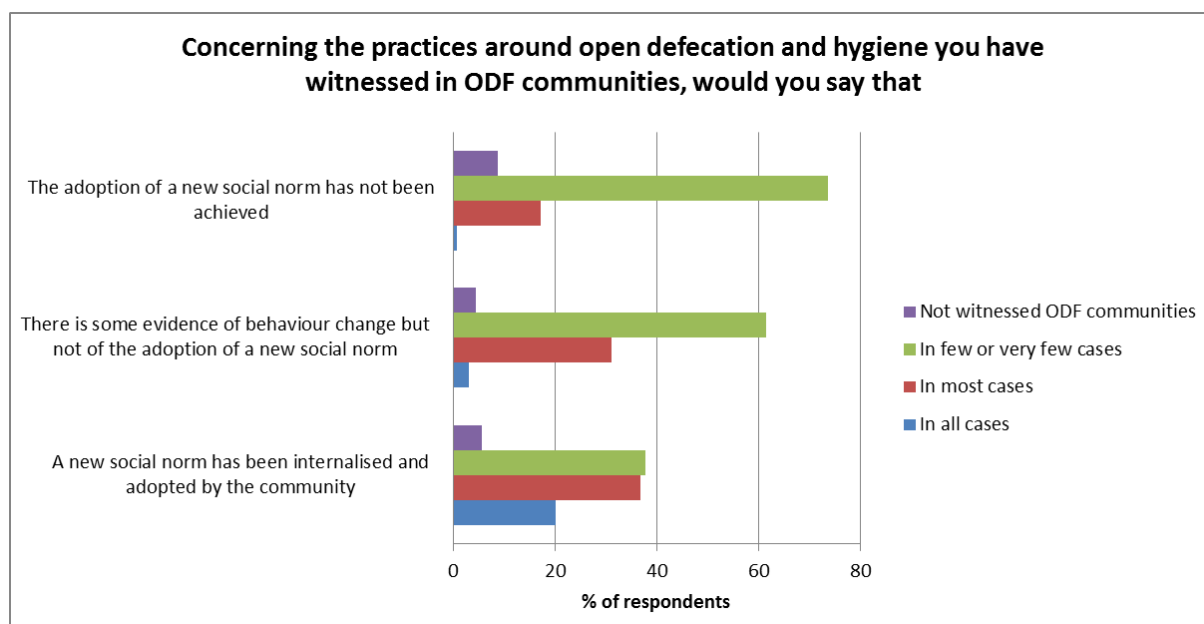
Source: Online survey, question 32

Children seem to play a role in the construction of the social norm: "The process and results of SLTS is also enhancing a sense of social norms evolution. Where children have access to and use appropriate latrines, hand-washing facilities, safe water supplies and waste disposal at school they have higher expectations of sanitary improvements at home. Using a latrine,

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[54] For instance, it is expected that a better understanding and use of the Social Norm theory / concept will help increase the 'conversion ratio' of "community triggered" to "ODF status achieved ratio – which would obviously have a strong impact on the effectiveness of CATS programs (see Webinar 2 on social norms).

adopting hand-washing and keeping the environment clean are becoming more of an expected way of life than would otherwise be the case." (Sierra Leone case study).

Another evidence of a change in social norms on OD is that after CATS intervention, the benefits from ending OD are seen as owned by the whole community, rather than by individual households. "Communities are increasingly seeing OD as a behaviour that can put the health of the entire community at risk." (Sierra Leone case study). This seems to be not only an evidence of a collective behaviour change, but also an important step in the construction and the adoption of the new social norm by the entire community.

In many countries, the strongest evidence of a change in social norms is the genuine adoption and the enforcement of formal and informal rules / bylaws at the level of the community, accepted by all the community members and recognized as collective rules which cannot be transgressed without consequences (these rules usually existed somewhere in the legal framework related to hygiene and health – but they had never been enforced). The case studies documented many different rules and also fines associated to transgressing them (see examples taken from the Sierra Leone case study below).

However, the existence of such rules (and the fact that they are actually enforced by the community leaders) is rarely taken into account in the certification criteria and in the M&E system. A point that is frequently discussed by CATS implementers is to know if the existence of (realistic) fines to prevent OD is an evidence of a change in social norms or if it introduces a bias – either because the fines exist but are not actually enforced or because people do not revert to OD only because they fear to be fined, and not because they are durably and intimately convinced that OD is not the right thing to do.

Examples of fines around OD and other hygiene-related issues at community level

In most communities, a flat-rate of USD 0.67 or USD 1.12 was imposed for actions such as:
Defecating in the bushes,
Not having a hand-washing facility,
Parents not using a potty for small children,
Not reporting a broken latrine to the WASH committee and reconstructing it,
Using another person's latrine,
Having a dirty compound, or
Not taking part in a monthly clean-up activity.

CATS evaluation, Sierra Leone case study, page 16

Existence of informal or formal rules around OD are not the only hard evidence of the adoption of social norms. Via the case studies (and also the webinar on social norms) many other interesting actions and good practices have been documented: support to women's groups to ensure a permanent supply of hygiene products (soap for instance), community initiatives around hygiene in the village in the broad sense of the term (sweeping of streets, garbage collection, cooking-related hygiene, etc.), organization of community monitoring / inspection of latrines and specific aspects of ODF certification (hand washing devices for instance). Of course all those initiatives are very community and context-specific, even if general patterns could be identified (for instance the link between latrines, hygiene, end of open defecation and garbage collection). This would require further investigation.

In conclusion, there is obviously hard evidence that social norms on OD have changed after a CATS intervention to some extent and that the initial messages have been translated into collective rules. The concern expressed by most players interviewed during this evaluation is more about the sustainability of this change after certification (see next chapter). This is captured for instance in the online survey (see figure 12 above): a large majority of the respondents acknowledge that a new social norm has been internalized, but an even larger

majority question the sustainability of this change and point that it could be only due to the temporary pressure applied on the community by their leaders.

G.2. Triggering

G.2.1. Steps taken during the triggering phase

"*Triggering is based on stimulating a collective sense of disgust and shame among community members as they confront the crude facts about mass open defecation and its negative impacts on the entire community*" (CLTS Manual, page 21).
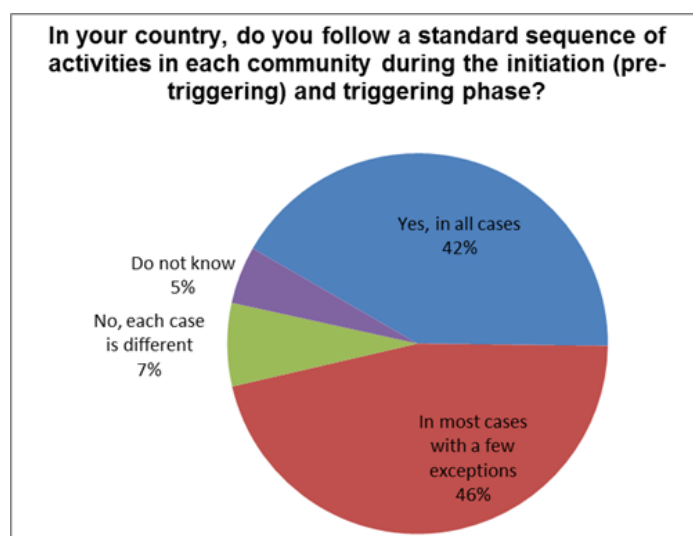
In every country where CATS is being implemented, steps that are usually taken during the triggering phase are rather classic and mainly based on the CLTS Manual developed by Kar and Chambers. Most of the original CLTS tools developed in the Asian context are used in other countries with alterations to adapt them to the national context:

- Transect walks (including children and women) throughout the village;
- Community mapping of defecation areas;
- Calculation of shits and medical expenses;
- Disgust triggering through demonstration of oral-faecal transmission route of infections;
- Identification of natural leaders;
- Participatory development of village action plan and timeframe.

CATS way of doing CLTS differs on a few points that are considered meaningful by CATS implementers and key alterations to make sure the CLTS approach could be translated to African countries. Among those differences practitioners usually mention: no systematic use of shame during triggering, no flagging, no children used as whistle blowers. This is an illustration of the inherent flexibility of CATS compared to the initial CLTS methodology.

These steps are followed by the majority of those responsible for triggering, whether working directly under the leadership of local authorities or for subcontractors (NGOs or private companies) as shown in the diagram below.

Figure 17: Standard sequence of activities during the pre-triggering and triggering phase

In your country, do you follow a standard sequence of activities in each community during the initiation (pre-triggering) and triggering phase?

- Yes, in all cases 42%
- In most cases with a few exceptions 46%
- No, each case is different 7%
- Do not know 5%

Source: Online survey, question 14

Adaptations were also made to the initial CLTS "package" for the triggering phase, in specific communities where the triggering is anticipated to be difficult, specifically:

- Communities where the traditional leadership is weak of conflictive, and

- Large, periurban and urban communities.

In such cases UNICEF's implementing partners, as well as other INGOs implementing CLTS, are testing different approaches. Some are reverting to PHAST, while others are beginning to complement CLTS with elements taken from the SanMark approach.

G.2.2. Factors impacting triggering effectiveness

a) Support of natural leaders

Active and interested natural leaders to support the triggering process are instrumental as shown in the diagram below. Natural leaders can improve CATS effectiveness during the triggering phase but also during the post triggering phase as they may be involved in follow-up and monitoring activities. Overall, lack of interest and support from natural leaders can be an accurate predictor of CATS failure.

Figure 18: Accurate predictors of CATS failure
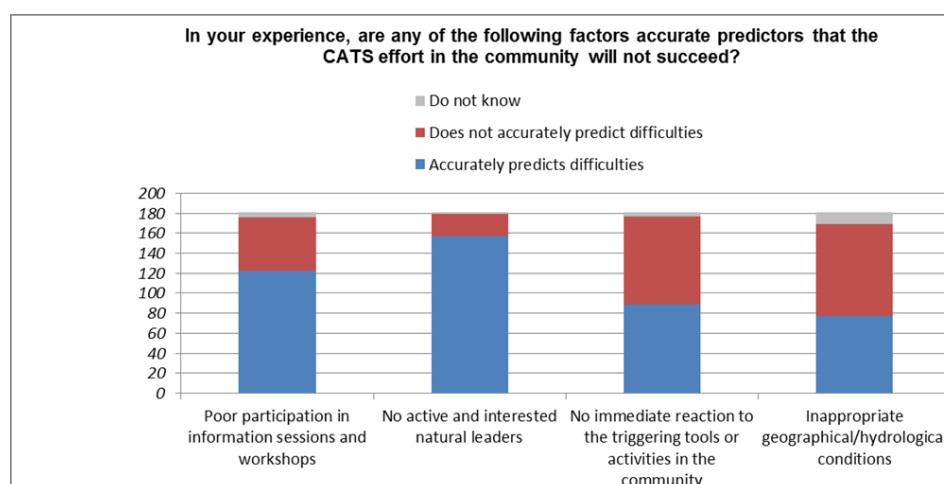
Source: Online survey, question 18

### b) Involvement of third parties actors can help

In Mali, the involvement of traditional communicators (*griots*), the support of media, the involvement of political leaders from central to local level in ODF celebration, and the sponsorship of ODF ceremonies by prestigious personalities have found to be critical to ensure triggering success. In some countries as in Mauritania, involvement of religious leaders and local radios to spread messages are also essential.

c) Social cohesion within the community

The social profile of the targeted communities is critical for ensuring success of the triggering phase. This has been noticed in most countries (e.g. webinar on social norms). In Mauritania, lack of communities' cohesion, due to different social backgrounds of origin, notably in peri-urban areas (where social groups originate from different rural areas), has been identified as an important factor of CLTS implementation failure. Overall, when communities are composed by several different sub-groups, it has proven to be much more difficult to trigger effectively. The diagram below shows that one of the main reasons for stopping working in a community during the triggering phase is the lack of social cohesion and the lack of interest of communities and leaders – which could be interpreted as a lack of social cohesion.

For that reason, having the entire community on board from the beginning of the process is critical. The evaluation and selection of the community realised in the pre-triggering phase can help identifying "free riders" and make sure the community is "ready" to undertake a change in terms of hygiene and sanitation practices.

Figure 19 – Reasons for stopping working in a community during the triggering phase
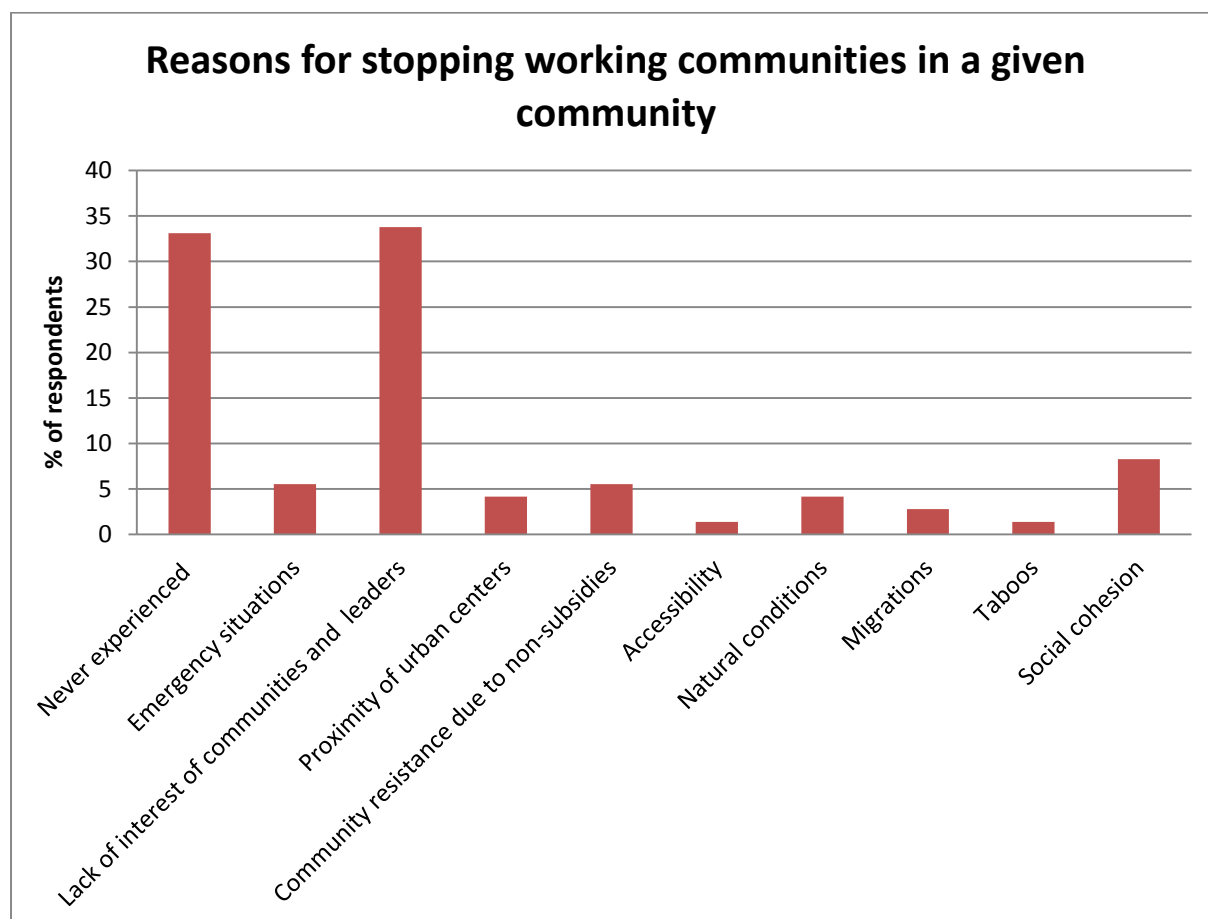
Source: Online survey, question 19

d) Quality of facilitation

In every country, quality of facilitation is instrumental in ensuring success of triggering (this point came clearly from the evaluation conducted two years ago in Western and Central Africa). This involves establishing high quality training for facilitators: with experienced trainers (field experience is as important as the expertise on the CLTS "theory"), long enough to include field activities, tailored to the local conditions, etc. Bad quality facilitation is widely recognised as a predictor of triggering failure.

G.2.3. Effectiveness of the triggering and its limitations

The effectiveness of the triggering process and the capability of CLTS to quickly bring most communities to (or close to) ODF status is widely recognized in every country where CATS is implemented. In India, original CLTS tools have worked irrespective of the caste type, gender and ages and have demonstrated to be fairly universal. In Mozambique and Mauritania, the usual time for the majority of communities to reach ODF status after being triggered is said to be somewhere between 3 weeks and 3 months. Communities that do not achieve ODF status within 3 months often do not reach it at all.

However, even if the triggering process is seen as very efficient by most actors, there are limitations to its overall effectiveness. In Mozambique it has been noticed that a community may be mostly ready for ODF certification, but one or two resistant households keep them from achieving ODF status ending in the community being counted as "not ODF" in the programme's database. This means that the results do not clearly account for the fact that a significant number of households have changed their behaviour, built and are using latrines.

In many countries, while CATS addresses open defecation within and around villages, it does not consider practices in surrounding fields or in family farms, where people spend significant amounts of time during the planting and harvesting seasons.

Overall CLTS is effective in triggering communities and bringing them to ODF status (or very close to it), but is not yet effective in establishing more stabilized social norms around open defecation– as evidenced by levels of slippage back to OD (see section H.3.4).

As observed in every country, post-triggering activities definitely have a strong impact on CATS effectiveness. It is instrumental to ensure a regular follow-up and to ensure reasonable duration of the post-triggering activities (see section H).

G.3. Drivers of change

G.3.1. Disgust and shock are the main drivers

In the triggering phase, drivers of change are consistent among countries and rely mainly on disgust and shock of communities through understanding oral-fecal transmission route of infections and the fact that people are basically "eating each other's feces". This is the main driver of change, regardless of the country. However disgust is generally used at an early stage of the process; the community "energy" released by the original shock is quickly converted into the pride of having taken community action to solve the problem, and this pride is precisely what fuels the process of change after triggering.

G.3.2. Active and interested leaders

The strength of the traditional community leaders (and in some countries such as in Mauritania of religious leaders) in mobilizing, supporting and enforcing action by all members of the community is the second driver of change.

In the case of SLTS, well-motivated and informed Focal Teachers play a significant role in mobilizing action, encouraging and supporting children to adopt the appropriate messages that can be replicated to the wider community. This has been noticed particularly important in Sierra Leone, India, and Nepal.

In Nepal "Children Clubs" are in charge of monitoring the sustainability of the ODF status. They are trained to use a whistle when they see a defaulter.

G.3.3. Integration of CATS with other (non-)WASH initiatives

The integration of CATS into wider WASH or non-WASH initiatives such as health seems to reinforce the sanitation messages through being associated with the wider benefits of improving all elements of WASH. In Mauritania, the integration of CLTS in health and mother/child programs implemented by UNICEF is pushed forward in order to maintain a high level of awareness on sanitation practices and to sustain behavior change.

H. Dimension 4: sustainability

Overarching question:

What are the key factors required at country/community levels to improve the adherence to ODF behaviors?

School latrine decorated by children. Madhya Pradesh, India.

H.1. Evaluation criteria used to measure results

The success of any CATS program is broadly evaluated by the number of ODF certifications awarded (either to communities when CLTS is the predominant component of CATS, or to schools in case it is SLTS). CATS implementation principles only suggests certification

criteria, and as a result these certification criteria vary from one country to another, as well as over time within the same country[55], as lessons are drawn from the field and as criteria are refined to reflect a more 'ambitious' definition of what CATS aims to achieve.

Although variations can be subtle from one country to another, almost all countries surveyed shared three common elements in defining their certification criteria:

- Eradication of open defecation in the community, attained when the community leaders are certain that open defecation has been completely abandoned and that the environment of the community is 100% ODF;

- Existence of latrines (any type offering privacy, a lid on the defecation hole and a roof to protect the slab[56]) in every premises within the community; phrasing differs from one country to another but latrines are usually supposed to be "fully functional and clean";

- A hand washing facility available near the latrine with water, soap or ash and evidence of regular use (not systematically measured but commonly included).

Recently, some countries introduced a second level of certification (called "CLTS+" for instance in the case of Mozambique) which often includes elements related to the sustainability of facilities and/or the adherence to ODF status or other hygiene-related behaviors. For instance in Mozambique, in addition to the previous ODF criteria, the standard of latrines built is evaluated in order to align better to JMP standards/definitions for improved sanitation and to address the issue of latrines frequently collapsing. This second level of certification implies a post-certification follow-up and regular visits to communities which have been certified several months ago.

There are also examples where additional positive behaviors have been adopted. In Sierra Leone many communities (including those visited) adopt a wider approach to a "healthy living environment" involving dish racks, compost fences and clothes lines; these now form part of the ODF certification checklist.

The way the criteria are measured and the moment of the measurement is also variable from one country to another and over time. The current tendency seems to be to delay the certification process (and especially the ceremony) once the community has reached the ODF status to make sure that there is a minimum adherence to the ODF status (for instance in Nigeria where there is no certification unless the ODF status is sustained for 6 months[57]).

From the country visits and the webinar discussions, the key factors affecting the sustainability of CATS outcomes in terms of measurement are:

- The adoption of a clear protocol for measurement[58] that is shared at national level and used not only by UNICEF but also by other implementing agencies;

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[55] The Mauritania case study, for instance, showed that the CLTS/CATS program started without clear and widely shared set of certification criteria at national level – detailed criteria were actually left to the appreciation of certification committees set up at regional (*Wilaya*) level. Almost 1,000 communities had been already certified when a workshop held in April 2013 finally stabilized the certification criteria that are now in use.

[56] Although this aspect is not systematic – see for instance Mali where most latrines are built using traditional bricks (mixture of clay and straw) to ensure privacy – but with no roof.

[57] See Thomas and Bevan, 2013 and presentation by Bisi Agberemi, UNICEF Nigeria, 2012.

[58] For instance see: Thomas A. and Bevan J., 2013, Developing and Monitoring Protocol for the Elimination of Open Defecation in Sub-Saharan Africa, paper prepared for the IRC Symposium 2013, Monitoring Sustainable WASH Service Delivery, Addis Ababa. Includes examples of protocol steps. This paper is especially interesting for the compilation of primary and secondary indicators in 15 countries where CATS is implemented.

- Clear and consistent definitions of ODF status and indicators[59] to measure this status over the lifespan of the program (and during follow-up phase if any);

- The inclusion of indicators related to sustained behavior change and adherence to the ODF status (e.g. existence of formal and informal rules and by-laws prohibiting OD). In addition to consistency in M&E, in order to assess the longitudinal trajectory of change in sustainability, it is important to be able to capture additional improvements or enhancements that are developing (as described above for Mozambique and Sierra Leone).

Measuring the results of CATS outcomes is currently leading to a debate around the very definition of what ODF status is and how it can be measured in the light of the long term adherence to ODF and the demonstrated adoption of a new social norm. However, this step further has not been taken in most countries which still rely on primary and secondary indicators – only partially connected to the social norms dimension of CATS and a future impact study is likely to be required.

H.2. M&E system used to measure CATS results

H.2.1. M&E at global level

Data on the implementation of CATS are drawn from information from country office programmes and data gathered through an internal reporting mechanism (twice a year: in June and December). The WASH section deploys substantial effort to gather this global data in all the concerned countries (currently more than 50)[60]. Three indicators are consistently and regularly monitored at global level:

- Number of countries implementing CATS;

- Number of ODF communities per country;

- Number of people living in ODF communities per country.

In late 2012, the WASH section conducted a rapid survey on the status of CATS in all the countries were WASH activities are currently being implemented. This included useful information regarding the integration of CATS approaches into countries' national policies as well as their clear commitment to achieve a countrywide ODF status, partners involved in CATS implementation at national and ground levels, etc. This survey has been very useful to the Consultant in the framework of the inception phase, especially for selecting countries to be visited. However this survey was not compulsory for Country Offices so does not provide comprehensive data that could be used in the framework of this evaluation.

These data are very useful for providing 'headline' data on CATS. The collection and presentation of global data e.g. on capacity/human resource and finance currently falls within the remit of the GLAAS report and its periodic updates. A specific example of a relevant link to the GLAAS report is that we have found it feasible to evaluate the less tangible aspect of CATS, including elements of the enabling environment where CATS has influenced national policy development. In fact our overall assessment from the country visits is that this aspect is particularly strong across the board, which means that CATS has been influential in the national policy process.

[59] This is for instance clearly identified as a key factor in the following review: Community-Led Total Sanitation in East Asia and Pacific: Progress, Lessons and Directions. Report of Review of Status of Community Led Sanitation implementation in EAST Asia and Pacific, November 2012.

[60] Variability in the quality of data is reflected in the matrix used by the consultant for the country selection.

There is an opportunity to aggregate CATS national data to supplement the existing global picture. However, we are not suggesting that this is a role for UNICEF; rather, that it reinforces the calls for a more joined up international approach to M&E.

Figure 20 shows the responses from the online survey for data reporting. We note that as UNICEF only collects 3 indicators globally, it is possible that the respondents may have interpreted the question in terms of data that is developed nationally but that could contribute in a wider sense to global reporting e.g. though the MICS/DHS in relation to JMP, or to the GLAAS report. That is, they may not have interpreted the question within the narrower confines of what UNICEF itself collects globally.

Figure 20: Data being reported for global monitoring and reporting
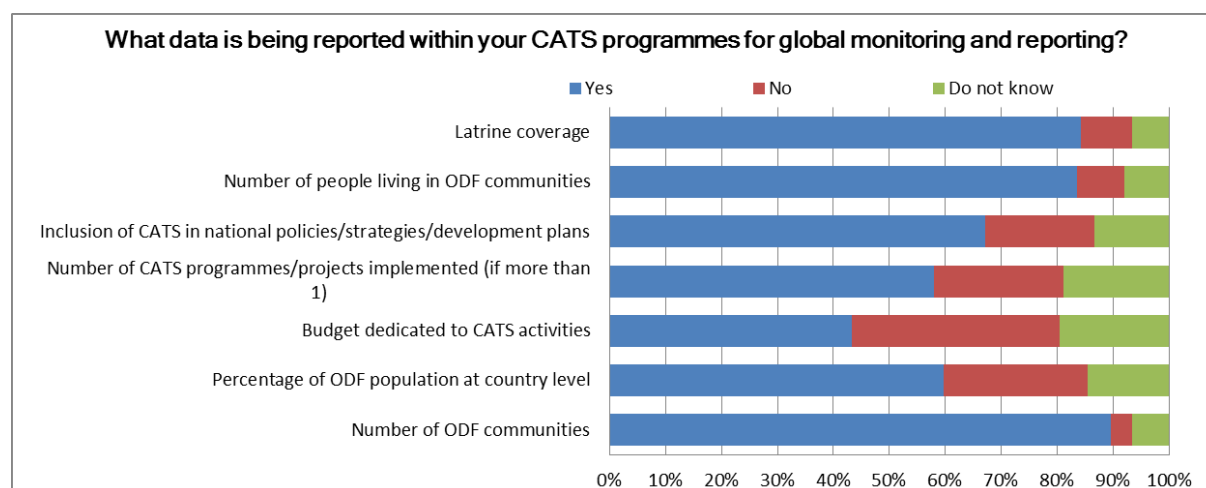
Source: Online survey, question 53

H.2.2. M&E at country and local levels

With regard to the M&E system, the overall policy of UNICEF in all the countries where CATS is being implemented is to rely as much as possible on existing government-led M&E systems, especially in countries such as India where 'pre-CATS' programs aiming at ending open defecation had already developed their own monitoring system.

This has proven to be difficult considering the initial weakness of the sanitation M&E system in many countries, especially in Africa, where sanitation is a recently tackled issue and where M&E systems, when they existed before CATS intervention, only took into consideration latrines constructed under government-led programs and certainly paid no attention to aspects related to open defecation, hygiene-related behaviors or social norms.

However, the interest of putting the M&E system in the hands of the government is obvious: it enhances the ownership of the government and also strongly connects the CATS programs with 'ending open defecation' as a national objective (whether reflected in the national policy or not). In this respect, harmonization of the indicators and the M&E procedures with other programs and other players is an important dimension of UNICEF's contribution to M&E, in order to allow the M&E system to report on progress made at national level in terms of OD – including programs other than CATS. UNICEF has been very supportive towards achieving this harmonization process – see for instance the MoU signed between DOLIDAR, DWSS, FUND BOARD and UNICEF in Nepal.

Whilst the implementation arrangements for monitoring vary considerably, these are carried out within the overall framework of the national M&E systems including through the use of sector working groups. Results of monitoring are used to inform and revise programme-based plans and actions. In some cases specific studies have been commissioned which feed into the overall national system, for example the substantive donor-commissioned study

in Mozambique which give insights into CATS. The variety of approaches is highlighted by the online survey snapshot response [online survey, question 52], which indicated that the management of CATS programs M&E is carried out by different actors as follows: directly by government (25%), UNICEF staff or consultants (25%) and partner NGOs (50%).

M&E systems are structured around data collected at the most local level with usually one (in most of the cases) or two intermediary levels depending on the size and the administrative complexity of the country (district and provincial levels in Mozambique, Wilaya level in Mauritania, etc.) and the institutional arrangements in place (e.g. through NGO partners or government actors). In very few countries M&E is carried out under a third party agreement (Pakistan being the best and most successful example) or with the involvement of a specialized M&E consultant (India to some extent).).

Countries monitor against a range of indicators both at household and community levels. While some are more common across CATS, there is variation in definitions and the scope of indicators e.g. household v. community achievements, ODF claimed and/or ODF certified, inclusion of number of (shared) latrines constructed, standards of latrines, inclusion of hand washing facilities (with/without soap and/or ash), inclusion of other supporting hygiene-related actions.

Overall, monitoring of both outputs and outcomes is a strength in most of the country programmes visited, with clear local (project) level M&E that can be aggregated to a programmatic level. There are also good examples of broader 'enabling' factors being established as KPIs (Mozambique).   Sustainability of the M&E systems is an understandable concern where it depends on external funding, for example in Sierra Leone where a strong system of performance based monitoring has been established via implementing partners using external funding.

The different implementation arrangements give rise to a number of context-specific concerns, particularly with respect to self-reporting and the extent and independence of verification processes. These can be quite subtle: for example in Mozambique, third-party (government-led) evaluations are conducted annually in the Districts as part of the process of awarding ODF status to communities. This has led to concerns around consistency in understanding between NGO-proposed communities and actual achievement of certification standards – but not the quality of the verification process in itself.[61] The key finding here is that it is a sense of coherence, common understanding and acceptability across the range of stakeholders concerning measurement within-country that is important, as the key long term monitoring issue is to identify the trajectory of change in ODF status.

In India, considerable variations were noted where UNICEF supported CATS work has independent reporting, but this is not necessarily the case across the wider state- and national-level programme.

A wider concern is the extent and robustness of systematic monitoring of post-ODF sustainability. Findings from all of the country visits report that the initial declaration of ODF is clearly verified, but that it is early days as far as monitoring sustainability issues are concerned. There is little post-ODF monitoring of, for example, continued adherence to ODF, continued use of associated hygiene facilities and adopted behaviors, extent to which communities / households adopt additional supporting actions / behaviors. We note that, subsequent to implementation, whilst headline data on coverage (by latrine type) and ODF will be picked up by DHS/MICS and reported via the JMP, this does not provide adequate granularity to develop corrective change at programme level.

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[61] There is significant, and growing, concern voiced as a result of the national evaluation / certification visits. This has identified an apparent mismatch between the number of communities that NGOs propose for ODF certification and the number that gain certification during the evaluation visits. These communities are not only within UNICEF's programme, but also within PRONASAR.

Capturing diffusion is also an important aspect of M&E; there is evidence (from the survey and webinar) that spontaneous diffusion of CATS occurs in a significant number of cases. Capturing more information about this (reasons, mechanisms and results) is not clearly identified or easily articulated at present.

The country visits show that there is an overall level of concern about the sustainability of the M&E systems themselves (e.g. as highlighted above in Sierra Leone and raised by ESARO in the webinar), particularly given the challenges of capturing post-ODF data. There are important issues concerning exactly what to measure, and how. Whilst these can be resolved through inter-country exchange of experience and specific capacity development to partners, we think it important to make the link with in-country capacity. This becomes part of a much 'bigger picture' concerning the lack of resource capacity in the 'missing middle' of local government where ultimate ownership of performance will need to lie. This is likely to be challenging even in India, with its long history of functioning local government structures. This will become increasingly important given the developments in a number of countries of moving beyond community/village-level towards declaring ODF-districts[62]

In relation to the measuring the sustainability of CATS, the role of independent periodic evaluation (as distinct from monitoring) becomes increasingly important. In India, we found particularly good example of systematic evaluation of CATS pilot and demonstration work, led jointly by UNICEF and their counterparts at State and District levels. These emphasize sharing the examples of success and looking with stakeholders at how the benefits of social mobilization achieved through CATS can be applied to lever wider change in implementation of programmes in other sectors.

In terms of other M&E issues raised, a majority of the respondents to the online survey as well as the participants in the "sustainability" webinar cited reliability of data and non-systematic monitoring as the main problems.

Figure 21: Reliability of CATS monitoring
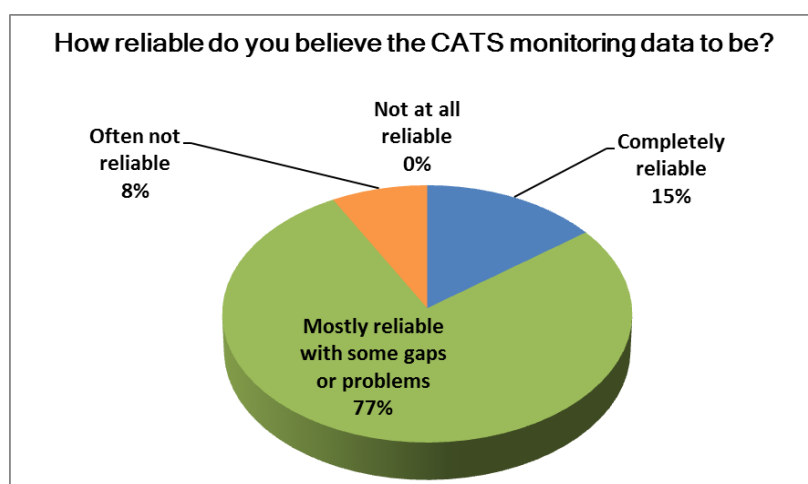
Source: Online survey, question 54

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[62] Earlier independent evaluation in Nepal also highlighted this as a serious problem in terms of post-ODF monitoring and follow-up: see *Cotton A P, Luff R, Upadhya S, Adhikari B (2012) WaterAid Nepal Country Programme Evaluation*, WaterAid London UK

Figure 22: Reliability of data being reported under M&E systems
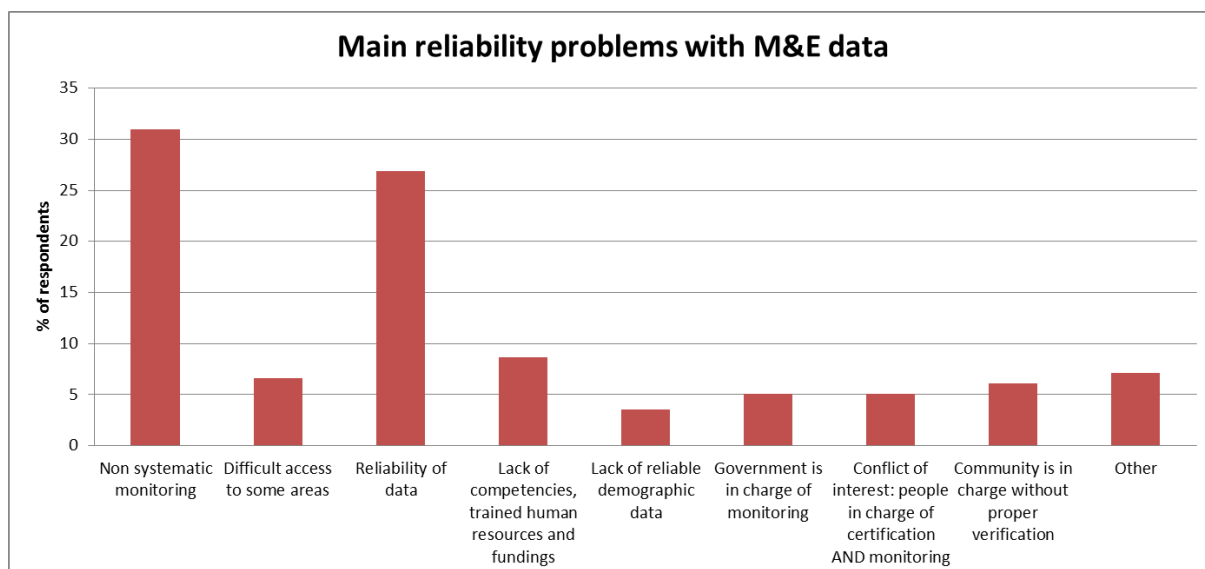
Source: Online survey, question 54

H.2.3. Supporting M&E for CATS

Monitoring and evaluation of CATS programmes remains 'work in progress' for UNICEF. The premise of continuing support for and strengthening of national monitoring structures is well-established and contributes to national capacity development. Given that the data UNICEF reports at the global level has to be aggregated from national data, the three indicators currently used are appropriate and do-able and should be continued with.

At the national level:

- Internal coherence and consistency nationally around definitions is important; lessons from periodic evaluations help to identify where problems arise and hence to support a common understanding amongst implementing partners who undertake monitoring.

- Consequently, UNICEF has an important role to play in supporting periodic evaluation of ODF status as a means of strengthening monitoring systems.

- Post-ODF sustainability is not adequately captured and attention needs to be given to how this can be improved in order to identify both the extent and causes of slippage.

- Sustainability of M&E systems themselves is a particular concern in those countries that rely on external support; in the medium term this requires increased capacity within local government. However, it is also important to realize that this is an issue that is much wider than the WASH sector and there are attendant risks of one sector driving ahead without considering the wider devolved responsibilities of local government within other development sectors.

H.3. Evidence of adherence to ODF and lasting behavior change (or drop out)

H.3.1. Underlying factors affecting sustainability

The sustainability webinar offered very helpful insights into a number of underlying factors around policy, institutional arrangements, finance and capacity. In summary:

- High-level buy in, with clarity and validation of the outcomes of CATS (definitions, indicators, etc.) is a foundation for sustainability. The issue of coherence and common understanding of these definitions (in a national-level sense) within the practice of monitoring has been discussed above;

- Engagement by and allocation of roles through the levels of government structures (national, sub-national, community-level leadership structures) is significant for both implementation and future monitoring of results;

- Financial implications for achieving longer-term sustainability of infrastructure and behaviours (materials, (re-)mobilization, follow-up support and monitoring, etc.) need to be more widely understood;

- Findings ways to facilitate access to affordable solutions that enable households and communities to stay on / move up the sanitation ladder need to be considered as part of the programme design and be appropriate to each context;

- Where CATS is implemented in fragile/vulnerable communities (as emergency response or in conflict-affected societies, for example Pakistan and Afghanistan, variations in the approach will need to be adopted e.g. targeted subsidies, accounting for the fragility of social norms.

The evaluation distinguished between shorter term outcomes which are a very much at the forefront of UNICEF programming and the requirements for longer term sustained impacts; there is a 'spectrum of sustainability':

Short term outcomes	------------------>	Longer term impacts
Reinforcing activities to sustain ODF/other behaviors	------------------> Increasing sustainability	Many elements including institutionalized changes to enabling environment

CATS programmes have had a strong influence on sanitation policy and strategy development across the board which is an important contribution to the overall enabling environment. In Sierra Leone, the PRSP II "Agenda for Prosperity" includes alongside the prioritization of WASH in the Government's development agenda, a commitment to increase the budget to the WASH sector to reach 1% of GDP by 2017, from a current level of 0.35%. The country visit concluded that the results seen from the implementation of CATS has had a significant role on the level of commitment to this allocation. Also in Nepal, the government has fully bought into the concept of ODF through CATS.

There are also "chicken and egg" situations that can arise: for example in Mozambique the major challenge that remains is for the government agency DNA to understand and address what it will cost to achieve sustainable sanitation services, using CATS. DNA wants more evidence on this before fully adopting CATS within the national guidelines.

Evaluating to what extent communities and households adhere to ODF status and long lasting hygiene behaviors presents a number of methodological challenges that the evaluators tried to overcome without being completely able to clearly establish that adherence is effective in the ODF communities and what is the extent of this adherence.

The key points summarized from the sustainability webinar are:

- The need to reinforce the earlier messages: preventing a regression back to OD requires adequate attention to the capacity and resource needs of

  o   Post-ODF monitoring,

  o   Follow-up support, and

      o   Development of affordable, durable options for maintaining latrines and other infrastructure (supported by access to finance and supply chains)

- The whole process needs to be given adequate time and the communities given the appropriate help as they face challenges, before a change in the social norm and a commitment to this is likely to become embedded.

Adherence to ODF emerged as an important concern during the country visit workshops with UNICEF staff and implementing partners. From the country visits, however, whilst there is a sense that level of early results in achieving ODF status is very impressive, overall the slippage in ODF status is not known.

Data are available for Mozambique, through the Sustainability Check report (2012). This identifies that overall sanitation sustainability within the programme was 69% in 2012, compared with 80% in 2011. Defecation-free communities reduced from 96% in 2011 to 84% in 2012. Although this is still considered to be "satisfactory", it indicates a loss of impact from the CATS strategy and approach with time. Indicators of safe sanitation at programme level have declined also - primarily affected by the change in emphasis and level of acceptable slab construction (from improved to traditional-improved) - which results in only 48% of slabs being considered durable and easy to clean. Other countries identified slippage as an issue but without substantive monitoring data to back this up.

As the focus of CATS is on behavior change – resulting in the adoption of a new social norm – there is currently a gap between the monitoring in place in most countries (focused more on outputs and relying on proxy indicators around hygiene behaviors such as hand washing[63]) and the effective measurement of social norms evolution

Post-certification follow-up and application of reinforcement measures are not systematically done in all the countries where CATS programs are being implemented; many reinforcement activities are documented (see below) but in the current M&E systems it is not possible to relate the intensity of this reinforcement (or the type of activities undertaken) with the adherence to ODF status in a given community. Existence and actual enforcement of community bylaws, or adoption of latrines by newcomers or households moving to a new house within the same community could theoretically be a good indicator of adherence. The use of MoRES, for example in Zimbabwe, offers good examples of an approach to measuring changes in terms of societal expectations. **As a result, adherence to ODF status is currently not clearly measured and reported back, which is a concern in terms of reaching a solid conclusion regarding the sustainability of the approach.**

The experience of programme implementers is that erosion of the ODF status fits broadly into two categories:

- A rapid decline in the consistent and continued use of latrines and other hygiene-related facilities by a small number of households.

- Later slippage that is usually related to communities which had shown resistance to first triggering attempts and/or with weak natural leaders.

H.3.2. Evidence of drop-out and equity aspect

Using a more qualitative approach (see figure below), we can assume, from field observations, recent evaluations and experience of implementers that there must be a "natural erosion" of the ODF status at the level of a community (the status being measured, for instance, by the % of households having latrines and consistently using them). This

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[63] There are a few exceptions of M&E systems using indicators that could be more directly linked to adherence to ODF status: for instance in Vietnam, UNICEF monitors the number of households stopping OD, on top of indicators about number of households constructing latrines or equipped with hand washing facilities (source: Webinar discussion on sustainability).

natural erosion that is not due to a general lack of adherence to the new social norm created by CATS, but other circumstances such as newcomers in the community or a deterioration of the first latrines constructed after the triggering phase. The "natural" erosion can be considered as acceptable if the "effort" that is necessary to maintain the ODF status over time can originate from the community itself – or with a very light external support.

The question is not whether there will be defaulters or not – but (i) how can these defaulters be dealt with within the community and (ii) what is the critical percentage of defaulters above which the social norm is put at stake – and the rapidity of the decline of the ODF status (as illustrated in the following figure. It was not possible to identify this critical "acceptable" percentage of defaulters within the context of this evaluation. However interviews (especially during field visits) showed that defaulters always exist. There are a number of examples of reinforcement practice and behaviors which are presented in section I3.4

Figure 23: Adherence to ODF status over time
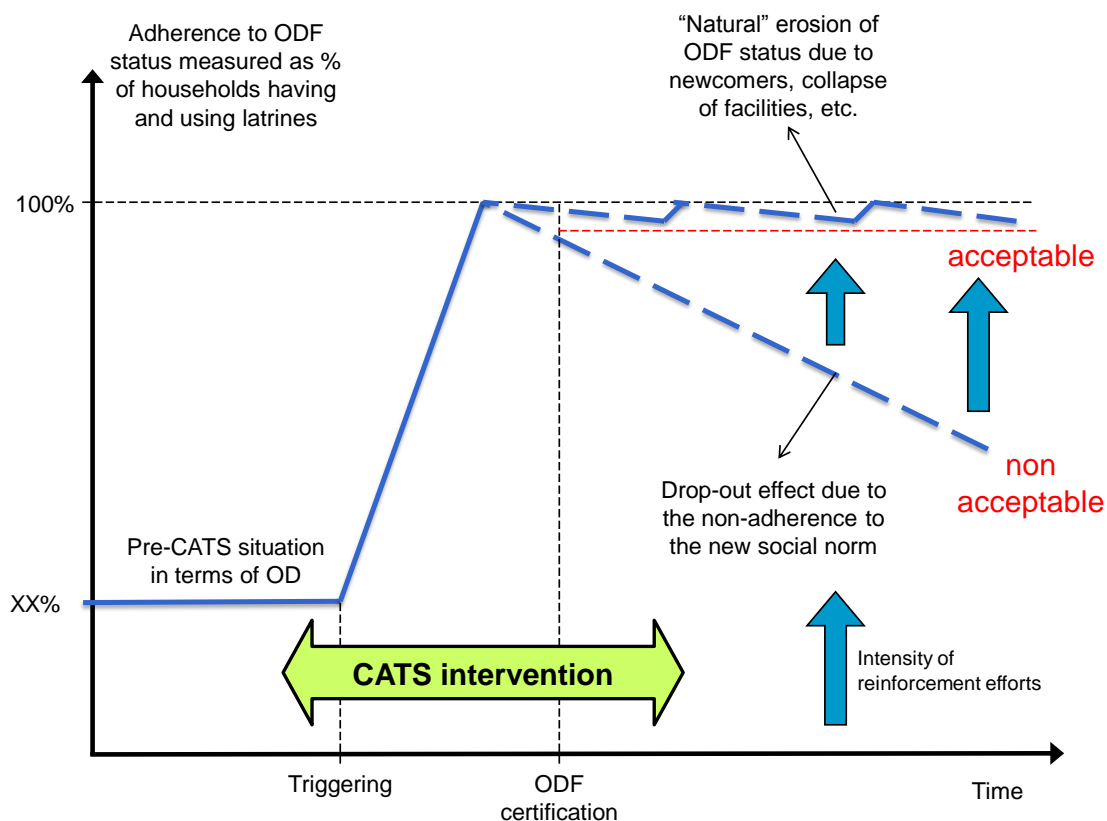
The absence of a systematic monitoring of ODF status after certification does not allow measurement of the extent of this regression, other than in the specific cases where third party studies have undertaken this, as in Mozambique. According to the CATS implementers themselves, from their field knowledge only, regression affects less than 25% of the communities – and this is an opinion shared by a large majority of the respondents considering the % of respondents (37%) who declared not having any opinion on this issue.

Figure 24: Regression to OD according to CATS implementers
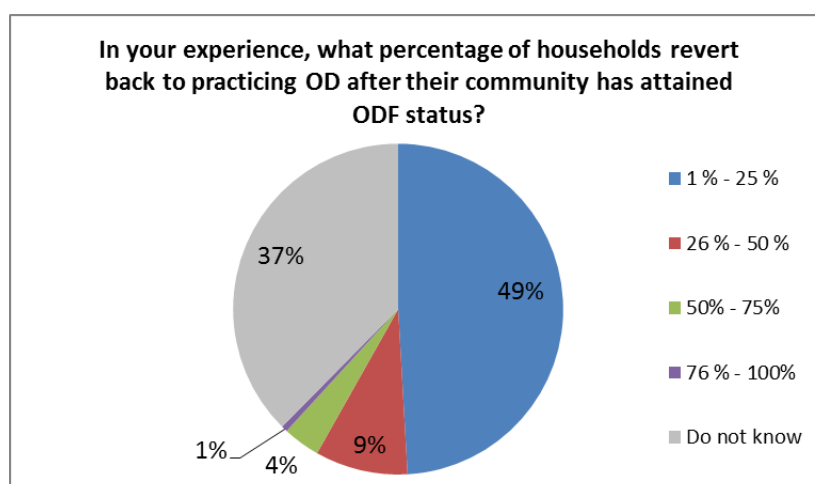
Source: Online survey, question 48

If the extent of the dropout phenomenon is not easy to assess, reasons for reverting back to OD after a CATS intervention are well known to CATS practitioners (see figure below) and the emerging pattern is very revealing: according to a majority of practitioners, lack of follow up after triggering and quality of constructed latrines are the two main reasons that explain the regression of the communities to open defecation. Lack of monitoring is mentioned as a reason, but definitely not the key reason to explain regression.

Overall, the objective of 100% ODF is feasible at a specific moment in time (at certification time or near it) but is not currently sustained. The capacity of the community to deal with defaulters so their numbers can be held at an acceptable level, although we have no evidence for what would be an appropriate threshold for change is a critical requirement for long-lasting adherence to the ODF status. This capacity is an indicator that the new social norm is being sustained.

Figure 25: Regression for reverting back to open defecation
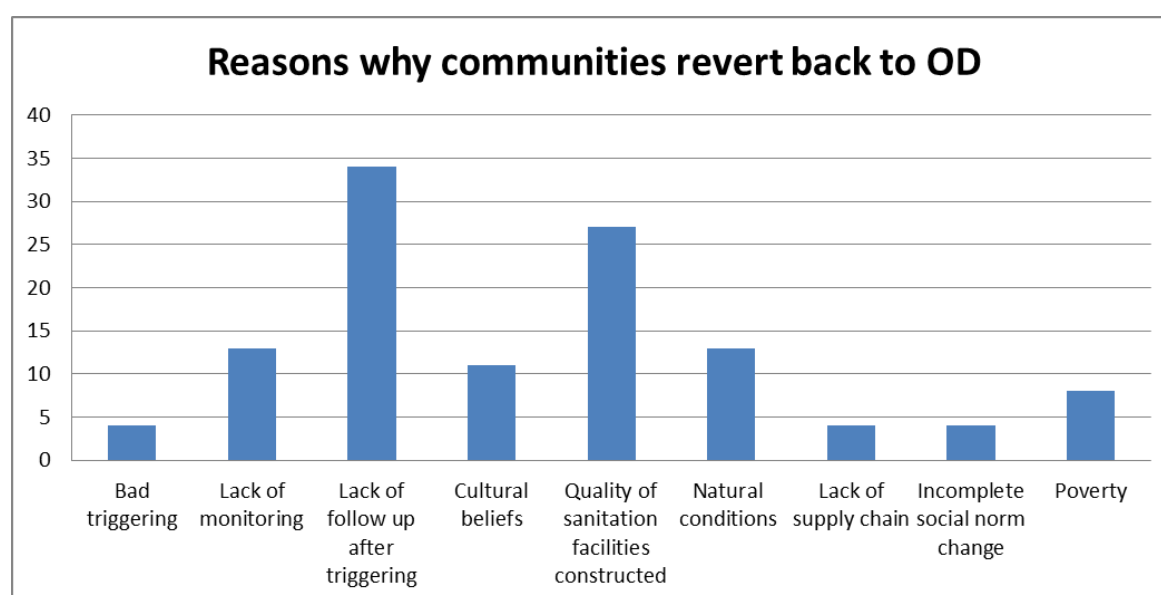
Source: Online survey, question 49

H.3.3. Reinforcement for continued adherence and going up the ladder (and remedial actions)

A number of key issues were identified through the sustainability webinar which highlight the longer term implications of adopting the CATS approach in terms of reinforcement practices.

- Experience and evidence is increasingly showing that achievement of ODF status through CATS brings programmes to the end of one phase (ODF certification) and the start of the next phase (post-ODF achievement of sustainable sanitation). Achieving ODF should not be seen as the end point. Only with sufficient attention given to the post-certification phase will the benefits gained through the first phase be secured and sustained in the longer-term.

- As CATS scales-up in many countries, programs need to integrate the post-certification phase into their plans and strategies. This needs particular attention giving to:
  - o Quality of facilitation
  - o Resource needs for post-ODF follow-up and monitoring (financial, capacity, agreements, institutional roles and commitments, etc.)
  - o Adequate capacity through the national-sub-national-local levels for follow-up support and monitoring
  - o Technical support (adapted to specific contexts and vulnerabilities)
  - o Enabling the development of affordable solutions that will gradually increase the durability of infrastructure (market-based approaches).

The adoption of additional positive behaviors was observed in Sierra Leone; many communities (including those visited) adopt a wider approach to a "healthy living environment" involving use of dish racks, compost fences and clothes lines; these now form part of the ODF certification checklist. It is understood that this builds on traditional practices and thus reinforces the importance of local and national coherence in indicators and appropriate criteria for determining success.

The webinar and country visits consistently raised the issue of difficulties in moving up the sanitation ladder, citing a whole range of problems including technical, financial and local capacity support materials. The construction and use of improved latrines can be viewed as a reinforcing practice, in which case it does require some attention in terms of helping to retain ODF behavior and reducing slippage, as considered below.

In Mozambique, Implementing Partners report that without regular (sometimes weekly) support visits following ODF status, communities quickly revert to past practices - although this is often in relation to hand washing practices rather than OD. Many NGOs find PHAST an appropriate tool to encourage on-going hygiene behaviours. Community meetings and one-to-one visits (often involving the local leader and the NGO) are adopted to address "resistant" families and where behaviours are not being adhered to. This appears to be a consistently recognized and applied need, but is very resource-intensive.

Nepal has a clearly defined post-ODF phase. Guidelines are being drafted at district level and will be compiled at regional and national level but it is unclear to what extent this will focus on the prevailing "coverage" aspect of the number of households having toilets.

All reinforcement activities (to ensure adherence to ODF status) are not systematically carried out in CATS programs; the respondents to the online survey reported that periodic visits of health facilitators / extension workers take place in 85% of the cases (see below).

Figure 26: Typical reinforcement measures taken in CATS programs
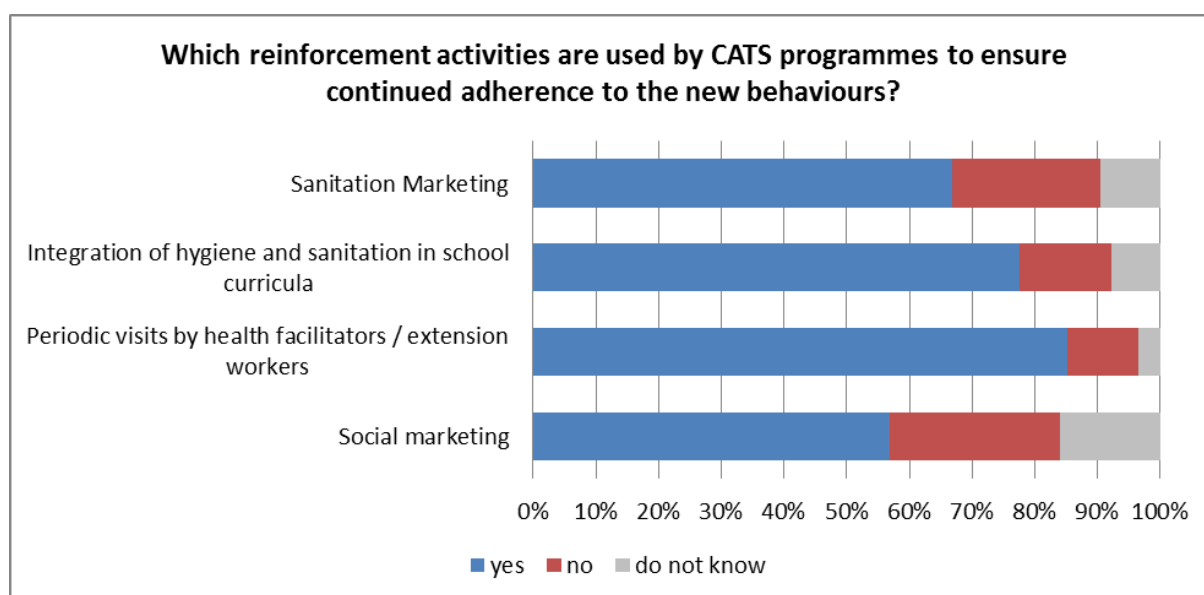
Source: Online survey, question 41

As discussed above in this report (see section F.1.6) the development of SanMark activities in the framework of (or in parallel with) CATS programs is envisaged but not effective yet in all the countries – and in most cases SanMark activities started too recently to lead to any conclusion regarding their potential effects on the adoption of improved sanitation facilities by the households.

This evaluation shows very little evidence that households are going up the "sanitation ladder" and progressively adopt more sophisticated sanitation facilities after the certification process. As CATS programs are not prescriptive in terms of technologies, the facilities constructed by the households reflect their investment capacity at the time of the triggering. In Mozambique, attention given by UNICEF towards CLTS+ / ODF+ (in the form of promoting improved facilities, with more durable latrines and a hand washing facility) has been introduced to address the frequent slippage from ODF status when basic latrines eventually collapse and the community are tired of rebuilding them. Interestingly, indicators of safe sanitation at programme level have declined - primarily affected by the change in emphasis and level of acceptable slab construction (from improved to traditional-improved) – which results in only 48% of slabs being considered durable and easy to clean.

The effect of CATS programs is therefore to shorten the process of adopting sanitation at the household level – classically described as a long, multi-step and complex process taking the household from preference to intention and then to choice (see below).

The process is shortened for at least two reasons: because the individual motivation and intention are replaced by collective or community pressure (leaving no choice to the households who would have "normally" stopped the process and fall into the "no preference", "no intention" or "delay" categories); and because CATS remove the permanent or temporary constraints to acquiring sanitation by allowing the households to select the lowest (and therefore cheapest) technological option. As a result, it is likely that once the community expectation becomes less intense (for instance a few months after certification), the households return to a similar scheme in terms of deciding to invest in sanitation – and even if CATS might have permanently removed the two first determinants in the process described below (which it will have if it has succeeded in creating a new social norm) , the decision of an household to invest into new sanitation facilities (or into rebuilding existing sanitation facilities) remains a complex process constrained by a number of issues.

The sustainability webinar identified the following issues:

- Durability of latrines: collapse due to loose soils, storms, rains notably after the rainy season (Nigeria, Vietnam, ESARO, Burundi, Togo)

- Cost of more durable latrine materials / structures (Vietnam)

- Poverty affects the priority people give to acquiring a durable latrine (Malawi)

- Lack of suitable latrine options (Nigeria)

- Supply chains: break down in remote rural areas (Malawi)

- Vulnerability of societies (Afghanistan, Pakistan)

Figure 27: The determinants of sanitation adoption
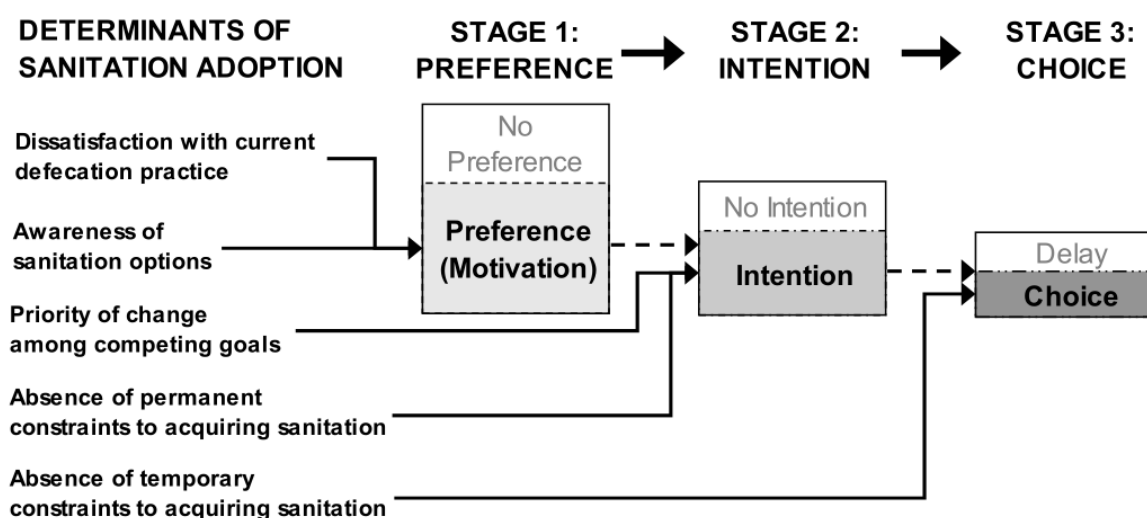
Source: Scott and Jenkins, 2006

According to CATS implementers (and also key informants), the main challenge that CATS is currently facing in terms of sustainability is its exclusive focus on the "bottom" part of the sanitation ladder. The certification can be seen as the beginning of the process that will take the households to sustainable access to sanitation – but at the moment most CATS programs are focusing on bringing large number of communities out of open defecation, and do not have enough resources to work on the reinforcement activities. In the currently prevailing sector conception of the "sanitation ladder" (see figure below), CLTS and sanitation marketing are traditionally seen as two consecutive steps. Current thinking around CATS has the potential of going beyond this conception by truly integrating CLTS and SanMark (and not restricting SanMark to a "post CLTS" process).

Figure 28: The sanitation ladder – the currently prevailing conceptual model in the sector
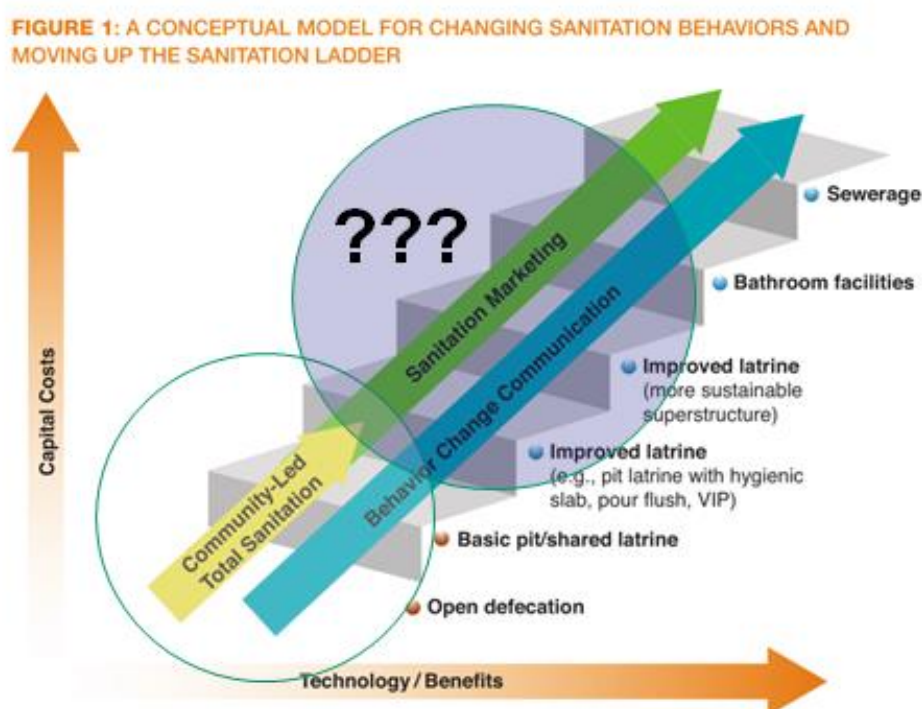
Adapted from Jacqueline Devine, WSP, 2010

H.3.4. Enhancing the sustainability of CATS outcomes

The sustainability webinar produced some very helpful pointers for future discussions around the whole sustainability issue, which are largely supported by the findings from the country visits. In summary:

- CATS is still relatively new (less than 5 years old) in many country programmes. The initial focus has been on achieving behaviour change (in place of achieving the construction of latrine).

- Enhancing CATS to incorporate a sanitation marketing phase is new, with results only now emerging. For most countries, developing sanitation marketing needs to move beyond the more traditional actions of training masons and entrepreneurs, towards reinforcing the supply side of sanitation. This requires a more comprehensive approach to researching the market demand (underway in a number of countries), viability of supply chains, mechanisms and motivations for private sector engagement.

- Consideration can also be given to the appropriate roles that other non-WASH sector actors and corporates can play (such as in promotion campaigns and uses of ICT).

- The development of supply chains must not jeopardise the wide-spread and extensive need for options to be available that are affordable and appropriate to the vast majority of rural households.

- With achievement of ODF status (and eventually national targets for access to improved sanitation) being increasingly adopted as covering larger geographical areas (e.g. LGA-wide in Nigeria), this may enhance the opportunities and potential for building markets and livelihood potential for private providers.

I. Recommendations

I.1. Continuing things that are working well

CATS has proven to be a successful approach in addressing some of the sanitation sector's bottlenecks and blockages. First recommendation from this evaluation is therefore to continue doing things that are working well. This is a sampling of those noted in the report:

- The implementation of CATS through government channel whenever it is feasible;
- The strong engagement at policy level to build a sound enabling environment;
- The integration of the social norms concepts in CATS design and implementation;
- The use of non-monetary, pride-based community awards as positive motivation;
- The integration of CATS M&E system into the sector overall M&E framework.

I.2. Areas for potential improvement of CATS

I.2.1. Recommendation 1

Provide across-the-board capacity building for UNICEF programme staff that can be effectively cascaded to the level of Implementing Partners. This needs to de-mystify social norms concepts and develop new indicators linked to them.

I.2.2. Recommendation 2

Address currently missing/insufficient components of CATS sustainability:

a. Clarify and emphasize the overarching intentions, goal and purpose of CATS to bring out the linkages between ODF status and sustainability considerations. The appropriateness and durability of infrastructure is a key issue; behavior change considerations need to be in balance with supply mechanisms in order to achieve the desired change to social norms. These supply mechanisms form key aspects of the enabling environment, as the new social norm becomes reinforced and stabilized/normalized.

b. Make post-ODF considerations an explicit component of CATS planning from the outset, including budget allocations, financing and overall timeframe; this is to reflect the finding that sustainability considerations and needs are an integral aspect of social norms in respect of maintaining ODF status.

I.2.3. Recommendation 3

Develop the current early ideas on further development of CATS ("CATS+" or "ODF+") with closer integration of sanitation marketing and social policy dimensions. This could take the form of working at national level on appropriate standards for latrines or to ensure that supporting information is available for low-affordability households living in difficult physical conditions. It seems also important to maintain the overall coherence of CATS by integrating sanitation marketing activities – and not only by running those activities in parallel.

I.2.4. Recommendation 4

With regard to M&E aspects, main recommendations of this evaluation are:

a. Develop current M&E systems to capture (and demonstrate) sustainability. The development of post-certification follow-up (which is very variable from one program and from one country to another) will have to be taken into account in terms of program design, capacity building of implementing partners and available financial resources.

b. Review the results, findings and subsequent actions from the application of the Sustainability Check tool with the aim of generic application to CATS programmes. Investigate how social norms indicators fit with the work-in-progress on the application of this Sustainability Check tool. Investigate longer term funding potential for the increased level of M&E required for sustainability monitoring.

I.2.5. Recommendation 5

Subsequent to addressing sustainability concerns, design and commission an impact study (in say two or three years' time) to research the relationships between social norm adoption and the level of post-ODF support in different areas (and the relative contribution of each area) that is required in order to stabilize/normalize the social norm adoption. Currently ongoing CLTS impact studies could provide valuable insights in terms of design and potential methodological biases for this future impact evaluation.

I.2.6. Recommendation 6

In more than 6 years of CATS implementation, a lot of work has been done by UNICEF's teams, especially at national and local levels, to adapt existing tools and develop innovative ways of dealing with implementation constraints. Despite all the efforts deployed at central level, there is still a lot to be done to document and highlight best practices, to share local innovations and tools and to disseminate them at global level. Developing this global CATS learning initiative would at the same time meet the demand from the UNICEF country offices and be a good way to continue the promotion of CATS worldwide.

J. Annexes

J.1. Documents produced by the consultant

Prior to this final report the consultant produced the following documents:

- Literature review
- Inception report
- Country visit protocol
- Country visit report – India (see Annex J6)
- Country visit report – Mauritania (see Annex J6)
- Country visit report – Mozambique (see Annex J6)
- Country visit report – Nepal (see Annex J6)
- Country visit report – Sierra Leone (see Annex J6)
- Analysis of online survey
- Analysis of webinar on sustainability
- Analysis of webinar on social norms

J.2. Key informants (semi-structured interviews)

Semi-structured interviews have been conducted with 10 key informants:

- Clarissa Brocklehurst (independent consultant)
- Cristina Bicchieri (Professor, University of Pennsylvania)
- Sandy Cairncross (London School of Hygiene and Tropical Medicine)
- Robert Chambers (Institute for Development Studies)
- Barbara Evans (Senior Lecturer, University of Leeds)
- Kamal Kar (independent consultant)
- Eduardo Perez (Lead Sanitation Specialist, Water and Sanitation Program)
- Andy Robinson (Independent Consultant)
- Sharon Roose (Sanitation Specialist, Plan Netherlands)
- Peter van Maanen (independent consultant)

J.3. Overview of institutional arrangements in the five countries surveyed

	Institutional arrangements at the central level and nature of UNICEF support	Partnerships with regional and local authorities	Partnerships with other implementing partners at the local level	Partnerships with other key actors
Mauritania	CLTS implementation is ensured by the National Directorate of Sanitation at the central level and the Regional Directorates for Hygiene and Sanitation at the regional level. This institutional arrangement reinforces CLTS ownership at all levels and is one of the key strengths of the approach despite the absence of a specific legal framework and formal partnership with UNICEF. This institutional setup encounters a number of problems relating to its functionality, and effective participation in decision-making.	At the regional level, Regional Monitoring Committees operating under the authority of local authorities monitor CLTS implementation at field level. These committees are composed by representatives of various decentralized state services (education, health, etc.), representatives of local radios, and religious organisations. Despite a lack of resources, their role in CLTS ownership and roll out is instrumental.	UNICEF does not implement CLTS directly through its own staff but trough coordinators (one by Wilaya), supervisors and facilitators who are working under the leadership of the Regional Directorates of Hygiene and Sanitation. Local NGOs may only be involved by providing facilitators.	Involvement of actors coming from other sectors such as education, local radios, religious leaders and organisations, and health has been instrumental in ensuring CLTS implementation in Mauritania. Religious leaders have a great role to play in terms of community sensitisation and buy in.
Mozambique	Responsibility for sanitation sits within the Department for Water and Sanitation (DAS) of the National Water Directorate (DNA), within the Ministry of Public Works and Housing (MOPH). UNICEF maintains a good level of institutional relations with the DNA at the national level (and at Provincial level through the DPOPH).	Although the field collaboration between implementing partners and local government agents is enabling good institutional engagement at this level (government Localities and Districts), there is a reduced presence of UNICEF staff at field and District level.	Implementing partners (IPs) have been selected by UNICEF to roll-out CLTS. They are local or national NGOs or firms specialized in community mobilization who signs a Programme Cooperation Arrangement (PCA) by which they agree with UNICEF on the way to implement the programme. This type of partnership approach enables significant presence at field level without UNICEF having to source too many of their own staff, as well as strengthening the extent of local capacity.	

	Institutional arrangements at the central level and nature of UNICEF support	Partnerships with regional and local authorities	Partnerships with other implementing partners at the local level	Partnerships with other key actors
Sierra Leone	Responsibility for sanitation sits within the Environmental Health and Sanitation Division of the MoHS. There is consensus among UNICEF's national-level partners that the creation of a Sanitation Directorate within MoHS will help to raise the political profile of sanitation within the Ministry and GoSL at large, such that the capacity and resource requirements can be built beyond the life of donor-funded programmes. The strong partnership between UNICEF and MoHS will need to be continued as this new arrangement becomes established.	Engagement of District-level government partners has been strong, with clearly defined roles and responsibilities identified through the District Health Management Teams (DHMTs – responsible for planning, organizing and monitoring health provision), as well as – to a lesser extent – District Councils and the Chiefdom structures.	UNICEF does not implement CLTS directly through its own staff, but through Programme Cooperation Agreements with the 43 local NGOs. This is a good way to build the national capacity and keep the implementation cost at reasonable level, while limiting the presence of UNICEF at field level. UNICEF has also established a network of 8 Monitoring Partners (local NGOs appointed for the sole purpose of monitoring the quality of work of the IPs). This arrangement supports both the attainment of programme outcomes, as well as the quality of the implementation process.	
India	CATS is operating under an institutional arrangement which is in adherence to the Governance structure in the country (Central, Federal State, District plus a three tier Panchayat Raj Institutional (Local Self Governments). UNICEF plays a critical role in building the capacity of National and District Governments.	Partnerships and modalities of partnerships and UNICEF support varies from states to states in India. In Madhya Pradesh, UNICEF has helped the local authorities to develop a Clean Village School Award scheme, as well as the guidelines for staff engagement and training. In Rajasthan, a tripartite arrangement (district' administration, village and non-governmental organizations) helped addressing the issue of community mobilization and ensuring supply chain.		The sanitation program also calls for engagement of other stakeholders like the non-governmental organizations, village level institutions, private agencies, civil society organizations, other governmental departments such as health, education, and women and child development.

	Institutional arrangements at the central level and nature of UNICEF support	Partnerships with regional and local authorities	Partnerships with other implementing partners at the local level	Partnerships with other key actors
Nepal	Department of Water Supply and Sewerage under the Ministry of Urban Development oversees the country's sanitation-based operations. Within the Department, National WASH Coordination Committee has been set up which coordinates relevant ministries, and UN agencies including UNICEF. UNICEF works within the framework of government and strengthens the role of such Coordination Committees at national, district and village level. UNICEF supports government notably through the development of policies, standards, and guidelines.	The National Committee is extended to the district level as District WASH Coordination Committee and to the village level as Village WASH Coordination Committee. These mechanisms enhance cooperation among political leaders, education office, local administration, local NGOs and forest users groups		Private sectors' role grew critical in making physical infrastructure available for toilet installations, overcoming financial challenges at the local level, and in distribution system by making materials available easily and efficiently.

J.4. Analysis of methodological limitations

To capture the diversity of this evaluation and to explore both its qualitative and quantitative dimensions, the evaluation team has deployed a set of complementary tools. This section analyzes the limitations encountered in the deployment of this methodology.

J.4.1. Literature review

Around 180 documents covering 39 countries out of the 58 countries where CATS programmes are being implemented were received and analyzed, varying in number, categories of document (academic documentation, technical guidelines, national evaluations, multiple countries evaluations, fact sheets, national policies, etc.), source (internal or external to UNICEF) and coverage of relevant issues for each country. Documentation has been mainly collected by UNICEF Headquarter with support from UNICEF Country Offices.

Due to the large number of documents, the evaluation team focused on two different sets of documents: the academic literature and the documentation produced by UNICEF. Consequently, the literature review may have missed lessons learned and findings from other organizations implementing CATS programmes. However this limitation has been addressed by the evaluation team during field visits where other stakeholders implementing CATS programmes have been interviewed and specific documentation was collected and analyzed as well as through the semi structured interviews and the online survey.

Literature review was completed during the field visits in the selected countries. However the information available was variable depending on the country reflecting different level of CATS maturity and underlining the challenges of knowledge management at the country level. In addition, in some countries most of the documentation available was in draft form. In such cases, the evaluation team attempted to mitigate this limitation by exchanging with UNICEF CO and implementing partners to check the accuracy of information.

J.4.2. Case studies

a) Country selection

The selection of countries for the case studies was done through a matrix based on information provided by UNICEF. The data used to populate the matrix were data provided by UNICEF CO to UNICEF HQ; in some cases data were insufficient or incomplete which might have affected the final score. However this limitation was taken into account throughout the selection process by the evaluation team who has systematically completed the missing information when possible by using other reliable sources of information.

Six main criteria against which the consultant team has scored each country have been established (maturity of CATS; country ownership; quality of data available; recent evaluations; scale of CATS implementation; familiarity of the team with the country; and a more practical criterion, namely security). The criteria have been weighted according to their importance and relevance. The weighting proposed by the evaluation team as well as the criteria, although as objective as possible, may be subject to discussion.

After completion of the matrix, a final score was automatically attributed to each possible country. Considering that all different UNICEF implementation regions had to be represented in the final sample, a pre-selection was proposed to UNICEF. Final selection has been made by negotiation and exchanges between the evaluation team and UNICEF HQ. Capacity and willingness of UNICEF CO to support the evaluation during country visits have also been key factors while making the final selection.

Lastly, it was decided to add one African francophone country selected from Chad, Niger, Mauritania, Togo or Madagascar. Mauritania has been proposed by UNICEF HQ. The

consultant is confident that the selection process preserved the representativeness of the countries finally selected for the case studies.

b) Case study methodology

The case study methodology was based on an extended visit to a relatively small sample of sites where CATS programmes are being implemented (the target was to visit between 4 and 5 communities per country), which provided opportunities for collecting and validating qualitative data. However, it provided no basis for statistical inference. Selection criteria for the field visit selection were intended to assure coverage of different contexts, but were not intended to create a properly representative or stratified sample. It is particularly true in the case of India which is a very large country. Selection criteria were namely:

- CATS "longevity" in order to gather evidence of long-term outcomes;

- Sites that were proven to be challenging in terms of CATS implementation because of geological / environmental issues, because of the presence of strong under-privileged groups, because of cultural specificities, etc.;

- Possibility for the consultant to capture various modalities of CATS implementation;

- More opportunistic considerations regarding logistical issues.

In all countries the UNICEF CO played some part in the selection of villages to be visited. However, even if during the selection process of sites, the above criteria have been proposed by the evaluation team and taken into account by UNICEF CO and there implementing partners, there is a risk that the sample includes mostly sites or communities where CATS programmes are more successful.

The evaluation did attempt to assess overall efficiency of CATS programmes; however it was particularly difficult to do so due to the lack of financial data at country level.

J.4.3. Online survey

The online survey was developed using the key questions from the evaluation matrix developed in the inception report. It was designed to cover all the evaluation dimensions and aimed at collecting quantitative data from a wider audience compared to other tools (webinars, semi structured interviews). This tool also helped to ensure that common information was collected for from most of the countries where CATS programmes are active. Overall, the online survey provided good quality data as 218 persons from 45 different countries responded. Yet, some limitations have been identified by the evaluation team:

- In a very limited number of cases, questions have been misinterpreted by the respondents. Data collected through these questions have been used with extreme care by the evaluation team. Detailed analysis of complementary questions helped identify the source of the misunderstanding and draw suitable conclusions;

- The online survey was targeted to individuals and was not designed to get an "organization wide viewpoint". In addition, it was dedicated to UNICEF staff as well as non-UNICEF respondents (government, strategic and implementing partners, etc.) invited by UNICEF CO staff, based on their knowledge of CATS. Therefore the results cannot be considered representative of the situation of a country and some minor inconsistencies have been identified in a given country;

- The survey included more than 50 questions. Some respondents complained about the length of the survey and did not complete the whole questionnaire. This limitation has been taken into account by the evaluation team by systematically indicating the number of respondents for each specific question used in the report;

- Unbalance in terms of geographical representation has been identified as some countries where CATS programmes are fairly new have been over represented while

other large countries with a certain longevity of CATS programmes had only a few respondents. This limitation has been taken into account by the evaluation team by systematically disaggregating data to make sure of the reliability of data.

J.4.4. Webinars

Two webinars in English and French on the sustainability of CATS programmes and the inclusion of social norms into CATS programmes were initially planned. These virtual meetings targeted only UNICEF staff and aimed at gathering quantitative data from a wide range of countries. Priority was given to countries that were not visited by the team.

However the webinar on social norms has not been held in French as only a few UNICEF staff got connected to the session which has been postponed once. Therefore, the result is a stronger representation of English-speaking countries in the qualitative data collected and among the concrete examples provided by participants.

J.4.5. Semi structured interviews

In total 11 semi-structured interviews with individuals, mostly non-UNICEF and with regional or global expertise and with in-depth knowledge and experience of CATS concept, have been conducted. Due to time constraint the consultant have been as selective as possible in the selection of respondents. Only respondents with excellent knowledge and strong expertise with regard to sanitation, CLTS or CATS were selected.

While it was initially planned to use the same template for all interviews, conversation guidelines were actually adapted depending on the background / specific area of expertise of each expert. In addition while it would have been preferable to conduct interviews face-to-face, they have been conducted by phone or Skype for very practical reasons.

Due to the limited number of respondents, semi-structured interviews were only analyzed using qualitative methods (identification of key topics and content analysis).

J.5. Bibliography

All documents mentioned below have been uploaded to the ftp library set up for this evaluation (ftp.hydroconseil.com/data). For some of the documents (especially the first category) exact author(s) and publishing date could not be determined.

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J.6. Country visit reports

J.6.1. India report

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J.6.2. Mauritania report

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J.6.3. Mozambique report

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J.6.4. Nepal report

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J.6.5. Sierra Leone report

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