Country-Led Formative Evaluation of Community-Led Total Sanitation in Timor-Leste (2012 – 2020)

Final report

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Commissioned by
the Ministry of Health,
Government of Timor-Leste

Independent evaluation team
FH Designs

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Preface

This evaluation of Community-Led Total Sanitation (CLTS) was commissioned by the Government of Timor-Leste (GoTL) Ministry of Health (MoH) in collaboration with the United Nations Children's Fund (UNICEF) Timor-Leste.

The evaluation was conducted by FH Designs between December 2019 and March 2021, a period which included a hiatus (February–November 2020) due to the global COVID-19 pandemic.

The statements in this report are the view of the authors and do not necessarily reflect the policies or views of the Government of Timor-Leste or UNICEF.

Cover photo: A young woman in Covalima shows her family's latrine, built as a result of the community-led total sanitation programme. ©UNICEF Timor-Leste/2019/Monemnasi

Back cover photo: The CLTS evaluation taking place in Liquica © FH Designs 2020

This report is available online at https://www.unicef.org/evaluation/reports#/

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Many individuals working in the sanitation sector agreed to be interviewed, and we thank them for sharing their thoughts and stories with us. The NGOs that provided data and feedback were an invaluable resource in this evaluation.

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Most of all though, we want to thank the chefe sucos, chefe aldeias and hundreds of 'ema Timor' who gave up their time to attend focus group discussions and answer survey questions and who ensured that our evaluation team was welcome in their aldeias. The people of Timor-Leste voluntarily shared their time and their stories with us in order to benefit those who have less, and for this they have our greatest respect and admiration.

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Abbreviations and Glossary of Tetun Words

ADRA	Adventist Development and Relief Agency
aldeia	A hamlet, often 10 – 30 households
ALFA	Open defecation free
AusAID	Australian Aid
BESIK	Be, Saneamento no Igiene iha Komunidade (Rural Water Supply and Sanitation Program—RWSSP)
chefe	Elected or traditional head of village/suco
CLTS	Community-Led Total Sanitation
CVTL	Cruz Vermelha de Timor-Leste (Red Cross)
CWSSP	Community Water Supply & Sanitation Program
DGAS	General Directorate for Water and Sanitation
DHS	Demographic Health Survey
DNSA	Direcção Nacional dosde Serviços de Água (National Directorate for Water Services)
DNSB	Direcção Nacional de Saneamento (National Directorate for Basic Sanitation)
DPHO	District Public Health Officer
EMG	Evaluation Management Group
ERG	Evaluation Reference Group
ETADEP	Ema maTA Dalan ba Progressu
FGD	Focus Group Discussion
GoTL	Government of Timor-Leste
HWWS	Hand Washing With Soap
INGO	international NGO
INS	Instituto Nacional de Saude (National Institute of Health)
JMP	Joint Monitoring Program
KEQ	Key Evaluation Question
KII	Key Informant Interview
MoH	Ministry of Health
NBSP	National Basic Sanitation Policy
NGO	Non-Government Organisation
OD	Open Defecation
ODF	Open Defecation Free
OECD-DAC	Development Assistance Committee of the OECD
PAKSI	Planu Asaun Komunidade Sanementu no Ijene (Community Action Plan for Sanitation and Hygiene)
PHD	Partnership for Human Development
PME	Planning, Monitoring and Evaluation
RDTL	Democratic Republic of Timor-Leste
RWSSP	Australian Government Bilateral Rural Water Supply and Sanitation Program
SDG	Sustainable Development Goal
SISCa	Family Health Worker Programme (Servisu Integradu Saude Communidade)
Suco	Village, usually consisting of several aldeia
ToC	Theory of Change
ToR	Terms of Reference
UNEG	United Nations Evaluation Group
UNICEF	United Nations Children's Fund
UTI	Urinary Tract Infection
VIP	Ventilated Improved Pit Latrine
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Executive Summary

Background

This evaluation of Community-Led Total Sanitation (CLTS) was commissioned by the Government of Timor-Leste (GoTL) Ministry of Health (MoH) in collaboration with the United Nations Children's Fund (UNICEF) Timor-Leste. The evaluation was conducted by FH Designs between December 2019 and March 2021, a period which included a hiatus (February–November 2020) due to the global COVID-19 pandemic.

Overview of the Intervention

The intervention that is investigated within this evaluation is a broad national programme of CLTS-style sanitation interventions conducted by the government, NGOs and multi-lateral and bi-lateral stakeholders from 2012 to 2020. This broad programme was a response to the GoTL's National Basic Sanitation Policy (NBSP) which was approved and introduced in 2012.

CLTS is a non-subsidised approach to sanitation that relies on provoking community conversation and action related to self-directed, self-funded latrine building at household level. CLTS-style programming was adapted to suit local needs and culture, and the resulting Planu Asaun Komunidade Sanementu no Ijene (PAKSI – Community Action Plan for Sanitation and Hygiene) model has been applied within most major sanitation programmes since 2012.

The broad object of the evaluation was *the implementation of CLTS-style programmes in Timor-Leste since 2012*.

Evaluation Purpose, Objectives and Scope

As requested by the MoH, the purpose of the evaluation was to '*produce evidence on the results of the CLTS approach in Timor-Leste to inform decision-making on potential adjustments needed in order to achieve the 2020 open defecation free (ODF) target and to ensure that ODF status is sustained*'. This overarching purpose is in line with the formative and utilisation-focused nature of the evaluation.

The objectives of the evaluation were:

- To understand the enabling environment, demand and supply factors from 2002 to 2012 that led to predominantly non-subsidised (CLTS-style) sanitation approaches being adopted in 2012 as the NBSP's main strategy to stop open defecation (OD)
- To document and analyse the process of CLTS-style programme execution since the adoption of the NBSP to date (2013–20), including what each implementing partner did, where, when and how, and covering enabling environment, demand and supply aspects
- To examine the qualitative and quantitative results of CLTS-style programmes from 2012 to 2020.

The scope of the evaluation included sanitation programmes aimed at household latrine building and ODF communities. Primary data collection was focused in communities that had been declared ODF and had CLTS-style programmes from 2005 to 2020. The municipality of Oecusse was also included, because CLTS-style programmes there have not resulted in sustainable sanitation outcomes.

Evaluation criteria were organized under the OECD Development Assistance Committee (OECD-DAC) criteria of relevance, effectiveness, efficiency, impact and sustainability along with the UNEG criterion of Equity, Gender and Human Rights. Key evaluation questions are related to each criterion.

Intended Audiences

The primary audiences for the evaluation are the GoTL, particularly the MoH, the Ministry of State Administration and the Municipal Administrations, and the main agencies implementing CLTS-style programmes in Timor-Leste (see section 1.5). Secondary audiences include other GoTL entities and the broader WASH sector in Timor-Leste. It is anticipated that the findings of the evaluation will also be of wider interest to the WASH sector generally and to UNICEF globally.

Evaluation Approach and Methodology

The evaluation used a mixed-methods, participatory, utilization-focused and theory-based approach designed to assess alignment of activities with the retrospective theory of change (ToC) developed in the early stages of the evaluation. The combination of quantitative and qualitative data allowed for triangulation of results. The evaluation was granted ethics approval by the National Health Institute of Timor-Leste and was compliant with United Nations Evaluation Group (UNEG) guidelines and standards. The evaluation was overseen by the Evaluation Management Group, which was also responsible for convening the Evaluation Reference Group.

The methods applied within this evaluation included a community co-design process (1 suco), community focus group discussions (21 FGDs, 546 individuals), household sanitation coverage surveys with field observations and photographs (1,359 households), sanitation organisation stakeholder questionnaires (13 responses), and key informant interviews (32 KIIs).

The CLTS evaluation team conducts a focus group discussion in Ainaro. © FH Designs 2020

Key Findings

Relevance

As a broad approach to sanitation, CLTS-style programmes were found to be relevant and appropriate to the goals of the GoTL to ensure all communities are ODF. While the date of achievement for this goal has been revised several times, activities and outputs within the scope of CLTS-style programmes were consistent with the ToC and with achieving 100% ODF. Funding and human resources, along with

the seasonality of access to some regions, limited the speed of delivery of CLTS-style programs. Nonetheless, within the current planning cycle, the goal of 100% ODF by 2024 is feasible.

Effectiveness

Community-Led Total Sanitation programmes in Timor-Leste have proved to be effective in creating progress towards the desired high-level outcome (from the ToC) that *every individual in Timor-Leste has sustained access to, and uses, a functional latrine, and maintains good hand hygiene practices*. This is evidenced by the increase in latrine ownership from 63% of households in 2009 to 93% in 2020. It is also evidenced by signs that, in areas that have been declared ODF, social norms for latrine ownership are strong. Social norms for handwashing are less strong but still impressive in the face of barriers that include a physical lack of water supply and the lower 'detectability' of handwashing behaviour in a community.

Children's faeces are not consistently safely managed. This is concerning and requires collaboration with sectors whose expertise include child development and understanding of Timorese child nurturing culture to discover the factors that could provide the impetus for change.

The municipality of Oecusse has proved to be a difficult context for CLTS-style programmes to gain traction. Sanitation programmes in Oecusse need to be contextualised to the specific nature of the enclave and its residents. The health workers and others in the sanitation sector in Oecusse would benefit from regular knowledge sharing to support their practice.

Efficiency

Progress towards ODF status has been substantial, with appropriate use of available resources to train and deploy staff for institutional and community triggering. Verification and monitoring of ODF status are less efficient than expected, due to issues with budgets and data management. While the 2020 target has not been met, ODF should be reached by 2024. At the same time, pilot programmes for the next step towards safely managed sanitation have been conducted, and the sector is now working towards both the ODF target and the SDG 6 Safely Managed Sanitation target.

Impact

This evaluation looked for impacts that were beyond the 'Healthy Population' identified within the ToC, because there are many other factors that contribute to or confound this ultimate goal, and the global evidence that good sanitation and hygiene contribute to positive health outcomes is uncontested. Unexpected effects of CLTS-style programmes were localised, and included behavioural changes around food covering (to avoid fly-borne diseases), and some discontent around the process of development, leading to a reluctance by some individuals to engage with further development activities.

Sustainability

The sustainability of outcomes from CLTS-style activities, as evidenced by social norms and latrine use after at least one year, is high. Continued encouragement, follow-up and monitoring by chefe aldeia and health workers are thought to contribute substantially to this sustainability. One of the barriers to sustainability is the availability of water, affecting both latrine use and handwashing, with evidence that lack of direct water supply to the yard is correlated with higher levels of open defecation (OD).

Equity and Inclusion

PAKSI implementation in Timor-Leste has been designed to involve women and people with a disability who may historically have been excluded from community decision-making. Actual implementation has been less inclusive than intended, as reported by women and people with a disability. Women and children are prone to diseases related to genital hygiene issues. Meeting women's needs for additional

space, water, and easy access to a latrine, would aid in menstrual hygiene management and avoidance of diseases such as urinary tract infections that are emerging as a previously 'silent' issue for women in developing countries. This is especially important as progress is made toward improved latrines.

Vulnerable household sanitation subsidies were not implemented by the GoTL in conjunction with PAKSI programmes and households with the lowest financial capacity are shown to have an average of a four times higher rate of OD or unimproved latrine access, than the wealthiest households.

Key Conclusions and Lessons Learned

Conclusion

The implementation of CLTS-style programming in Timor-Leste, under the auspices of the MoH, has been a relevant and appropriate response to issues of OD and poor hand hygiene. The whole-of-sector approach to using the PAKSI model and the introduction of institutional triggering has resulted in efficient, effective and sustainable change at the household level. Longer-term sustainability and progress from ODF to safely managed sanitation will require consistent public reinforcement of desired social norms. The implementation of the next stage of sanitation and hygiene programming provides the challenge of completing CLTS-style programmes alongside subsidised programs, and may require some hybridisation of CLTS/PAKSI style programming with Hygienic Suco programmes to achieve the aims of ODF and perhaps 'leapfrog' to improved sanitation, whilst still creating desired changes in social norms that are not inherent to subsidised sanitation solutions.

Lessons Learned

Key lessons learned through the evaluation include:

- The need for government leadership to ensure that the sector has clarity of purpose both in the short term (programme planning) and the long term (SDGs/policy), and that there are mechanisms for both formal and informal interactions between sector stakeholder groups and government duty bearers.
- Sanitation monitoring and data management are necessary for evidence-based decision-making, and in ensuring that responses to slippage are timely and appropriate. These processes need to be transparent, appropriately funded and include feedback to communities.
- Gender equity, disability inclusion and children's rights are issues for the entire society. It is particularly important that programmes in direct contact with small communities, such as sanitation and hygiene, demonstrate through their programmes and within their own labour force the positive aspects of diversity.
- The growing, decentralised public workforce, including public health officers, healthcare workers and other members of ALFA secretariats, could – with minimal central support – assist each other in training, implementation and monitoring of PAKSI and other sanitation programs. Creating a forum for regular dialogue between this workforce, NGOs and Government is likely to heighten feedback loops into government planning, provide opportunities for testing innovation and support continual improvement within the sector. All of these functions will be important as ODF is reached and the sector changes gears to ensure that all Timorese people have access to an improved latrine. This would require secretariat support and a trusted designated facilitator to maintain open dialogues.

Key Recommendations

To achieve the 'last push' to 100% ODF and move into hygienic suco programmes, the MoH and other Government entities, including the Ministry of Public Works and the Ministry of State Administration, should ensure that the following activities are undertaken either internally or by external agencies with oversight by the ministries:

- Develop transparent criteria and plans, in conjunction with sanitation agencies, for the implementation of hygienic suco programs to reach the 2030 goal of improved sanitation
- Advocate within government for higher standards of water supply to ensure adequate water to the home
- Develop and fund appropriate data collection and analysis to enable evidence-based decision-making around sanitation programs now and into the future
- Encourage agencies and public health workers to explore and share innovation for local contexts in sustaining ODF gains, social norms change and behaviour change communications, particularly in relation to 'last mile' communities that may be hard to reach or face environmental and financial barriers.
- Develop a separate plan for sanitation programmes in Oecusse to start as soon as possible
- Form a multisectoral team to investigate issues around children's faeces disposal

1. Evaluation Background

1.1. Introduction

This report presents the background, methodology, results and recommendations of a Formative Evaluation of Community-Led Total Sanitation (CLTS) in Timor-Leste. The evaluation was commissioned by the Government of Timor-Leste (GoTL) Ministry of Health (MoH) in collaboration with the United Nations Children's Fund (UNICEF) Timor-Leste. The evaluation was conducted by FH Designs between December 2019 and March 2021, a period which included a hiatus (February–November 2020) due to the global COVID-19 pandemic.

1.2. Context

Timor-Leste is one of the youngest nations in the world. According to the 2015 Population and Housing Census, the total population of Timor-Leste was 1,183,643, consisting of 601,112 males and 582,531 females living in 204,597 households. The population estimate for 2020 is 1,318,445. Timor-Leste has 13 municipalities (previously districts) each with further administrative divisions: administrative posts (previously sub-districts), sucos (villages) and aldeias (sub-villages or hamlets).

When Timor-Leste became an independent nation in 2002, it was in a state of ruin, with tattered infrastructure and a poor economy. It has since faced many political, security and development upheavals, but has made steady progress in peace and democracy, especially after 2008.

Data from 2013[1] show that 50.2% of Timorese children aged under five years are stunted (too short for their age); 11% are wasted (too thin for their height) and 37.7% are underweight (combined stunting and wasting). More recent data from the 2020 Timor-Leste Food and Nutrition Survey shows some improvement in these indicators, with stunting reduced to 47.1%, wasting to 8.6% and underweight children at 32.1%. Respiratory and diarrhoeal diseases remain the leading causes of infant mortality, both of which are strongly linked to inadequate sanitation and hygiene. Diarrhoea alone is responsible for more than 380 child deaths per year in Timor-Leste,[2] and research suggests that insufficient access to improved sanitation and low availability of hand-washing facilities are significantly associated with stunting.[3] A World Bank review of malnutrition in Timor-Leste in 2016[4] further revealed that childhood malnutrition is the leading risk factor for under-five mortality and that unsafe water, unsafe sanitation and lack of handwashing facilities are strong contributors, ranking as 3rd, 4th and 6th risk factors. The World Health Organization (WHO) and UNICEF Joint Monitoring Programme (JMP) in 2019[5] found that 20% of Timor-Leste's people, and 28% of the rural population, still practice open defecation (OD). It further revealed that 46% of the population lack access to basic sanitation. Poor sanitation and hygiene in Timor-Leste are estimated to cause economic losses of USD16.9 million per year (equivalent to 4.8% of gross domestic product in 2006).

The following sections provide further background to the context, history and policies affecting the sanitation sector in Timor-Leste from 2002 to 2020.

[1] Malnutrition in Timor-Leste: A review of the burden, drivers, and potential response, World Bank, (2016) citing Timor-Leste Food and Nutrition Survey, RDTL (2015)
[2] Politica Nacional de Saneamento Basico de Timor-Leste (RDTL, 2011)
[3] Timor-Leste Food and Nutrition Survey (2013)
[4] Malnutrition in Timor-Leste: A review of the burden, drivers, and potential response, World Bank, (2016) http://pubdocs.worldbank.org/en/487831491465798343/Malnutrition-in-Timor-Leste.pdf
[5] Progress on household drinking water, sanitation and hygiene, 2000–2017, (2019), UNICEF-WHO JMP Report - https://washdata.org/

1.3. Evaluation object

The Terms of Reference (ToR) broadly define the object of the evaluation as 'CLTS-style sanitation programmes implemented in Timor-Leste'. However, this masks much of the complexity in the sector, and it is important to place the programme in the context of the history of water, sanitation and hygiene (WASH) programming in Timor-Leste.

As described above, nearly 20 years after achieving independence, and despite significant investment from both the GoTL and donors, Timor-Leste still faces major public health challenges, notably poor hygiene and sanitation. Since 2000, the MoH has worked with development partners to improve the sanitation and hygiene situation in Timor-Leste through WASH and other health-related programmes.

The nation's first sanitation policy (the National Basic Sanitation Policy – NBSP) was ratified in 2012, and, whilst not explicitly adopting CLTS-style programmes as the national approach, it used language which urged CLTS-style principles and methodologies. Over the eight years since the NBSP was adopted, most development partners and donors in the sanitation sector have used CLTS-style programming (or versions of it, most notably PAKSI[6] – the version of CLTS tailored to the Timor-Leste context and culture) in their programming.

As a national approach to providing sanitation as a 'public good', the rights holders of CLTS program include all citizens. Those who are provoked into building latrines will benefit from improved safety and health, while other citizens will benefit from improved public health and lower government costs for healthcare. The duty bearers of CLTS programming include all of the government agencies involved in sanitation and hygiene, particularly the Ministry of Health, along with all of the NGOs and multi-lateral and bi-lateral agencies working in this area of development.

Coinciding with the 2020 target[7] of achieving universal ODF status (known locally as ALFA), the MoH decided to take stock of the collective effort and investment in the CLTS approach by conducting a formative evaluation of CLTS-style programmes in Timor-Leste. The evaluation covered the development and implementation of CLTS-style programmes from 2005 to 2020.

1.4. Timeline of the sanitation sector in Timor-Leste

Access to sanitation has evolved in Timor-Leste since the Portuguese occupation (1769–75), during which the population's needs for WASH and other services were largely neglected.[8] Whilst some WASH infrastructure was built during the Indonesian occupation (1975–99) such as *Mandi, Cuci, Kakus (MCK)*,[9] it is difficult to know what proportion of Timor-Leste's population had access to safe sanitation (and water and hygiene infrastructure) at the time.[10] After the referendum in 1999, the Indonesian army and anti-independence militia destroyed most of Timor-Leste's infrastructure, including WASH infrastructure.[11] Between 1999 and 2002, when Timor-Leste was formally establishing itself as a newly independent state, sanitation was mostly managed through Australian Aid (AusAID) funded programmes implemented by local NGOs such as Bia Hula. Caritas and NZ WASH were also working on small-scale WASH programmes in Oecusse.[12]

[6] Planu Asaun Komunidade Sanementu no Ijene (PAKSI—Community Action Plan for Sanitation and Hygiene)
[7] The 2020 target is not documented in policy, but was a goal agreed among municipal leaders in 2015 and became incorporated within the sanitation sector
[8] Magalhães (2015); Peake (2013); Smets (2015)
[9] An Indonesian public facility for bathing, washing and toileting
[10] Smets (2015)
[11] Commonwealth of Australia (2014), International Committee of the Red Cross (1999), World Bank (2019)
[12] Hunt, 2008

The management of sanitation (and water and hygiene) in Timor-Leste has undergone several iterations since 2002, with responsibilities for WASH divided between government ministries and directorates. Decrees and policies for WASH have been drafted and some have been endorsed.[13] The progression of the management of sanitation, and in particular the establishment of PAKSI, in Timor-Leste since 2002 is described in the remainder of this section.

In 2002, the new government drafted its first National Development Plan. Clear outcomes and responsibilities for both urban and rural sanitation were described in the plan under the section for the Water and Sanitation Division, which was under the jurisdiction of the Director-General for the Department of Water and Public Works (within the Ministry for Water and Public Works). The overall approach was described as: 'to address the provision of the services in urban areas on a cost recovery basis, whilst community ownership and operation is the norm in rural areas.'[14] In the same year, the first phase of the Australian Government's support for sanitation in Timor-Leste began. This was called the Community Water Supply and Sanitation Programme (CWSSP) (2002–06)[15]. Although it was focussed heavily on water supply the CWSSP, along with others operating at the time (see Annex X), provided subsidised materials for latrine building and water supply.[16] In the period from 2002 to 2020 at least 18 international organisations and at least 17 local organisations have been part of the sanitation sector in Timor-Leste, many of these have implemented CLTS-style programmes and with various degrees of government coordination at different times.

Around 2004, the global conversation about sanitation moved from an infrastructure coverage approach to a focus on community participation, management and overall governance.[17] CLTS programmes had been piloted in Bangladesh and was starting to be seen as a practical and scalable approach for the sector.[18] WaterAid, which had set up its first office in Timor-Leste in 2003, began working in Aileu and Liquiçá municipalities in 2005.[19] In 2007, under the leadership of Dinesh Bajracharya, who had experience of CLTS-style programmes from Nepal, WaterAid piloted CLTS-style programmes in Liquiçá and conducted staff training and an inter-agency workshop.[20]

The second 5-year phase of the AusAID CWSSP programme began in 2007 and was called Be, Saneamento no Igiene iha Komunidade 1 (BESIK 1, or Rural Water Supply and Sanitation Program—RWSSP). BESIK initiated a review of the sanitation sector, with a view to supporting sanitation policy development in Timor-Leste.[21]

In 2008, the GoTL issued the Timor-Leste Rural Water, Sanitation and Hygiene Sector Strategy 2008–2011, which featured gender equity and social inclusion as cross-cutting strategies.[22] In 2009, the GoTL committed USD3.5 million to the WASH sector[23] and in 2010, a further USD200,000 to rural household latrine construction.

[13] Buhl-Nielson, Giltner, Dutton, & Donohoe (2009), Smets (2015), World Bank (2018)
[14] Government of Timor-Leste, (2002)
[15] Aurecon Group, date unknown
[16] Pers comm from KIIs
[17] Rosenqvist, Mitchell, & Willetts (2016)
[18] Institute of Development Studies (2019)
[19] WaterAid (2010)
[20] Grumbley & Moran (2017), Moran (2017), Murta & Willetts (2014)
[21] Government of Australia (2016)
[22] Government of Timor-Leste (2008)
[23] Government of Timor-Leste (2012)

In 2010, the government (DNSB) and BESIK piloted a Total Sanitation Campaign that included CLTS-style programmes in 15 subdistricts.[24] The effectiveness of this campaign and previous pilots of CLTS-style programmes in Timor-Leste was doubtful: anecdotal evidence suggested that slippage from these programmes was high[25] and that implementation had been inconsistent and not well coordinated or resourced.[26] In his role as Prime Minister, Xanana Gusmão did not fully support CLTS-style programmes due to their 'shaming' approach and complaints about poor-quality latrine construction. Consequently, the sanitation sector in Timor-Leste turned its focus to disgust rather than shame in CLTS-style triggering.[27] The result was PAKSI, Timor-Leste's main approach for ending OD and encouraging good hygiene in rural areas.[28] The MoH and BESIK conducted PAKSI training for facilitators in November 2011.[29]

In the same year, the Timor-Leste Strategic Development Plan 2011–2030 set the ambitious target that all Timorese people would have access to clean water and improved sanitation by 2030.[30] Timor-Leste became the first country from the Pacific region to join Sanitation and Water for All.[31]

The NBSP was approved in 2012.[32] It had four main objectives:

- an ODF environment, including water bodies and institutional buildings
- all people practise improved hygiene behaviour all of the time, particularly use of a hygienic latrine, handwashing with soap, and the safe disposal of child and infant excreta
- all people and institutions always practise safe management and disposal of solid wastes and
- all people and institutions always practise safe management and disposal of wastewater (and other liquids)[33]

The government committed USD20 million to the WASH sector, which included sanitation.[34] Nevertheless, the new sanitation policy stipulated that households were responsible for constructing and maintaining their own latrines and handwashing facilities.[35] The WASH sector was reorganized so that agencies were allocated specific municipalities, thus avoiding some villages being over-serviced or under-serviced. In the same year, PAKSI guidelines were set out in three manuals -Preparation, Triggering, and Follow-up – aligned closely with the new policy.[36] Currently, almost all partners of the GoTL with a rural WASH programme have adopted the PAKSI approach.[37]

2012 was an election year, and the government announced its *Programa Nasional Dezenvolvimentu Suku* (PNDS, or National Programme for Village Development). This was a decentralisation program, to be launched in 2014 with a budget of USD300 million over eight years. Through this program, each suco was to be provided with an annual grant of approximately USD50,000 to fund infrastructure

[24] Araujo, Jesus, Soares, & Whalen (2011)
[25] Noy & Kelly (2009)
[26] Araujo et al., (2011)
[27] Personal Communication – Key Informant Interview
[28] United Nations Children's Fund (2016)
[29] Government of Australia (2012)
[30] Government of Timor-Leste (2011)
[31] Sanitation and Water for All (SWA) (2020)
[32] Government of Australia (2016)
[33] Government of Timor-Leste (2012)
[34] Government of Timor-Leste (2012)
[35] Government of Timor-Leste (2012)
[36] Government of Timor-Leste (2012)
[37] United Nations Children's Fund (2016)

projects of their choice, which included options for building public sanitation facilities.[38] 2012 also marked the beginning of the third five-year phase of the AusAID CWSSP program, called BESIK 2.[39]

In 2013, the National Directorate for Basic Sanitation (DNSB), under the Ministry of Public Works, prepared a Five-Year Strategic Sanitation Plan to guide priorities and actions for rural and urban sanitation.[40] The strategic plan identifies priority districts (municipalities) for sanitation programmes, based on percentages of households without access to a latrine or with access to an unimproved latrine. Both the policy and the strategic plan indicated that there would be financial support for particularly vulnerable households to acquire sanitation materials.

Until 2013, the rural districts had very few government staff to support household-level sanitation.[41] Hence, during 2013–15, the MoH trialled a programme in which 'sanitarians' were employed at the district level to directly deliver the government's rural sanitation program, which was based on the PAKSI approach. At the same time, NGOs such as WaterAid continued to implement PAKSI in rural areas.[42] However, when Kamal Kar and his team visited Timor-Leste in late 2013, at the behest of WaterAid, they found that the national budget and surveillance mechanisms for PAKSI were insufficient. They ran workshops which brought high-level government leaders together with residents of ODF communities so that these government leaders could realise the benefits of PAKSI for themselves.[43] In 2015, BESIK instigated another visit from Kar and his team. An institutional triggering with the municipal administration in Bobonaro created dramatic positive change in perception of local leaders and led to heightened commitment to ensure that Bobonaro quickly became ODF. At this time, sanitation targets shifted from 10 municipalities being ODF by 2020 (and 100% by 2030) to targeting 100% ODF status by 2020.[44] At the same time, BESIK and the MoH ran behaviour change communication programmes (Uma Kompletu ho Sintina – A house needs a latrine) to support the push for ODF municipalities.[45]

In 2016, the AusAID-funded BESIK 2 programme ended and, in its wake, the Australian Government transitioned to a programme called Partnerships for Human Development (PHD), which included a focus on operation and maintenance within its WASH priorities. PHD responded to requests from the Ministry of Health's Environmental Health Department and municipal leaders to engage in sanitation programmes in Bobonaro, Viqueque and Lautem.

After years of continuous stepwise implementation of sanitation programmes throughout Timor-Leste, the last few years have seen several milestones achieved. In 2018, Ermera was the first municipality to be declared ODF, and representatives from every municipality publicly signed a commitment to make Timor-Leste ODF by 2020.[46] By the end of 2019, four more municipalities had been declared ODF (Aileu, Liquiçá, Manufahi and Bobonaro), five have ongoing sanitation programmes (Covalima, Ainaro, Oecusse, Viqueque and Lautém), and three have new sanitation programmes (Baucau, Dili and Manatuto).

[38] Smets (2015)
[39] Aurecon Group, date unknown
[40] Smets (2015)
[41] Smets (2015)
[42] Clark & Willetts (2016)
[43] Kar & Pradhan (2014)
[44] Personal Communication from KIIs
[45] Government of Australia (2016)
[46] United Nations Children's Fund (2018)

In the wake of the institutional triggering in 2015 and the consolidated push for 100% ODF coverage in Timor-Leste, there were several regional and local evaluations of sanitation programmes and outcomes, including the Second Review of Community-Led Total Sanitation in the East Asia and Pacific Region by UNICEF and partners in 2016, and the review of ODF Sustainability in Timor-Leste for PHD in 2017. These reviews indicate that while there has been solid progress in sanitation infrastructure and behaviour change, this is diminished somewhat by rates of OD slippage of between 10% and 30% nationwide.

The recent COVID-19 pandemic interrupted sanitation programmes across the country from February to October 2020, but it led to significant focus on hygiene messaging during this period, including school handwashing programmes, distribution of buckets with taps for handwashing and public information banners on handwashing techniques.

In early 2021, the GoTL created new institutions with responsibility for water supply and sanitation, signalling future changes to the management and provision of urban and rural water and sanitation. The changes respond to a need for a functional, financially sustainable water supply in urban areas, but there is still little information on how these changes will affect urban or rural sanitation programmes, including CLTS-style programmes.

1.5. Stakeholders involved in the delivery of CLTS/PAKSI in Timor-Leste

The CLTS-style program, PAKSI, is delivered by various stakeholders in Timor-Leste who, from around 2010 to 2017 met regularly at the national WASH forum and Sanitation Working Group.[47] UNICEF's second review of CLTS in East Asia and the Pacific region mapped out these stakeholders in 2015 (see Figure 1 below).

The agencies involved in CLTS-style programming in Timor-Leste in 2015 are shown in Figure 1, noting that CVTL continues to use a subsidised sanitation approach across its integrated poverty reduction/livelihoods programmes. A full list of organisations involved in the delivery of WASH programmes in Timor-Leste from 2002 to 2020 is provided at Annex X.

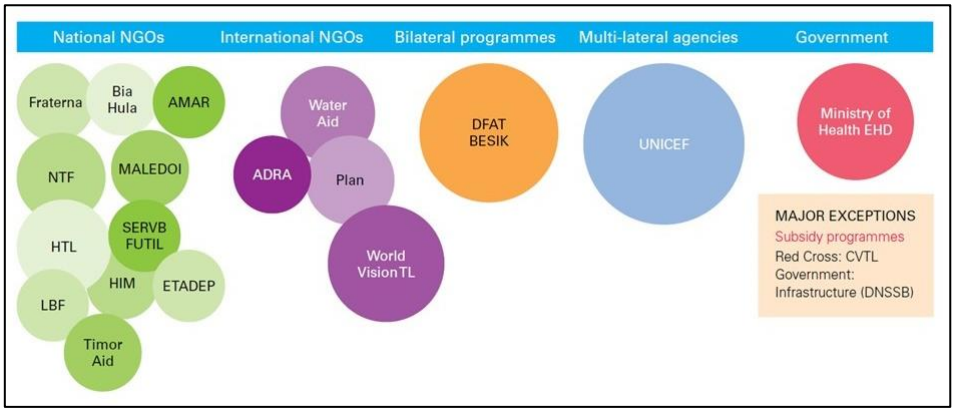

Figure 1 Institutions and organisations involved in the delivery of PAKSI/CLTS in Timor-Leste (as at 2015) [48]

Responsibility for sanitation within the GoTL has been shared between multiple ministries and directorates (see Figure 2) with the Ministry of Health taking lead responsibility for rural sanitation

[47] World Health Organization (2015)
[48] United Nations Children's Fund (2016)

and hygiene, while the Ministry of Public Works has led water supply work[49]. Since 2008, in addition to NGO programmes, sanitation (and hygiene) promotion has also been conducted by family health promoters through the MoH-run National Integrated Community Health Services (*Servisu Intergradu Saude Communidade*, or SISCa) who are still important in maintaining ongoing sanitation and hygiene support in communities.[50] Through the PAKSI program, households are expected to finance their own sanitation and hygiene infrastructure. The NBSP notes the expectation that there would be a vulnerable household subsidy through the Ministry of Social Solidarity[51] (separate to the Bolsa de Mae cash transfers), but this subsidy was never made available.

Early in 2021 the GoTL created new institutions with responsibility for water supply and sanitation:

- **National Authority for Water and Sanitation**, with primary objectives '*to manage the use of water resources'* and *'to regulate the activities of collection, transport, treatment, distribution and discharge of wastewater and solid waste'*, and
- **Bee Timor-Leste**, public company '*responsible for providing water and sanitation to citizens'.*

These institutions are not functional at the time of writing. Both will focus (at least initially) on urban areas. The government has not announced how these new institutions will be structured around current institutions with similar responsibility; it seems that at least some sections of the General Directorate for Water and Sanitation (DGAS) will be made redundant or shifted to the new organisations.

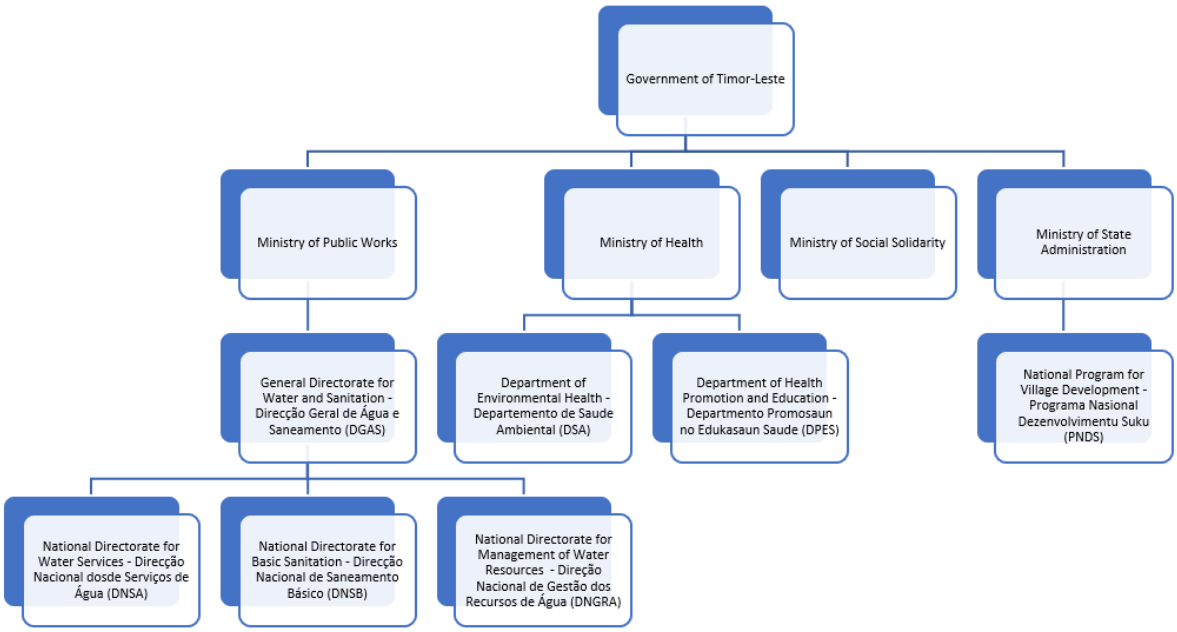

Figure 2 Ministries, directorates and departments responsible for water, sanitation and hygiene in Timor-Leste

1.6. Theory of Change

One of the early requirements of this evaluation was to develop a retrospective ToC for CLTS programmes in Timor-Leste. The ToC (Figure 3) was developed with contributions by sanitation

[49] Renneberg, Bond, & Patrocinio (2015), Smets (2015)
[50] Smets (2015)
[51] Smets (2015)

stakeholders at the first stakeholder workshop held on 20th November 2020, and in close consultation with the Evaluation Management Group (EMG).

Developing a retrospective ToC is a useful way to inquire into the assumptions and processes that constitute sanitation interventions. Having a reconstructed ToC provided a theoretical framework of activities, outputs and outcomes that formed the basis for evaluating the overall CLTS-style implementation activities in Timor-Leste.

A ToC requires us to start from the ultimate desired **impact**. In this case, the ultimate impact to be aimed for is a **healthy population** (as noted in the NBSP). It is well recognised that using a functional latrine and good hygiene contribute to significant public health outcomes, including reductions in diarrhoeal diseases, helminths (worms), malnutrition and stunting. For women, improved menstrual hygiene management is expected, as well as flow-on effects in terms of access to education and other opportunities. While the sanitation sector is not solely accountable for these impacts, it is useful to understand that the ultimate purpose of safely managed sanitation is to contribute to the conditions that create a **healthy population**.

The long-term **outcome** specifically related to CLTS-style programmes is the area for which the broad sanitation sector is accountable. In this case, that outcome is that **Every individual in Timor-Leste has sustained access to, and uses, a functional household latrine, and maintains good hand hygiene practices**. CLTS-style implementation programmes are responsible for facilitating household sanitation coverage for ODF as indicated by the **intermediary outcomes**.

Outputs in terms of household sanitation include having adequate monitoring, verification and data collection processes to ensure that the overall sanitation programme continues to be effective. This monitoring role sits largely with health workers, who also work with NGOs to trigger communities to inspire individuals' desire and action towards building latrines. **Inputs** required to ensure that health workers have the capacity, and the support of community leaders, to trigger and monitor community latrine building include training, financial commitments, a policy and media environment that supports individual sanitation options, and a well-coordinated sectoral approach to ensuring that support is provided from all levels of government.

Once effective CLTS-style triggering has occurred in OD communities, the other outputs of CLTS-style programmes are enacted: households acquire the materials to build latrines, and are supported/encouraged by their communities to build at least an unimproved pit latrine and hygiene facilities. This includes the need to support vulnerable households to achieve ODF status.

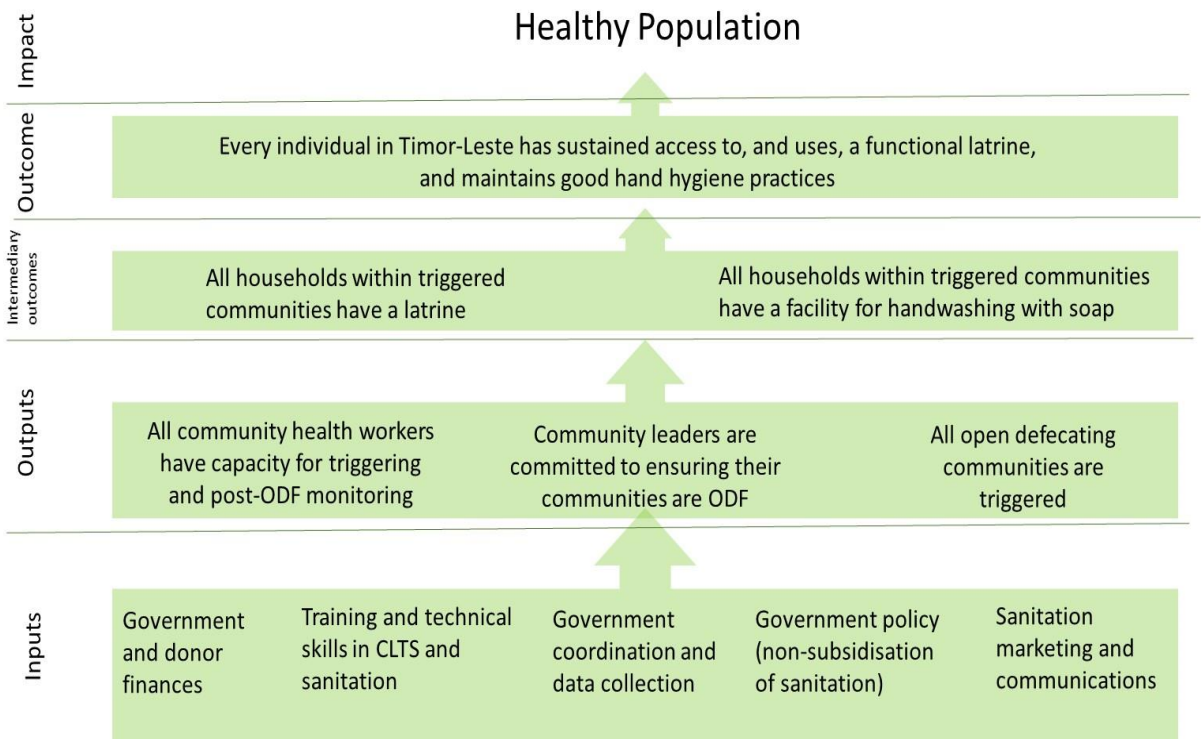

Figure 3 Reconstructed theory of change for CLTS programmes in Timor-Leste 2012 - 2020

Risks and assumptions of the ToC

Within this model there are risks associated with governance of the sector (enabling environment). While there is a sanitation policy in place, recent political issues in Timor-Leste have made budgets and long-term planning and coordination difficult to achieve and finance appropriately. This has flow-on effects to capacity building, municipal level coordination, monitoring and data collection, and finance for inclusive sanitation.

Non-government organisations and other agencies may work independently of the government, or apply government policy in different ways, with little accountability. This creates the potential for positive innovation but also for competitive behaviours that reduce programme efficiency.

Within CLTS-style programs, variation in the experience and training of community facilitators can lead to variations in the effectiveness of community triggering activities and hence the comprehensiveness of the outputs across communities. As a 'once off' activity, a 'failure to trigger' could result in poor outputs and few behavioural outcomes and little eventual impact on community health.

Community-Led Total Sanitation policy and programmes in Timor-Leste are designed to drive full access to household sanitation, resulting in ODF/ALFA status. While unimproved pit latrines can be classed as safely managed sanitation,[52] there is also a push towards improved sanitation. The assumption made here is that combining improved supply of affordable (or subsidised) sanitation products with the motivation provided through CLTS-style triggering exercises will encourage individuals to climb the sanitation ladder. Several sucos have already been declared 'hygienic suco[53]'.

[52] JMP https://washdata.org/monitoring/sanitation

[53] Hygienic Suco is Category 3 of the Timor-Leste Sanitation Categories. This category requires 100% use of hygienic latrines and handwashing stations with soap and water in all households, schools, institutional buildings

Inputs and outputs on the supply side of hygienic suco programmes are not considered to be a consequence or driver of CLTS-style programming.

Validation of the ToC

The ToC elaborated above was developed collaboratively with the key stakeholders associated with the evaluation and the sector more broadly, and in parallel with the development and refinement of the evaluation framework. As such the lines of enquiry taken by the evaluation team in the surveys and questionnaires with key informants drew heavily from the risks and assumptions articulated above, and the inputs, outputs and intermediary outcomes in the ToC provided the lenses through which evaluation sought to examine the sector. Hence, this ToC provides the theory against which this theory-based evaluation assesses activities, progress, and outcomes in the sector.

and public places; plus 100% safe disposal of infant and child faeces; and verification of continued ODF status. Category 1 indicates Zero Sanitation Sucos while Category 2 are ODF Sucos. Beyond this, Category 4 are Litter Free Sucos and Category 5 are Foul Water Free Sucos (see Figure 18).

2. Evaluation Purpose, Objectives and Scope

2.1. Purpose and objectives

As outlined in the evaluation ToR (attached to this report as Annex XVII), the purpose of the evaluation was to '*produce evidence on the results of the CLTS approach in Timor-Leste to inform decision-making on potential adjustments needed in order to achieve the 2020 ODF target and to ensure that ODF status is sustained*'. Broadly, this involved investigating evidence for the efficacy of CLTS, and documenting strengths and weaknesses in the various approaches to CLTS taken by development partners and the MoH. It is anticipated that the results of the evaluation will be used to inform the next sanitation programming cycle within Timor-Leste and shore up the achievements and impacts to date. It is anticipated that the findings of this evaluation will further influence government policies, strategies and resource allocation in the lead-up to the 2030 SDG target of universal access to safely managed sanitation.

The objectives of the evaluation, as described in the ToR, are:

- to understand the enabling environment, demand and supply factors from 2002 to 2012 that led to predominantly non-subsidised (CLTS-style) sanitation approaches being adopted in 2012 as the NBSP's main strategy to stop OD;
- to document and analyse the process of CLTS-style programme execution since the adoption of the NBSP to date (2013–19), including what each implementing partner did, where, when and how, and covering enabling environment, demand and supply aspects; and
- to examine the qualitative and quantitative results of CLTS-style programmes since the adoption of NBSP to date (2013–19).

2.2. Evaluation use

As per the ToR, the primary audiences for the evaluation are the GoTL (particularly the MoH, the Ministry of State Administration and the Municipal Administrations) and the main agencies implementing CLTS-style programmes in Timor-Leste (see section 1.5). These organisations are in the process of a 'final push' for ODF in Timor-Leste and looking towards implementing improved sanitation in households in line with the SDGs. The evaluation will be used to develop strategies to reach 100% ODF and to move seamlessly to improved sanitation programs.

Secondary audiences include other GoTL entities and the broader WASH sector in Timor-Leste who will use the evaluation to be informed of the status of the sector to work with, or to find synergies with, their own programming. It is anticipated that the findings of the evaluation will also be of wider interest to the WASH sector generally and to UNICEF globally as it adds to overall knowledge of the effectiveness and pitfalls of CLTS-style programmes applied at a national level.

2.3. Scope

Thematic

This evaluation investigated the PAKSI/CLTS-style implementation efforts of the GoTL and its development partners. It encompassed a range of organisations' approaches to implementing CLTS-style programmes and their effectiveness in creating sustained sanitation outcomes. It sought to understand how the environment acted as an enabler or barrier to sustained sanitation. It also drew from the experiences of households exposed to CLTS-style programmes that resulted in their aldeia being declared ODF.

Whilst most sanitation programming – including CLTS-style programmes – ultimately have the aim of improving community health, establishing definitive causal links between sanitation interventions and

health outcomes in countries such as Timor-Leste is challenging because numerous variables and counterfactuals are beyond the ability of evaluations such as this to control. For example, when other health and nutrition-related programmes run alongside sanitation programs, all with the aim of improving community health, determining attribution for any improvements is very difficult, and arguably not an efficient use of resources because the link between improved sanitation and hygiene and improved community health has already been established in the literature.[54] Hence, this evaluation did not collect or analyse epidemiological data, and no attempt was made to estimate actual health outcomes or changes in diarrhoeal rates or infant mortality across the programme.

Community-Led Total Sanitation programming in Timor-Leste has focused on achieving sanitation in households through limited- or non-subsidy approaches. Institutions such as schools, health clinics, markets and government offices are identified within the NBSP as being eligible for public finance and therefore they are rarely included in CLTS interventions. As a result, the scope of the evaluation was confined to community-focused programmes and interventions that focus on moving households towards being ODF. The evaluation did not investigate programmes focused on sanitation in institutions.

Geographic

Whilst the ToR stipulated that the focus of the evaluation would be all 13 municipalities in Timor-Leste, following discussion with the EMG, it was agreed that the scope would be reduced to the six municipalities (Liquiça, Aileu, Ermera, Bobonaro, Ainaro and Manufahi) that have been declared ODF, as well as the enclave of Oecusse which has not reached ALFA status. The rationale for this is that focusing on those municipalities that have been declared ODF/ALFA allows a detailed investigation of the strengths and weaknesses of the PAKSI process after it was deemed to have concluded, and in particular the reasons for any slippage. This also kept the evaluation process manageable and within the available resources (noting the difficulty of reaching some municipalities). Oecusse was added to enable further investigation of the additional challenges presented by the relative isolation of that municipality and suspected high rates of slippage.

Chronologic

The evaluation aimed to investigated progress towards the target of 100% ODF status over three significant time periods: 2005–11, when CLTS was first introduced to Timor-Leste; 2012–15, after the NBSP was enacted; and 2015–20, after the first institutional triggering event. CLTS programmes in the period from 2005 – 2011 were not investigated in the final report as data was not available. This period was discussed during KIIS and is documented in the timeline of sanitation at section 1.4.

2.4. Evaluation criteria and key questions

The ToR sets out the evaluation criteria (OECD-DAC criteria) of Relevance, Effectiveness, Efficiency, Impact, Sustainability and the UNEG evaluation criterion of Equity, Gender and Human Rights. Questions that the evaluation has sought to answer fit within these criteria. The key evaluation questions (KEQs) are shown in Table 1 and Table 2, and include several differences from the evaluation questions listed in the ToR. They are the removal of two questions under impact focused on diarrhoeal rates and U-5 mortality (for the reasons explained under 2.3 Scope), and the addition of four questions (Table 2, and shown in italics in Table 1).

[54] Botting, M., et al. (2010) Water and Sanitation infrastructure for Health: The Impact of Foreign Aid. Globalization and Health 6:12

Table 1 Key Evaluation Questions

Relevance	
R1	To what extent has CLTS been, and is still, aligned to national priorities and relevant given the country context, the existing WASH challenges, and the higher ambitions set out by the SDGs, particularly the government's ODF target by 2020?
R2	Were the various activities and outputs consistent to achieve the overall goal and intended impact related to the eradication of OD?
Effectiveness	
E1	To what extent were the CLTS programme objectives achieved or are likely to be achieved? In particular, has the collective practice of OD disappeared and the practice of handwashing at critical moments been taken up as a result of CLTS (at the time of certification, or shortly before or after)?
E2	To what extent has CLTS motivated households in the communities targeted to climb up the sanitation ladder and improve the quality of their latrines after achieving ODF?
E3	*Does a declaration of ODF status have meaning and value to residents? Is ODF status something that individuals/communities strive for? If so, why? Is it perceived to change anything?*
Efficiency	
EC1	Is the level of achievement of outputs and outcomes related to the eradication of OD, use of improved sanitation, handwashing practices, and sector coordination satisfactory when compared to the level of financial and human resources mobilised/used?
EC2	Were the objectives achieved on time, or have there been any significant delays in programme implementation and achievement of results, and if so, why?
Impact	
I1	*Were there any unintended impacts from CLTS interventions?*
Sustainability	
S1	To what extent have ODF status and the associated social norms such as handwashing been sustained since certification (in communities certified in the earlier years of the evaluation period), and what were contributing factors, both at community level and in the enabling environment?
S2	When sections of communities have returned to their original habit of OD, despite their villages attaining ODF status, how have GoTL duty bearers at municipal and central levels managed such slippage?
S3	*Is there a relationship between the sustainability of sanitation outcomes after CLTS programmes and the availability of water or co-implementation of water supply programs?*
Equity, gender equality and human rights	
EQ1	To what extent has CLTS been implemented in communities which had the greatest need for it, with the intention of reducing inequities? Have equity considerations been integrated at each stage of the programme cycle?
EQ2	To what extent has the programme effectively mainstreamed gender equality and empowerment of women and girls?
EQ3	*To what extent has the programme been inclusive of and responsive to the needs of people with a disability?*

Table 2 Additional Evaluation Questions

Evaluation Question		Rationale for inclusion
E3	Does a declaration of ODF status have meaning and value to residents? Is ODF status something that individuals/communities strive for? If so, why? Is it perceived to change anything?	*Provide a strong community perspective to the analysis of the effectiveness criteria*
I1	Were there any unintended impacts from CLTS interventions?	*Capture any effects of the programme that were not envisaged*
S3	Is there a relationship between the sustainability of sanitation outcomes after CLTS programmes and the availability of water or co-implementation of water supply programs?	*Determine if there is correlation between access to water and CLTS outcomes*
EQ3	To what extent has the programme been inclusive of and responsive to the needs of people with a disability?	*Capture the experience of people with disabilities during CLTS programs*

3. Evaluation Approach and Methodology

3.1. Evaluation Approach

The approach that was used in this formative, participatory, utilization-focused evaluation was designed to reflect the inquiry-based nature of the KEQs. This is a formative, as opposed to an impact or final, evaluation. Therefore, the focus on learning to inform future programming (utilisation focused) led to the use of a pragmatic mixed-methods theory-based approach in which quantitative data from household and organisational surveys is supported with qualitative data from focus group discussions (FGDs), key informant interviews (KIIs) and secondary quantitative data. This enabled the evaluation team to investigate beyond the 'what' and begin to understand the 'why' of successes and failures in CLTS programs.[55]

The approach to the qualitative data collection was designed to pay attention to the knowledge and voices of those who have experienced sanitation deficits and CLTS triggering. Social norms and attitudes to sanitation and hygiene were explored in group settings, as were gender and inclusion issues. The community-based data collection approach included self-reporting of quantitative data, enabling triangulation of information on sustained behaviour change. The approach within the FGDs was designed to be as participatory as possible, within pragmatic constraints such as requiring answers to specific sets of questions in a set timeframe.[56]

The quantitative data from the household sanitation coverage survey complemented the qualitative data by providing a statistically significant dataset of sanitation coverage in ODF municipalities. The survey enabled identification of differences and similarities between municipalities.

The approach taken to understanding the background of CLTS in Timor-Leste was a socio-historical one based on KIIs and document analysis. The researchers collected first-hand accounts of the environment and the events and decisions that were perceived to have led to change. A timeline was created and checked and the researchers developed a story of change through a narrative that highlights critical milestones (see section 3.1).

3.2. Data Collection Methods

The five data collection methods included collection of primary and secondary data, and drew on both qualitative and quantitative methodologies as shown in Figure 4.

Primary data sources included stakeholder (key informant) interviews, sanitation stakeholder organisational questionnaires, as well as community-level data collection through FGDs and household surveys. Secondary sources were existing documents, including evaluations, programme documentation and relevant agency reports. The following sections outline these methods.

[55] Tashakkori, A., Teddlie, C., (2010), Sage handbook of mixed methods in social & behavioral research, Sage.
[56] Teddlie, C., Tashakkori, A., (2009) Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences, Sage Publications Inc.

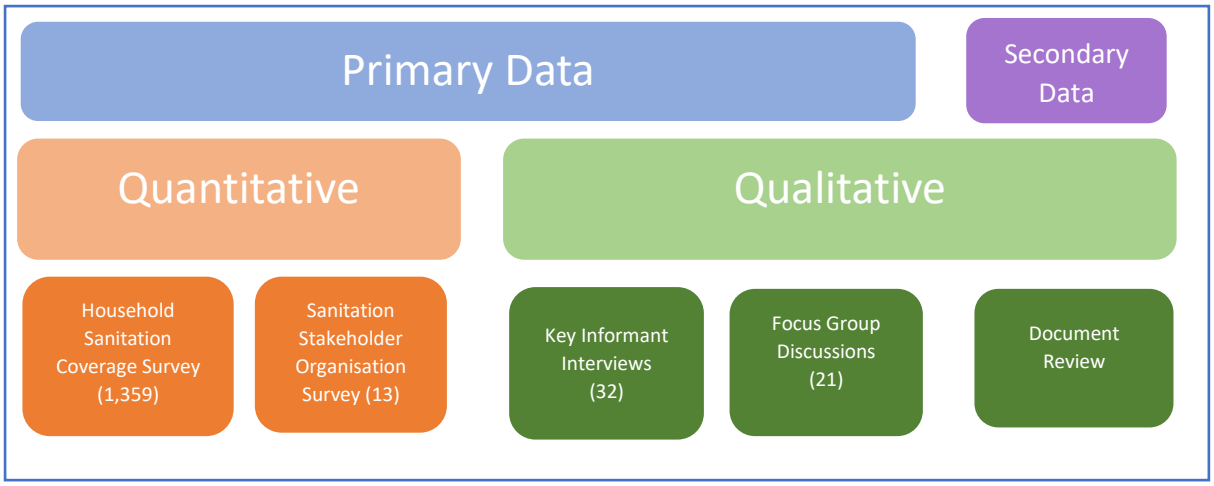

Figure 4 Data Sources & Types

Document review

During the inception phase, the evaluation team conducted a desk review of the major documentation pertaining to the sanitation sector in Timor-Leste since independence, the results of which were used to develop the sanitation timeline and context provided in Section 1 of this report. Ongoing document reviews included new information such as the Food and Nutrition Survey Timor-Leste 2020 Preliminary Results and the GoTL Gazettes with Decree Laws Initiating the new WASH Institutions.

The documents reviewed are listed in Annex IX.

Key informant interviews (32 individuals)

Interviews with key informants were used to develop an understanding of past events and political economy, as well as determine current organisational knowledge and activities. A list of the stakeholders interviewed is contained in Annex VII.

The key informants belonged to the following four groups:

- GoTL staff and ministers (5)
- Local NGO staff (10)
- International NGO staff and consultants (12)
- Municipal environmental health officers (5)

Separate interview guidelines were used for each group; these are attached to this report as Annex II. KIIs generally consisted of semi-structured interviews of approximately one hour's duration. KIIs in Timor-Leste were conducted in person, INGO staff and consultants were mainly contacted by phone and email.

Sanitation Stakeholder Organisation Questionnaire (13 organisations)

A questionnaire focusing on the data required to assess the KEQs on relevance and efficiency of CLTS-style programmes was sent to all known rural sanitation stakeholder organisations in Timor-Leste. This questionnaire requested data that is not publicly available, such as cost of sanitation programs, staff training and staffing ratios, relating to the past eight years. Many NGOs did not respond to this questionnaire or responded tardily and/or incompletely, reducing the data's usefulness within the evaluation. Of the thirteen responses there were 8 from local NGOs, 3 from the local office of International NGOs and 2 from multi/bi lateral agencies. The questionnaire is attached as Annex V.

Focus Group Discussions (21 groups, 546 individuals)

Focus group discussions were conducted in 21 aldeia across 7 municipalities.[57] Of these, FGDs were conducted in 18 aldeia from 6 ODF municipalities, and 3 aldeia in Oecusse, which is not considered ODF. There were 546 individuals involved across all the focus groups including 279 children/teens, 138 women and 129 men. The FGDs were designed to be as participatory as possible, ensuring the full involvement of diverse members of the community. Questions and processes were checked and modified in a community co-design process prior to data collection. Data was collected from segregated FGDs designed to enable feedback from specific community members such as women, young people and people with disabilities. The evaluation team tried to ensure that people with a disability would be invited to community FGDs. The chefe aldeias were made aware that the evaluation team would provide transport for any person with a disability and their carer if that would facilitate their participation. Participants with a disability were interviewed individually as well as being included in FGDs. Children were engaged in handwashing activities and discussions through story-telling, games and songs. Focus group sizes were originally intended to be around 12–16 people, but COVID-19 restrictions required smaller group sizes for some FGDs.

Children in a focus group discussion in Ainaro raise their hands to say that they wash their hands with soap. © FH Designs 2020

[57] Selected aldeias by municipality: Aileu: Fatumirn, Atoin, Tatilisame; Ainaro: Raebuti Udo, Canudu, Poelau; Oecusse: Oebaha, Maquelab, Baqui; Bobonaro: Biacou, Futurasi, Rairobo; Ermera: Centro Hatugao, Poeana, Bura; Liquica: Darumuda Pu, Manu Colohata, Raeme; Manufahi: Nalolo, Caikasa, Kledik.

Household Sanitation Coverage Survey (1,359 households)

A Household Sanitation Coverage Survey was undertaken by a team of enumerators across the 21 aldeias in which the FGDs took place, as well as several neighbouring aldeias. In smaller aldeias, enumerators sought to survey in as many households as possible where a suitable respondent was present. In larger aldeias, the team of enumerators mapped out the survey to ensure a representative geographic spread across the entire aldeia, and to avoid any bias associated with wealthier or poorer looking households. This provided information from 1,359 households; 1,182 households from within ODF communities, along with 177 households from Oecusse. There were 805 female respondents and 554 male respondents. The survey recorded evidence of OD, latrine use, access to water, handwashing facilities and soap availability. Latrines were photographed and GPS markers taken during the survey process. The survey included demographic information on gender and disability and vulnerable households, as well as distance to water sources and water security. The survey was designed to respond to the several KEQs, providing quantitative evidence around questions of effectiveness, sustainability and equity.

Secondary data

This evaluation relies somewhat on secondary data sources to provide historical trends and population information. The data sources accessed were:

- Timor-Leste Population and Housing Census 2015[58]
- Timor-Leste Demographic Health Survey 2016[59]
- Timor-Leste Demographic Health Survey 2009[60]
- Ministry of Health database of declarations of ALFA 2019 (not publicly available)
- Ministry of Health database of water and sanitation (not publicly available)

3.3. Data analysis

Sampling

FGDs: The sanitation sector in Timor-Leste currently implements programmes geographically at the municipal level so the agency with the main responsibility for sanitation programming in each municipality was asked to select the communities (aldeias) for community data collection. Twenty-one aldeias were visited, three from each ODF municipality and three from Oecusse, representing a total of 546 people attending community-based FGDs. The implementing NGOs were asked to select aldeias in locations where CLTS-style programmes were implemented within one of the following timeframes: 2005–11, 2012–15 and 2015–19. The latter two timeframes are based on two significant events: the passing of the NBSP (2012), and the first CLTS-style institutional triggering in Bobonaro (2015). This was to enable the evaluation to draw conclusions about patterns of functionality and sustainability over time, and generate further insight into the differences in programming based on those events. The timeframes were mostly recent though, and meaningful longitudinal comparison was not possible due to confounding factors of the number of different development programmes that had been provided in most aldeias.

[58] https://www.statistics.gov.tl/census-2/
[59] https://www.dhsprogram.com/publications/publication-fr329-dhs-final-reports.cfm
[60] https://dhsprogram.com/publications/publication-fr235-dhs-final-reports.cfm

Household Survey: The household survey was designed to achieve a balance between an acceptable confidence interval and the resources available to conduct the survey. The survey was conducted in all of the 21 aldeias selected for the FGDs, as well as up to 5 neighbouring aldeias (depending on the geographical size and number of houses). The demographic data was not checked for underlying bias. Conducting household surveys prior to FGDs provided the FGD facilitators with some local knowledge which they were able to use to guide the lines of enquiry in the FGDs. Geographic clustering of survey locations allowed the data collection team to travel together so that the enumerators could continue to carry out the survey whilst the FGDs were being conducted. In total 61 aldeias were included in the household survey, as shown in Table 3.

A CLTS evaluation member checks a latrine, as part of the household survey, in Bobonaro. © UNICEF 2020 / Benevides

The anticipated sample size for each municipality was checked using the Yamane simplified formula[61] to ensure the evaluation would be representative of all ODF communities. The determination of the sample size per municipality was based on a confidence interval of 95%, but actual sample sizes achieved varied due to circumstances on the ground at the time the surveys were conducted (weather, road conditions, geographical spread etc), and the margins of error (MoE) for each municipality estimated on the basis of the sample sizes achieved. As shown in Table 3, despite the variation in the sample sizes across the municipalities, the MoE were all within 10%, and, with the exception of Ainaro where circumstances hindered the ability to collect the desired number of surveys, most were around 7%.

Table 3 Household Survey Sampling

Municipality	Rural Pop'n[62]	Sucos	Aldeias		Households			Margin of Error
			Total	Surveyed	Total	Planned	Actual	
Aileu	54,106	31	127	10	7,231	204	181	7.4%
Ainaro	65,165	21	129	5	9,546	204	122	9.0%
Bobonaro	99,956	50	192	7	15,557	204	167	7.7%
Ermera	136,010	52	275	12	19,341	204	211	6.9%
Liquiça	78,700	23	134	10	11,129	204	247	6.3%
Manufahi	56,844	29	137	10	7,858	204	254	6.2%
Oecusse	71,486	18	64	7	12,101	204	177	7.5%
Total	562,267	224	1,058	61	82,763	1428	1359	2.7%

[61] Yamane (1967), cited in Israel, G., (1992) Determining Sample Size, Institute of Food and Agricultural Sciences, University of Florida

[62] 2019 population figures projected from 2015 Government census data

Data processing and analysis

The application of a mixed-methods paradigm to this evaluation provided multiple data sources for each of the KEQs. This allowed for triangulation, and the most effective use of the relatively small overall sample size, to ensure that the analysis and conclusions are both robust and reliable.

Document analysis

In addition to the initial document review, sanitation and WASH programme documents from current sanitation agencies in Timor-Leste were reviewed as they were made available. The analysis interrogated specific aspects of programme planning and delivery, such as engagement with gender empowerment and equity issues. This information is summarised herein with respect to the reviewed national policies, goals and strategies and the validated retrospective ToC (see section 1.6) to assess alignment of government and non-government partners.

Monitoring data

Quantitative monitoring data from government agencies, non-government agencies and the sanitation stakeholder organisation questionnaire was aggregated to provide up-to-date descriptions and graphs of recent trends in CLTS-style delivery, ODF coverage and slippage rates.

Programme planning data from agencies was used to project an ODF achievement timeline to total sanitation coverage across Timor-Leste.

FGDs

Data from the FGDs included team debriefs on the day of the FGD to capture any unrecorded observations or 'interesting' notes that the team made. Notes made during the FGDs were typed by the recorder, checked by the facilitator and translated (when required).

Semi-quantitative data elicited from the FGDs were tabulated and compared to survey and programme data. This data was analysed at the village level and aggregated across villages to identify overall trends.

Qualitative data from the FGDs was used to create village-level summaries of the overall experiences of residents with respect to sanitation programming. This data was also aggregated and deductively coded by question and theme, and summarised for verification and conclusions.

Household Sanitation Coverage Survey

The household survey collected demographic and location data, as well as photographs of sanitation and hygiene infrastructure, enabling the enumerators' classifications of toilet types and features, as well as handwashing facilities, to be checked. The survey included standard questions drawn from the Equity Tool[63] to enable the household wealth quintile to be determined. Marginalised or vulnerable households were identified by questions to identify female- or child-headed households as well as the Washington Group[64] standard short set of questions on disability to allow disaggregation of the data by incidences of disability.

[63] www.equitytool.org

[64] www.washingtongroup-disability.com

KIIs

The KIIs were analysed in Dedoose (qualitative data analysis software) using thematic coding methods to summarise the overarching knowledge base, intentions and expectations of sanitation stakeholders in Timor-Leste. Themes aligning with the KEQs were aggregated for broader analysis.

3.4. Ethical conduct and compliance with UNEG/UNICEF Evaluation Norms and Standards

The evaluation was undertaken in line with the UNEG Ethical Guidelines for Evaluation (2008) (as the evaluation planning began before the availability of the updated UNEG Ethical Guidelines for Evaluations (2020)), UNEG Norms and Standards of Evaluation (2016), UNICEF-Adapted UNEG Evaluation Reports Standards (2017), Revised Evaluation Policy of UNICEF (2018) and the UNICEF Procedure for Ethical Standards in Research, Evaluation, Data Collection and Analysis (2015). The evaluation adhered to the criteria for integrating gender equity and human rights as per the UN-SWAP Evaluation Performance Indicator (2018), the UNEG Guidance on Integrating Human Rights and Gender equality in Evaluations (2014) and Integrating Human Rights and Gender Equality in Evaluation – Towards UNEG Guidance (2011).

All research assistants signed a code of conduct for working with children, and the senior researchers signed the UNEG[65] Code of Conduct for Evaluation in the UN System and successfully completed UNICEF-recommended online ethics program. The international team leader has read the UNEG Ethical Guidelines for Evaluations (2020) and has abided by the pledge throughout the evaluation. The evaluation team ensured that these standards were met throughout the evaluation by ensuring the transparency and credibility of the research, respect for the research participants' rights and culture, gender sensitivity, and inclusivity and access for those with a disability or other vulnerability.

Specific actions taken to align with ethical frameworks and practises:

Approval

- Ethics approval was sought and gained through the INS (National Institute of Health), as per GoTL requirements. Ethics approval was gained for the evaluation programme overall, with the most significant aspects dedicated to ensuring that the community based-data collection was culturally appropriate and ethical in all areas.

Consent and Confidentiality

- The FGD was co-designed with a community in one of the target municipalities. During this this process the team explained the purpose of the evaluation and the key criteria and then worked with the community to explore which draft questions were appropriate and to rework the questions that weren't appropriate in their original forms. The evaluation team and the community also trialled the activities to ensure that they were appropriate to a community group and that all members could participate.

[65] United Nations Evaluation Group

- The researchers ensured that informed consent was given for surveys, interviews, FGDs and photographs. All participants were assured that they did not have to answer questions or stay for the duration of discussions if they chose not to (and in fact several people walked in and out of FGDs at various times).
- Social norms were investigated using a 'voting' activity where participants placed marbles in baskets. This provided an opportunity for participants to give an anonymized opinion of what is important and what their peers "should" do.
- Maintaining confidentiality is difficult due to the small size of the sanitation sector in Timor-Leste but has been respected as appropriate, and permission was sought for the inclusion of any direct quotes in this report.

A CLTS evaluation team member makes sure that a mother participating in the evaluation in Oecusse understands the consent form.
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Child Safeguarding

- The international team leader has a valid Australian "Working with Children Check" and was the focal point for any issues that may arise.
- All researchers and assistants signed a code of conduct for working with children.
- Children were invited to join a discussion group that included local songs and a story about handwashing with follow-up questions and games.
- Children's consent was verbal as they were asked to join the group and were reassured that they didn't have to answer questions or participate in activities if they didn't want to.
- The children's groups were held concurrently, and within visibility of, the community FGDs to ensure that children were safe and carers were assured of their whereabouts.

Equity and Inclusion

- Women were included in community discussions as well as gender segregated FGDs.
- The evaluation team had gender equality both in numbers and in the team responsibilities.
- Persons with a disability were included in community discussions and were offered separate interviews to enable their engagement with the evaluators in a comfortable manner.
- One team member with a disability required some adjustments to work practices, which were enabled by the team.

Health and Environment

- The evaluation team acted in a COVID-safe manner by wearing masks when possible, providing and using a handwashing facility at each FGD, maintaining physical distance as much as possible, and, during times when COVID-19 transmission was of particular concern, reducing numbers of community members invited to FGDs. Most FGDs were held in outdoor or well-ventilated 'sede suco' areas unless it was raining.

- The evaluation team took on responsibility for ensuring that their environmental impact was low by using reusable water bottles and providing bulk drinking water in each vehicle. This saved an estimated 7kg of plastic waste.

Training and Capacity Development

- Capacity development with local enumerators within the evaluation was considered an essential and ethical part of the evaluation, both to ensure quality of data collection and to ensure that working as part of the evaluation team left local staff in a better position to find further work or to excel in their studies.
- Enumerator training included ethical research practises in collection and reporting of data, working with children and gender and inclusion. Staff were also trained in using the data collection instruments and informed consent.

Reporting

- Logistics for reporting back to communities at the end of the evaluation were finalised prior to the lead evaluator leaving Timor-Leste, to ensure that this important component was not 'left off' the evaluation. This final aspect of the evaluation involved the team members returning to 18 of the 21 aldeias sites of the FGDs, after COVID-19 travel restrictions were lifted, to report back to the communities who had hosted the team and had shared their knowledge and experiences of sanitation programs. As community members were busy carrying out agricultural works, the team members updated the aldeia and/or suco chiefs, who appreciated this initiative. The reporting back could not be carried out in Oecusse, due to travel and logistical difficulties.

A CLTS evaluation team member meets a suco chief in Ainaro municipality to give her information on the evaluation findings, and hand out photos of the field work with community members.
© FH Designs 2021

- Sanitation Agencies in Timor-Leste have been involved through workshops, key informant interviews, a questionnaire and the evaluation reference group. This final report will be available to all sanitation agencies in Timor-Leste.

3.5. Quality Assurance

The following steps were taken to ensure quality of data and reporting.

- Training of the team was undertaken by the international team leader and the local technical expert. Training occurred at several stages, over several days, and included trialling the survey and giving feedback to enumerators.
- Supervision was continuous – the international team leader and/or the local technical expert were always in the field with the survey team to provide support when needed.
- FGDs were audio recorded when possible, and recordings used to augment written notes.
- Latrines and handwash points were photographed and the images used to check data and generate feedback for enumerators.
- GPS location for each survey ensured that surveys were conducted in the desired locations.
- Translations between English and Tetun were checked by the local technical expert.
- Participation and feedback were sought from communities and sanitation sector staff throughout the evaluation.
- Feedback on the draft report from the Ministry of Health, Environmental Health Department was given verbally via discussion of the document with the national technical expert.
- Written material was reviewed by at least one director of FH Designs before submission to the EMG.

Additionally, UNICEF, through the EMG and the Evaluation Reference Group (ERG), provided quality assurance on all evaluation tools and documents based on UNEG and UNICEF norms, standards, processes and tools, as well as on other best practices related to WASH programme evaluations. This report will be submitted to UNICEF's global evaluation reports oversight system (GEROS) for an independent quality rating. The report and the review will be made available on the UNICEF website in compliance with the UNICEF commitment to transparency of evaluation findings.

3.6. Limitations, Constraints and Mitigation Strategies

This section lists the key evaluation limitation or constraints and the mitigation strategies that were developed and used to minimise impacts on the evaluation.

Limitations & Constraints	Management & Mitigation
Data was difficult to obtain from MoH because recent monitoring results had not been collated. The MoH was regularly (and reasonably) diverted by issues arising from the global COVID-19 pandemic.	Offers to assist in data collation were made and regular contact kept with heads of department (several of whom changed positions during the evaluation).
The initial stakeholder workshop was delayed due to the focus on COVID-19 preparatory work by both UNICEF and the MoH. This made it much more difficult to ensure collaboration and cooperation by stakeholder agencies both for logistics planning and collecting agency data.	The evaluator's existing network was used to request introductions to stakeholders, resulting in one-on-one meetings that achieved some, but not all, of the aims of the initial workshop. In particular, individual meetings could not create the hoped-for sense of sectoral unity around the evaluation. A Facebook group was set up to share information, but this failed to become a 'community of practice' space.

The COVID-19 pandemic caused UNICEF Timor-Leste to ask all international consultants to postpone their work. This led to a seven-month hiatus in work at the start of field data collection.	The evaluation team agreed to pause the evaluation and renegotiate timeframes when travel became plausible again. The local team also agreed to a hiatus. During the hiatus, two local team members became unavailable for recommencement; replacements were found and trained.
The COVID-19 pandemic resulted in restricted numbers in some focus group discussions.	The evaluation team followed government advice on the numbers of people allowed to gather. As this varied throughout the evaluation, some FGDs had very small numbers of participants in order to comply with government restrictions.
The response from sanitation agencies to the stakeholder questionnaire was rarely comprehensive or provided in a timely manner. This affected some of the quantitative results, especially the analysis of responses to efficiency KEQs regarding comparative cost/per latrine.	The evaluation team requested MoH support in ensuring that agencies understood the nature of the evaluation and its importance to the MoH. Reminders were delivered by phone, email and in person. In some cases, team members worked with agencies to collate the data. However, there are still gaps in the data.
After the evaluation restarted, seasonal rains combined with poor road conditions to make data collection locations difficult to access. The difficulty of travel also reduced the number of municipalities that could be visited each week and therefore extended the number of weeks of fieldwork. In some weeks, fieldwork could not be completed because of the end of year break.	This resulted in judicious selection of aldeia that would be accessible during heavy rains, but means that more remote and isolated aldeia are less represented within the dataset. This is noted as a weakness in the data. The extended data collection period caused ongoing delays in analyses and reporting for the evaluation.
In the field, it is difficult to tell the difference between a septic tank and soakage pit, so these two disposal methods may not be accurately labelled within the survey.	Septic tanks and soakage pits are treated as soakage pits for the purposes of analysis, because they are more likely to be such in most places. The evaluation team also investigated septic sludge removal in rural areas; no septic sludge removal services exist outside of Dili, so the safety concerns are the same as with a soakage pit.
ODF/ALFA municipalities are not evenly dispersed across Timor-Leste, so it is possible that the information collected may not reflect the experiences of all households.	Sanitation implementation staff who had worked with communities of different municipalities were involved in workshops and the reference group in order to broaden the perspectives provided.

The social norms questions to determine empirical expectations were presented as *Is it very important/important/not important that:* *Your friends and neighbours use a latrine rather than defecating outside* *Your friends and neighbours wash their hands regularly with soap* But they should have been asked in terms of what people believe their friends and neighbours actually do.	This issue was only recognised during the analysis of the strength of social norms. The FGDs included further questions of a similar nature (eg does everyone in this village use a latrine?) so these were combined with the social norms questions to estimate the strength of the social norms developing around latrine use and handwashing.
Many communities had had other water and sanitation programs, including subsidised latrine building in the early 2000s, hygienic suco programming since 2018, and verification and remediation exercises led by ALFA secretariats between 2016 and 2019. Amongst a plethora of other NGO- and government-led development programs, it was frequently difficult for participants to identify particular activities as 'CLTS/PAKSI' style programs.	The evaluation team visited some communities where CLTS-style programming occurred prior to 2015, but in most communities, it had occurred after 2015. Attempts to assist communities in distinguishing the different programmes by talking with them about activities that are typical for CLTS/PAKSI style programmes resulted in an understanding that different groups of community members may have participated in the different activities. Because of these difficulties data is not disaggregated by timeframes.

3.7. Evaluation Implementation

Timeline

The evaluation was designed to be completed within 22 weeks, with a series of deliverable outputs evenly spaced across the workload. The reality of the evaluation was that it included a significant interruption due to the COVID-19 pandemic and further obstacles related to unavailability of flights and mandatory quarantine regulations imposed on the international team leader moving between Australia and Timor-Leste. This required extra time for additional training and repeated logistic work. It also resulted in fieldwork being conducted during the rainy season and being prolonged over the end-of-year holidays. Annex XI shows the intended timelines and actual work dates.

The agenda for FGDs and surveys in the municipalities was the result of evaluation team conversations/negotiations with NGOs, chefe sucos, chefe aldeias, the EMG and UNICEF logistics. It reflects the suggestions of chefes and NGOs, the availability of transport and the availability of team leaders, as shown in Annex XII.

Evaluation Management

The evaluation was requested by the MoH and was managed by UNICEF Timor-Leste via an EMG and ERG. The EMG consisted of UNICEF Timor-Leste's Chief of Planning, Monitoring and Evaluation (PME) and Social Policy, UNICEF Timor-Leste's Chief of Child Survival and Development, UNICEF Timor-Leste's WASH specialist, and an MoH delegate. The EMG provided oversight and technical inputs as well as being available for ongoing discussion throughout the evaluation. It was responsible for contractual aspects, day-to-day oversight and management of the evaluation, as well as budget, and facilitated communications with the ERG and other stakeholders as required. The EMG was also responsible for

the quality of the evaluation, checking whether its findings and conclusions were relevant and recommendations were implementable, and proposing improvements. The UNICEF Timor-Leste Chief PME & Social Policy was responsible for approving deliverables and payments. In addition, the EMG will disseminate the evaluation findings and follow-up on UNICEF's management response to the evaluation recommendations.

The ERG had the following roles:

- provide advice to the evaluation management team, as requested
- contribute to the preparation and design of the evaluation
- provide feedback and comments on the draft inception report and on the technical quality of the work of the consultants
- assist in identifying internal and external stakeholders to be consulted during the evaluation
- participate in review meetings organized by the EMG
- provide comments and substantive technical feedback to ensure the quality of the second draft and final evaluation reports
- propose improvements/inputs to the preliminary recommendations
- promote learning and knowledge sharing based on the evaluation results
- contribute to dissemination of the findings of the evaluation

The evaluation reference group (ERG) involved fifteen individuals from a range of organisational stakeholders. This group expanded over the duration of the evaluation as awareness of the evaluation increased and interest was expressed in contributing to the outcomes. The group consisted of 2 representatives from the Ministry of Health, 2 representatives from the National Institute of Health, 1 representative of the Prime Minister's Office, 5 representatives from local NGOs, 1 representative from a bilateral agency, 1 representative from a local office of an International NGO, 1 representative of UNICEF Timor-Leste and 2 representatives of UNICEF's East Asia and Pacific Regional Office.

Team composition

FH Designs was contracted to conduct the evaluation on behalf of the MoH with support from UNICEF Timor-Leste. FH Designs is an Australian-based consulting firm that specialises in design and evaluation of WASH and other development programs. The evaluation team experts (Annex XIII) have all worked and/or lived in Timor-Leste, and collectively have substantial experience in WASH, gender, public health and development. The research assistants (Annex XIII) were all Timorese, including three youth and nine older adults. They mostly hold, or were nearing completion of, degrees in public health or development. The two staff members without degrees have previously worked in research logistics and translation with the International Team Leader.

4. Evaluation Findings

This section describes the evaluation analysis and findings. The description is structured as per the Evaluation Matrix, whereby each question (following OECD-DAC/UNEG evaluation criteria) is addressed separately. A separate section is included to respond to non-OECD-DAC criteria and cross-cutting themes that arose during the evaluation and analysis.

The findings were generated within a mixed-methods paradigm using triangulation of data to ensure rigour. As detailed in section 3, data collection methods included a household survey (administered to 1,359 respondents), and FGDs held in 18 ODF communities and 3 non-ODF communities from 7 municipalities (Figure 5). During these focus groups, 546 community members were consulted, including 129 men, 138 women, and 279 teenagers and children. Furthermore, 32 KIIs were conducted with informants at the national, municipal, *posto-administrativo*, and community levels.

Overall, at least 1,950 individuals were consulted during the evaluation.

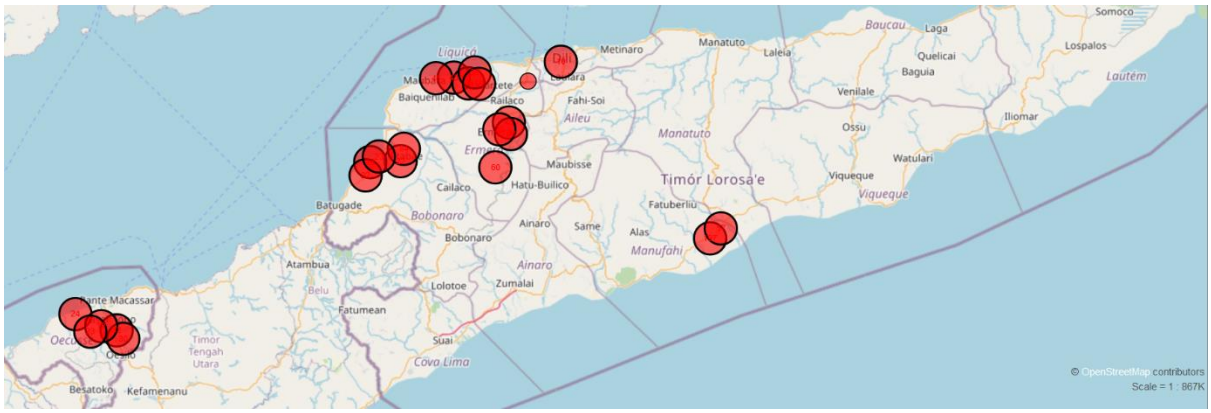


Figure 5 Survey sites across ODF communities and Oecusse in Timor-Leste

4.1. Relevance

This section responds to two evaluation questions regarding the alignment of CLTS-style programmes with government policy, and the alignment of CLTS-style activities with the ODF goals of the government.

Relevance 1

To what extent has CLTS been, and is still, aligned to national priorities and relevant given the country context, the existing WASH challenges, and the higher ambitions set out by the SDGs particularly the government's ODF target by 2020?

Summary of assessment

CLTS is well aligned with national priorities

Government staff indicated that sanitation was, and still is, perceived to be an important factor in the development of the country and the health of its population. By 2022 it is expected the twelve out of thirteen municipalities will reach 100% ODF status on the basis of CLTS-style programme implementation. Given an environment of financial constraints, coupled with relative political stability

and will towards achieving an ODF country, CLTS-style programmes are still an appropriate sanitation programming option.

Evidence for assessment

This question was assessed using a qualitative indicator designed to detect a shift in the priorities or preferences of the GoTL in sanitation programming across the country. The overall outcome from both KIIs and document reviews is that while CLTS-style implementation has changed between 2012 and 2020, these changes have been in line with government needs and expectations and in response to issues that have arisen.

By 2020, with the target of 100% ODF having been missed, some respondents indicated that finance or budgets were a cause for concern and delays against the goal of reaching 100% ODF status across the whole country. This concern is based mainly on the cessation of NGO funding to ALFA secretariats, which has not yet been replaced by municipal budgeting.

With six municipalities already declared ODF, UNICEF and PHD are the two remaining international agencies overseeing the remaining municipal efforts to reach ODF. These agencies indicated that they expect all municipalities except Oecusse to reach ODF status by 2022. In the first meeting of the recently renewed sanitation working group, held in March 2021, the sanitation goal agreed by the sector is to reach 100% ODF across Timor-Leste by 2024. This 2024 target is not confirmed in policy documents. Key informants generally considered that this goal is achievable, although a few felt that the timeframe may be too short.

High level officials in the Ministry of Health, including the Minister, have observed the results of CLTS-style programmes and are happy that it is achieving its intended outcomes. These leaders both indicate that the MoH will ensure that household sanitation is strongly promoted through CLTS-style programmes and further sanitation programs, and that achieving an ODF country in line with the SDGs is still a strategic part of national development planning.

The 2012 NBSP was produced as a result of the four-year Joint Sanitation Evaluation that enabled decision-makers to access external expertise and experiential learning in order to make sound judgements about national water and sanitation needs and Timor-Leste's financial and human resource capacity to meet those needs. The sanitation sector responded to the NBSP by ensuring that almost all sanitation programming moved to CLTS-style programs. The only dissenting voice was (and still is) CVTL, whose sanitation programmes are integrated with whole-of-community livelihoods programs. While implementing CLTS-style programs, many NGOs continued to integrate water and sanitation, often using the promise of water supply as the incentive to encourage community-wide latrine building. At least one NGO still integrates water and sanitation programming.

The 2013 National Strategic Plan for Rural Sanitation[66] set a goal of 2030 for latrines to be available in all households in Timor-Leste. This goal provided impetus for training staff in CLTS-style triggering methods.

In 2015 the BESIK led sectoral development of the PAKSI handbooks, contextualised for Timor-Leste, responded to some of the issues that were seen with CLTS-style programs: quality of latrines, sustainability, gender equity and inclusiveness of programming. The other significant response to

[66] Politica Nacional de Saneamento Basico de Timor-Leste (RDTL, 2011)

issues of quality, sustainability and appropriateness of latrine design was a trial of, and report on, low-cost latrine designs for rural Timor-Leste[67].

In 2015, the move from triggering communities to triggering municipalities is perceived to have been a game changer in terms of speed of roll-out and a commitment by community leaders to reach ODF status by 2020. Along with the decentralisation of government services to municipal authorities, institutional triggering led to the creation of municipal-based ALFA secretariats with responsibility for sanitation planning, verification and monitoring.

The Government's 2019 report on the implementation of the SDGs in Timor-Leste[68] draws explicit links between working towards improved water and sanitation and working towards improvements in child nutrition, child survival, mothers' wellbeing and a productive workforce. The report reaffirms the government's commitment to implementing SDG 6 Clean Water and Sanitation within Phase 1 of the Timor-Leste SDG Roadmap (Figure 6).

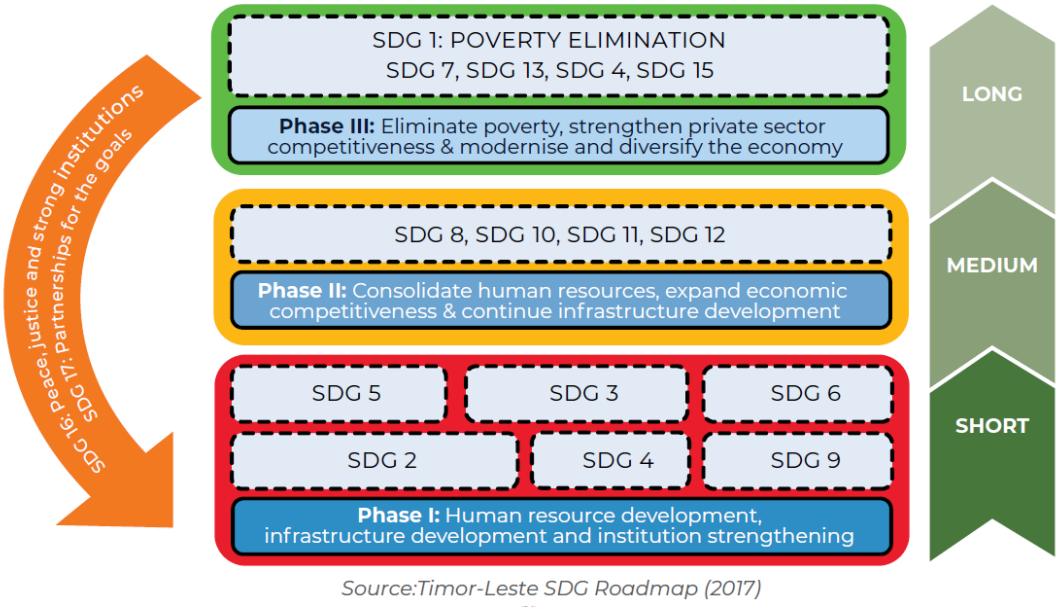


Figure 6 Planned phases for SDGs achievement

Relevance 2

Were the various activities and outputs consistent to achieve the overall goal and intended impact of eradication of open defecation?

Summary of assessment

Activities and outputs are likely to achieve the eradication of open defecation

Eradicating OD in Timor-Leste has been a challenge for the entire WASH sector. From a baseline of 63% of households having access to, and using, a latrine in preference to OD in 2009,[69] the sector has achieved remarkable progress to 2020, with an updated estimate of 93%.

[67] Low Cost Latrine Designs for Rural Timor-Leste; Executive Summary. Plan International Timor-Leste, (2015)
[68] From Ashes to Reconciliation, Reconstruction and Sustainable Development; Report on the Implementation of the Sustainable Development Goals; Voluntary National Review of Timor-Leste (2019)
[69] Timor-Leste Demographic and Health Survey, RDTL & ICF (2009-10)

The activities of agencies within the sector over 2012–20 were generally well aligned with the goals of eradicating OD, resulting in outputs that ensured significant nationwide progress on the first step of the sanitation ladder.

Evidence for assessment

This question was assessed by comparing the main sector activities over 2012–20 against the reconstructed ToC (Section 1.6 Theory of Change, Figure 3) developed in consultation with stakeholders at the sanitation sector workshop in November 2020.

Sanitation agencies have worked together and separately to progress sanitation coverage in Timor-Leste, from the initial insight that introduced CLTS-style programmes as a pilot in 2006 to the full engagement of the sector with the joint sanitation evaluation and policy process that led to the NBSP in 2012. From 2012, most major NGOs made efforts to change their programming to align with the GoTL's stated preference for non-subsidised sanitation programme methodologies. Based on current data from NGOs regarding household sanitation access for each municipality, 93% of households in Timor-Leste have access to a latrine. The household survey indicated an average slippage to open defecation of 3.8% of households, including this rate of slippage brings the total percentage of households with latrines to 91% of households in Timor-Leste. Throughout this document the figure of 93% latrine access is used rather than the lower figure of 91% latrine access.

Table 4 Latrine access by households in Timor-Leste

Municipality	**Households with latrines (based on NGO reports)**	**Number of households (2015)**	**Number of households with latrines**	**Number of households with latrines (incl. 3.8% slippage)**
Aileu	100%	7,598	7,598	7,309
Liquica	100%	11,885	11,885	11,433
Ermera	100%	20,671	20,671	19,886
Ainaro	100%	10,601	10,601	10,198
Bobonaro	100%	17,635	17,635	16,965
Manufahi	100%	9,023	9,023	8,680
Covalima	98%	12,564	12,313	12,087
Viqueque	92%	15,297	14,073	14,073
Lautem	90%	12,050	10,845	10,845
Oecusse	74%	14,345	10,615	10,615
Manatuto	99%	6,338	6,275	6,097
Dili	97.5%	42,485	41,423	41,423
Baucau	70%	22,976	16,083	16,083
Total		**204,597**	**189,130 (93%)**	**185,694 (91%)**

In Table 5 and Table 6 below, the separate activities of the sector are outlined in chronological order and aligned with inputs and outputs from the ToC. The right-hand column of the tables shows activities that are incomplete, or which should be ongoing in order to reach the 2024 target of 100% ODF.

Table 5 Inputs based on reconstructed Theory of Change

INPUTS (ToC)	ONGOING or INCOMPLETE INPUTS (ToC)
Government and Donor Finances • Agencies consistently advocated with donors for sanitation programmes throughout Timor-Leste • Government budgets included public health, INS and other sanitation-related budget lines	Government and Donor Finances • The sector will require ongoing financing both to complete the activities intrinsic to CLTS and to ensure that verification, monitoring and follow-up is continued until there is a strong enough change in social norm for sanitation behaviours to be self-sustaining
Training and Technical Skills in CLTS and Sanitation • Agencies trained staff in CLTS implementation • PAKSI, a contextualised version of CLTS for Timor-Leste, was developed • PAKSI training manuals were shared with the sector • Trials and production of the booklet "Low-cost latrine designs for rural Timor-Leste"	Training and Technical Skills in CLTS and Sanitation • Training new staff and ensuring that current staff have the skills to deal with new issues that will arise in the 'last push' are still important factors in reaching 100% sanitation
Government Coordination and Data Collection • Significant leadership from two agencies and the GoTL saw networks of WASH practitioners arise to provide support structures and knowledge translation amongst agencies • Sustainability of ODF outcomes have been evaluated independently • Verification exercises were supported and undertaken through ALFA secretariats at municipal level	Government Coordination and Data Collection • Creating learning networks of sanitation expertise, including health workers, is essential to recognising and remediating issues as they arise during the final stages to reach ODF • Having clear data collection and collation processes, with timelines and a feedback mechanism is important to ensuring that monitoring activities are useful and can be acted upon
Government Policy (non-subsidisation of sanitation) • National Basic Sanitation Policy 2012	
Sanitation Marketing and Communications • Trials of sanitation marketing and behaviour change communication were initiated in Bobonaro and other municipalities	Sanitation Marketing and Communications • Sanitation marketing and communications will be important in sustaining change and in encouraging movement up the sanitation ladder in conjunction with the hygienic suco program

Table 6 Outputs based on reconstructed Theory of Change

OUTPUTS (ToC)	ONGOING or INCOMPLETE OUTPUTS (ToC)
All community health workers have capacity for triggering and post-ODF monitoring • INS trained health workers, environmental health officers, and others, in PAKSI implementation and verification processes	All community health workers have capacity for triggering and post-ODF monitoring • There are still many community health workers to be trained, particularly in areas where CLTS/PAKSI is yet to be implemented or those areas where CLTS was implemented before the ALFA secretariats were instituted
Community leaders are committed to ensuring their communities are ODF • Kamal Kar was invited to Timor-Leste to train and inspire the sector; he worked with community leaders and conducted the first institutional triggering in Timor-Leste • Institutional triggering was taken up by the sector and community leaders signed commitments to support the elimination of OD in their municipalities	Community leaders are committed to ensuring their communities are ODF • Some institutional triggering may need to be revisited in the wake of leadership changes
All OD communities are triggered • Water supply programmes were de-linked from sanitation programmes – allowing for more and/or faster sanitation programme completions • Environmental health officers and municipal leaders are involved in triggering events, adding gravitas to the events and ensuring that communities are aware that household sanitation is expected in every household	All OD communities are triggered • There are still some OD communities that have not been triggered, and others where triggering is an inappropriate response, either because it has been tried and is ineffective, or due to other circumstances such as the small number of OD households in a community

4.2. Effectiveness

This section responds to questions about whether the use of CLTS-style implementation, as the main sanitation programme style in Timor-Leste, has resulted in positive sanitation and hygiene behaviour changes.

Effectiveness 1

To what extent were the CLTS programme objectives achieved / are likely to be achieved? Has the collective practice of OD disappeared and the practice of handwashing at critical moments been taken up as a result of CLTS (at the time of certification, or shortly before or after)?

Summary of assessment

There has been a change from OD to latrine use and a change from poor hand hygiene to handwashing with soap as a result of CLTS-style programmes in Timor-Leste.

The proportion of households in Timor-Leste that have gained access to a latrine since 2009 is considerable, at 32% of households in the nation. This progress is mostly attributable to PAKSI/CLTS-style programming, because this was the primary method used throughout the country for sanitation programming during this period.

Evidence for assessment

This question was assessed using secondary population and health census[70] data and primary household survey data. Survey results in Table 7 shows household latrines based on the JMP service level definitions where 'safely managed' indicates the use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site. There is no off-site disposal in the municipalities surveyed so latrines are only classified as safely managed if they are connected to septic tanks or the pit has been filled and the safely disposed of at some point.

In 2009, the DHS[71] indicated that 63% of households had access to a latrine.

In 2016, the DHS[72] showed 73% of households had access to a latrine.

In 2020, based on information from NGOs and the Department of Health, 93% of households have access to a latrine.

Table 7 Household Latrines (post CLTS) in ODF Municipalities – Oecusse is not ODF

Total (households)	Municipality							
Sanitation	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Safely managed	11.0%	2.5%	2.4%	1.9%	5.3%	4.3%	4.6%	2.3%
Basic	60.8%	64.8%	88.0%	47.4%	58.3%	66.5%	64.3%	46.3%
Limited	7.7%	8.2%	5.4%	12.3%	6.9%	13.4%	9.0%	6.8%
Unimproved	19.9%	23.8%	4.2%	25.1%	21.9%	15.4%	18.4%	23.7%
Open defecation	0.6%	0.8%	0.0%	13.3%	7.7%	0.4%	3.8%	20.9%

9.3% of households share a latrine with relatives or neighbours and 1.4% of households use a public latrine close to their house. Reasons given for sharing a latrine included cost, collapse of a previous latrine, and households where a young couple are living near family but take time to build a house and then a latrine.

PAKSI programmes explicitly trigger handwashing with soap. Despite this, the data for handwashing with soap is more complex as there may be rapid changes in status due to the temporary nature of many handwash facilities – often a bucket or plastic bottle which may be moved, destroyed or

[70] Timor-Leste Demographic and Health Survey, RDTL & ICF (2016)
[71] ibid
[72] ibid

replaced. In 2019 and 2020 many households were provided with 'handwashing bucket with tap' as part of the national response to the COVID-19 pandemic, these buckets were observed by enumerators to be present for handwashing in many cases, but used for purposes other than handwashing as well, for example one had drinking water in it, while another held dirty dishes. In the rural areas of Timor-Leste visited by the evaluation team, the most obvious signs of the public campaign for handwashing, part of response to COVID-19, were large banners with descriptions of how to wash your hands (Figure 7) and the 'bucket with tap' (Figure 8) broadly distributed to households to ensure handwashing is available to all. Discussing changes in handwashing with communities revealed that most people had increased the frequency of handwashing at the onset of public health messaging, and are still washing their hands more often than before the onset of COVID-19, but less often than at the peak times of public messaging.

Figure 7 Handwashing banner

Figure 8 Handwashing buckets distributed in response to COVID-19

The DHS survey[73] indicated that in 2016, 90% of households had access to handwashing facilities whereas the survey results (Table 8) indicate that, despite recent distribution of handwashing buckets, less than 75% of households have access to a handwashing facility in 2020.

Table 8 Handwashing facilities (post-CLTS) in ODF municipalities – Oecusse is not ODF

Total (households) Hygiene	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	59.1%	18.9%	18.6%	19.0%	27.1%	33.1%	29.3%	6.8%
Limited	34.3%	47.5%	43.1%	42.2%	47.0%	49.2%	43.9%	48.0%
No facility	6.6%	33.6%	38.3%	38.9%	25.9%	17.7%	26.8%	45.2%

The household survey confirmed that uptake of latrines and handwashing is high in areas declared ODF. NGOs report that CLTS/PAKSI style programmes consistently result in the building of latrines and handwashing facilities within aldeias, although in most (14 of 18) community FGDs it was reported that a few households in each aldeia were still yet to finish building their latrine.

During the household survey, respondents who indicated that their household had no latrine and whose main place of defecation was in the open (3.8%) were asked why they had no latrine. The responses indicated that only 17% of OD households were due to 'slippage' – they had previously had a latrine which was no longer functional.

A much larger group of households (83% of the 3.8% of households that are OD) had never built a latrine; their reasons are shown in Figure 9 below.

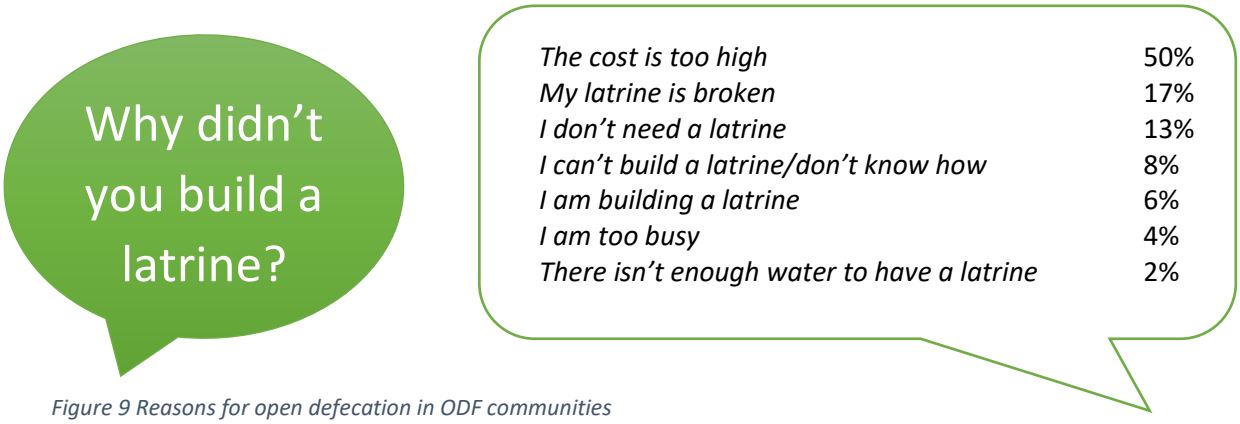


Figure 9 Reasons for open defecation in ODF communities

Looking at these barriers to sanitation, it is interesting to note that despite the CLTS mantra of low-cost latrine building, including pit latrines, there is still a perceived cost barrier for 50% of OD households, although correlation of the claim of a cost barrier with wealth quintiles has not been assessed.

The other 33% of OD households who had never built a latrine give reasons that contrast with the commonly stated belief that 'neighbours will help if someone cannot build a latrine'. These households do not have a latrine and have not been assisted to build one. From this data, and advice from a Department of Public Health Officer (DPHO), verification of ODF communities does not require 100%

[73] Timor-Leste Demographic and Health Survey, RDTL & ICF (2016)

latrine access, as it is given where at least 95% of communities have a latrine and the other 5% indicate a commitment to build a latrine.

Effectiveness 2

To what extent has CLTS effectively motivated households in the communities targeted to climb up the sanitation ladder and improve the quality of their latrines after achieving ODF?

Summary of assessment

CLTS-style programmes have provided some motivation for households to move up the sanitation ladder.

Eighteen per cent of households from ODF communities surveyed indicated that they had invested in their household sanitation or hygiene without co-investment or assistance. Within the FGDs, there were stories from each aldeia of households improving latrines after CLTS-style programs. Many of these improvements seem to be driven by a desire to sustain latrine use coupled with the difficulty of maintaining a pit latrine, which is prone to need mending or re-digging regularly. Overall, though, there were more comments indicating a desire to make improvements than actual improvements.

Evidence for assessment

This question was assessed using the household survey data to estimate the proportion of households improving their sanitation status post-ODF declaration, and FGDs to understand the drivers and barriers to improvement.

PAKSI programmes have been very effective in provoking individuals and communities to move away from OD. For many households, the first step away from OD is an unimproved pit latrine with a temporary superstructure made of easily available local materials. Moving up the sanitation ladder from this step requires several resources – local materials, purchased materials and additional time and labour. Community members frequently commented in FGDs that they would like to improve their latrine (regardless of what they had) but that they lacked the resources to do so. In some cases, households indicated that they were making stepwise progress towards building a substantial latrine as finances became available. In Oecusse, this progress was explicitly encouraged by one NGO which worked with communities to develop savings and microcredit associations to help households to set and achieve aspirational goals like building their own latrine.

As shown in Table 9, households who invested in sanitation and hygiene (excluding soap) after a declaration of ODF are 25% of the community, although almost one third of those households gained external support, leaving 18% of households who had invested in WASH improvement or maintenance post-ODF without external support. Sanitation marketing has been trialled in Timor-Leste, it is likely to be more successful in rural areas if the cash economy increases. [74]

Table 9 Sanitation improvements in ODF municipalities

Household investment in sanitation and hygiene	***Assistance received by household***	***% of households in ODF communities***
no	no	51
yes	no	18
no	yes	11
yes	yes	7
n/a	n/a	13

[74] Guidance on Programming for Rural Sanitation: Briefing Note (washmatters.wateraid.org/Rural-San)

The FGDs highlighted that maintenance of pit latrines is an essential and regular task due to their temporary/makeshift nature, and that for some households this drives the desire and action to invest in more permanent sanitation solutions (see Figure 10) as these latrines were considered "not good".

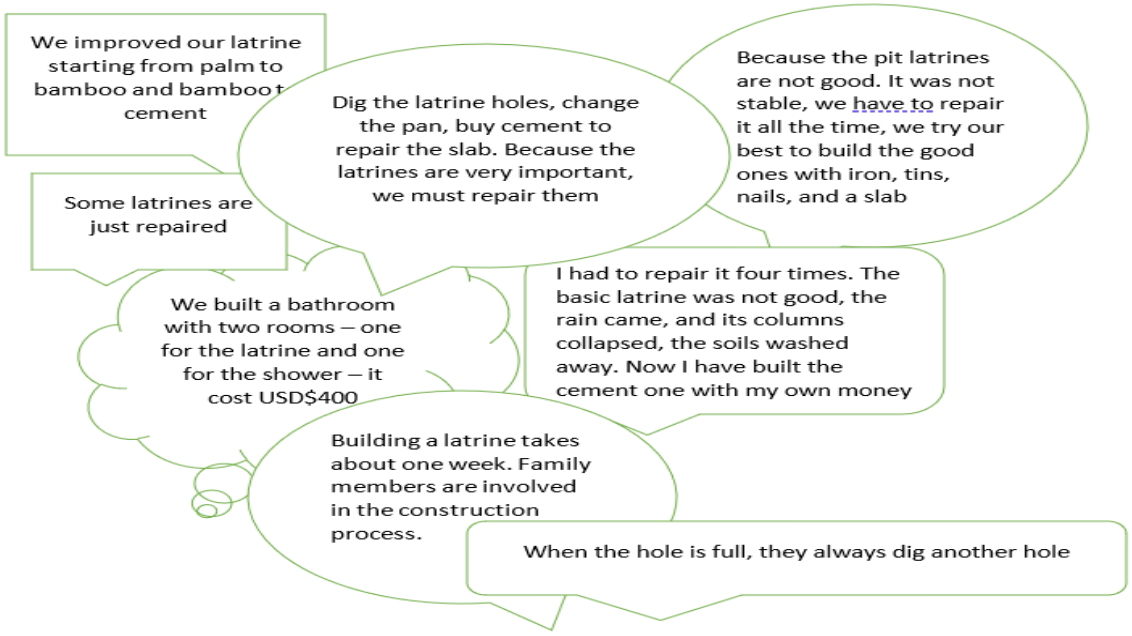


Figure 10 FGD comments on pit latrines

Intensive sanitation campaigns in Bobonaro included behaviour change communications with significant media around the '*Uma Kompletu ho Sinitina*' concept in an effort to encourage people to move up the sanitation ladder. According to the household survey, the intensive work in Bobonaro has been effective, because there were no pit latrines recorded. In the current situation, where Timor-Leste is close to 100% sanitation, maintaining ODF status and moving up the sanitation ladder could be encouraged with engaging behaviour change communications on traditional and social media. This could serve to reinforce messaging by local health workers and chefes and create a nationwide excitement around the push to become ODF. Behaviour change communications could be combined with new approaches to sanitation markets.

Open Defecation

There was a general agreement in FGDs that OD in areas where people live close to each other is not acceptable, and that finding faeces on the ground is disgusting. Despite this, there is still community tolerance for some forms of OD. The two main areas of tolerance for OD were 'at the farm' and children's faeces.

At the farm

In rural areas of Timor-Leste, most families are engaged in agriculture for subsistence and livelihoods[75]. Housing and farmland are not necessarily co-located. Aldeia-based programmes that ensure latrines are built within households do not address OD on farmland.

[75] Timor-Leste Population and Housing Census 2015, Volume 12; Analytical Report on Agriculture, RDTL, FAO, UNFPA (2018)

Within most FGDs, in response to the question 'do you think that your aldeia is still open defecation free?', at least one person would say that if they are at the farm they would practise OD because it is too far from home to return to use the latrine. This appears to be a widely acceptable practice – there was no dissent and no sense of disapproval or disgust when this was brought up. No known academic literature indicates whether OD in rural farm areas in Timor-Leste is problematic in terms of the spread of disease. Further investigation of the locations and fate of faeces would help to determine if there is a likelihood of disease transmission from farmland OD.

Children's faeces

The household survey asked about the disposal of children's faeces (Table 10). While the most common disposal method for baby faeces is via a latrine, and burial is also practised, close to a quarter of respondents reported that infant faeces are left (on the ground or in the bushes) for scavengers to consume. The 'other' response in the survey includes faeces disposal into rivers and the ocean, being washed off clothes, being burnt or thrown into the rubbish.

Table 10 Disposal of children's faeces in ODF communities

Disposal of children's faeces	**Municipality**						
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total
Latrine	51%	41%	52%	34%	41%	31%	42%
Thrown to the bush	7%	14%	9%	19%	14%	14%	13%
Buried	11%	7%	11%	6%	21%	24%	13%
Left for animals	11%	11%	0%	6%	10%	7%	8%
Left	2%	0%	9%	8%	0%	0%	3%
Other	17%	27%	18%	27%	14%	24%	21%

Surprisingly, data from sucos where hygienic suco programmes have been implemented (Table 11) show little difference to ODF communities in the methods of disposal of children's faeces or the proportion that are safely disposed.

Table 11 Disposal of children's faeces in hygienic sucos

Disposal of children's faeces	**Hygienic sucos**	
	Bobonaro	Liquiça
Latrine	33%	41%
Thrown to the bush	14%	6%
Buried	10%	29%
Left for animals	0%	12%
Left	14%	0%
Other	29%	12%

Children's faeces were discussed separately in the men's and women's FGDs, and a similar range of answers was provided for the means of disposal of faeces. Women were much more explicit in their answers than men. Both groups noted that the responsibility for dealing with infant faeces lies with whoever notices them, but that this is mostly women. For younger children, nappies, either disposable

or cloth, tend to be used overnight. Disposable nappies were generally disposed of by 'throwing in the rubbish', 'throwing far away from the house' or 'putting in the pit latrine'.

The age at which children are taught to use a latrine seemed to vary from three to five years old; there was an expectation that by school age, a child would no longer practise OD. For children under five it was commented that pit latrines are perceived to be 'unsafe', with some danger of children falling into the pit, no reasons were given for children not being encouraged to use a pour-flush latrine at a younger age, but it seems likely that adult width latrine pans may be too wide for a child to use. Hence, it is possible that small children require modifications, or continual adult assistance, to make latrines accessible. When asked about their preferences for where they go to the latrine and why, most children talked about cleanliness, safety, proximity and access to water and soap. Children also mentioned that they would OD if they were away from either home or school – collecting firewood or cattle food or playing. In this case they would use a stone or leaf to clean themselves with.

As grandmothers, older sisters and aunts are often influential in child raising, there is a need to consider the social and cultural norms around the management of children's faeces and toilet training. Understanding the physical needs of children (smaller pan or potty), along with beliefs, norms and attitudes to child raising would enable the development of cross-sectoral strategies for providing information and working with families to ensure safe and sustainable disposal of both faeces and nappies.

Progress to Safely Managed Sanitation

The Government of Timor-Leste has identified that the target of safely managed sanitation for all should be reached by 2030 in line with the SDGs agenda:

SDG 6.2 "*By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations"*

Within the NBSP the transition from ODF to safely managed sanitation is indicated within the section "Incentives for sanitation improvement" which includes scope for innovative programmes to engage citizens and encourage latrine building. It also indicates that incentives are to be financed by government, but gives no clarity as to which arm of government would be responsible. Targets for improved latrines are shown in Figure 11, taken from the 2013 Strategic Plan for Rural Sanitation[76]. Hygienic suco programs, designed to inspire households to move to improved sanitation, have been piloted in Bobonaro, Aileu and Liquica.

The Demographic and Health Survey shows that by 2016 improved sanitation in rural areas was at 42%, slightly below target, and urban areas averaged 75% overall. By 2020, the evaluation data shows that for households in ODF municipalities 78% have improved sanitation facilities (includes shared and safely managed sanitation) and that number increases to 81% for areas that have had hygienic suco programs.

Subsidies for sanitation improvement are likely to be needed, especially given the gap in access between the wealthiest households and the poorest households - almost 90% of the wealthiest households have access to an improved latrine, while 41% of the poorest households have either no latrine or an unimproved latrine. Smart subsidies (or targeted subsidies) have been applied within

[76] Timor-Leste National Strategic Plan for Rural Sanitation. RDTL (2013).

pilot programmes and within CVTL sanitation programmes in Timor-Leste, and there is emerging evidence of their effectiveness in post-CLTS programming from global sources[77].

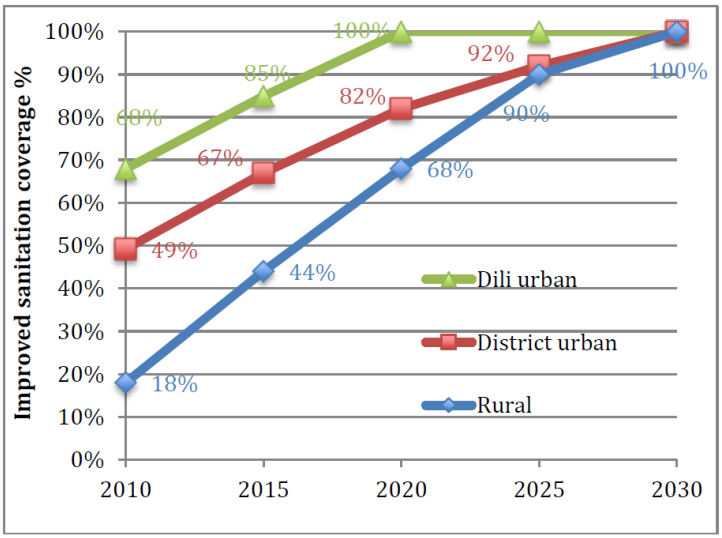


Figure 11 2013 projections for improved sanitation in Timor-Leste[78]

Effectiveness 3

Does a declaration of ODF have meaning and value to residents? Is ODF status something that individuals/communities strive for? Why? Is it perceived to change anything?

Summary of assessment

Communities are proud of being declared ODF and maintain their sanitation facilities.

All communities indicated that they were aware of declarations of ODF/ALFA when they occurred at the suco or municipal levels. In many communities there was a sense of pride in being free of OD as a community and of being able to have visitors use their latrine without embarrassment. So, there is meaning and value to residents in being ODF, although much of the meaning and value was attributed to health outcomes and the personal aspects of latrine ownership rather than a sense of community wellbeing.

Evidence for assessment

This question was assessed using the household survey and responses from FGDs and KIIs. The answers reveal several perspectives on the declaration of ALFA/ODF communities.

Previous investigations of sustainability of the outcomes CLTS-style programmes in Timor-Leste have found that the drivers of latrine use are health, pride, privacy, safety, external encouragement, sanctions and disgust at OD, water access, convenience, subsidies and family improvement (Abdi 2016, Moran 2017). This investigation adds to the list of drivers of latrine use a reduction in flies (and mosquitoes), and having a cleaner environment. It should be noted that the source of pride most often mentioned was that visitors would not be subject to OD. PAKSI programmes, as with most CLTS-style

[77] Implementation of a Targeted Toilet Subsidy in Ghana. USAID WASHPaLS (2020)
[78] Timor-Leste National Strategic Plan for Rural Sanitation. RDTL (2013).

programmes, did not generally offer incentives for latrine building although in the early stages there were some programs that used provision of water supply as an incentive for latrine building.

In FGDs and KIIs, the words most commonly used to describe community feelings at being ODF are shown in Figure 12.

Figure 12 Community feelings about being ODF

There is no evidence that community members aimed specifically for their aldeia to be 'declared' ODF, despite their obvious pride and happiness in achieving this. Every community was, however, aware of celebrations around the municipal declaration of ODF and their contribution towards it, and it is likely that these public celebrations strengthen the positive feelings of individuals. The strategy to reach ODF municipality status was led by the ALFA secretariats, including the municipal administrators. Chefe sucos showed distinct pride in the suco-level achievement of ODF – perhaps bolstered by smaller ceremonies and obvious signage such as those shown in Figure 13.

Figure 13 Declaration of ODF and other signs found in sucos

4.3. Efficiency

Efficiency 1

Is the level of achievement of outputs and outcomes related to the eradication of OD, use of improved sanitation, handwashing practices, and sector coordination satisfactory when compared to the level of financial and human resources mobilised/used?

Summary of assessment

Efficiency of progress towards ODF has not been quantified.

The current achievement of 93% household latrine access across Timor-Leste, and 96% in ODF municipalities, has been achieved using mostly CLTS/PAKSI style programming, from a base of 63% household latrine access in 2009. In the space of 11 years, 558,474 people have gained access to a latrine.

Costs of achieving this are not quantified directly, because the evaluators have low confidence in the comparability of NGO programme costs as provided within the Sanitation Stakeholder Questionnaire.

Evidence for assessment

This question was evaluated through KIIs with sector stakeholders and extraction of data from the Sanitation Stakeholder Questionnaire. An attempt to develop a 'cost-per-latrine' analysis was abandoned due to lack of information that would allow for NGOs' and programs' costs to be reasonably compared.

Costs

The report of Timor-Leste Joint Sanitation Evaluation[79] indicated that in subsidised sanitation programmes the cost of a latrine was USD$211, whereas in the CLTS-style programme model the average cost per latrine was USD$89. Assuming that inflation would affect both CLTS-style programmes and subsidised sanitation programming equally, it is fair to say that the cost of CLTS-style programmes is around half of the cost of subsidised programming. It is difficult to assess the speed of rollout of CLTS-style programmes compared to subsidised programmes in Timor-Leste because there is no data on numbers of staff during programme eras, and it is likely that more recent programmes are aimed at 'harder-to-reach' populations. Figure 14 compares data available from different sources over time for both improved sanitation (no national data available after 2016) and open defecation rates in Timor-Leste, it shows a general trend of increased household coverage of improved latrines and decreasing open defecation behaviours.

[79] Shapiro et al. Timor-Leste Joint Sanitation Evaluation; A Study of Sanitation Program Outcomes (2009)

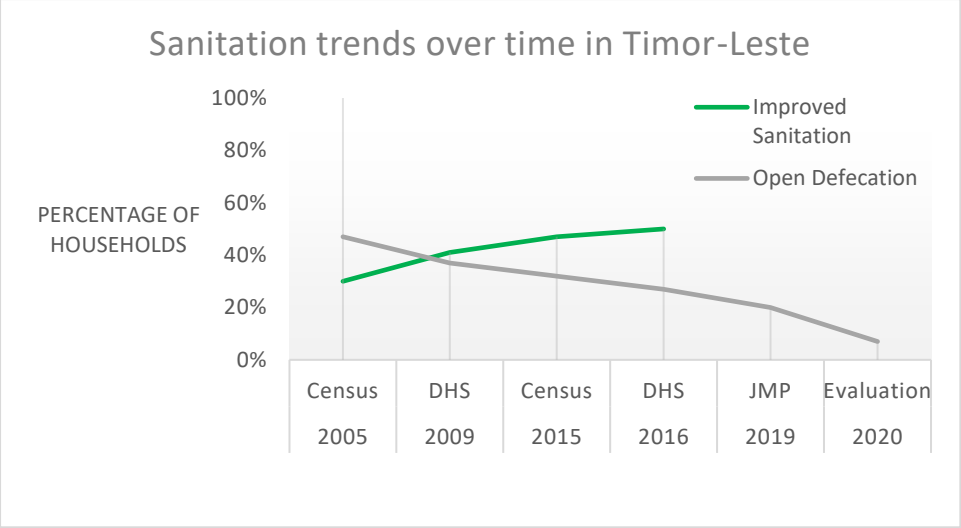


Figure 14 Sanitation Changes in Timor-Leste

In 2015 the World Bank[80] used a cost per household of USD$110 (based on a 2010 BESIK report) to estimate that it would cost ~USD$12.25 million to ensure that the whole of Timor-Leste was ODF. Programme costs supplied to the evaluation from NGOs indicates that cost per latrine is significantly lower than USD$110; only one NGO reported figures that suggest a cost higher than USD$100 per latrine (and this may have included additional programming), and many NGOs reported costs that appeared to be below USD$50 per latrine. With 14,500 households still to acquire a latrine, even at USD$110 per latrine, this would reflect a maximum investment of USD$1.6 million remaining to reach ODF in Timor-Leste.

Hutton[81] estimates a return of USD$13.8 for every USD$1 spent on gaining ODF status in Southeast Asia. Hence, there is a significant national financial benefit to being ODF.

Human resources

Since 2012, the agencies involved in sanitation delivery in Timor-Leste have included:

- 2 bi- or multi-lateral agencies
- 6 country offices of INGOs
- 17 local NGOs.

Not all local NGOs had continual work in the sanitation sector. Peak years were 2013 and 2015, when there were 13 local NGOs working in the sector, 'trough' years were 2012 and 2017, when only 4 local NGOs had work in the sector. The average number of local NGOs working per year was 7, and staffing at local NGOs averaged 14 per WASH team. Variations of intensity of work in the sector is likely a reflection of the international donor aid cycle.

Sector perspectives

Seventeen out of twenty-one respondents within the sector generally agreed that the sector is well coordinated and that outcomes are satisfactory in relation to the resources applied. One cause for

[80] Timor-Leste Water Sector Assessment and Roadmap, World Bank Group (2015)
[81] Water and Sanitation Assessment Paper; Benefits and Costs of the Water and Sanitation Targets for the Post-2015 Development Agenda, Hutton (2015)

concern arising in the KIIs was the lack of a formal sector network (previously the Sanitation Working Group). This gap is perceived to impair coordination of new programmes and reduce knowledge sharing that would improve the efficiency of the sector by ensuring that government needs are clear and that the sector is working collaboratively rather than competitively to achieve sectoral goals. The lack of coordination that some sector informants mentioned may arise from insufficient opportunity to raise issues, share knowledge and agree on targets. All these activities were part of the previous sector network.

Finding a way for the sector, as a whole, to have a voice to government is an important role of this type of network, and would operate in a similar fashion to industry peak bodies in other countries. As the sector transitions from programming for ODF, to programming for improved sanitation, it will require strong sector leadership, knowledge sharing and task coordination to efficiently meet the challenges of multiple sanitation programme styles, monitoring and verification exercises, and the push to achieve 100% ODF (the 'last mile') in some of the most physically, socially and financially challenging locations in Timor-Leste.

As a small country with reasonable internet access, Timor-Leste is ideally positioned to take advantage of digital communications technology (in addition to face-to-face meetings) to create sanitation communities of practice for sharing information, exchanging ideas and developing new programmes that suit its unique context. A growing, decentralised public workforce, including public health officers, healthcare workers and other members of ALFA secretariats, could – with some central support – assist each other in training, implementation and monitoring of PAKSI and other sanitation programs.

Efficiency 2

Were the objectives achieved on time or have there been any significant delays in programme implementation and achievement of results, and if so, why?

Summary of assessment

The objective to reach 100% ODF communities in Timor-Leste by 2020 has not been met. On the current trajectory, it is likely that the goal of reaching full ODF status will be reached by 2024.

The objective of an ODF Timor-Leste has been consistent since the inception of the first development plans in Timor-Leste. However, the timing of this ambition has changed several times. In 2013 the GoTL set a goal of achieving 100% hygienic sucos (safely managed sanitation) by 2030. This goal aligns with the SDGs that were adopted in 2015. Safely managed sanitation, according to the JMP definitions, would mean that all households, schools, institutional buildings and public places have improved latrines and handwashing facilities, as well as practising safe disposal of infant faeces. The 2030 goal included reaching nationwide ODF status between 2025 and 2030. On the current trajectory, it is likely that the goal of reaching full ODF status will be reached by 2024.

Evidence for assessment

This question was assessed using available data for municipal declarations of ODF and up-to-date data on progress in non-ODF municipalities from NGOs.

The highly ambitious goal of ODF by 2020 was set by popular agreement of the municipal administrators in 2015 following a very successful institutional triggering. While this target challenged agencies to work towards fast implementation, it was hindered by a lack of process and budget for sanitation for vulnerable households and, from around 2016, a reduction in the coordination of knowledge sharing networks. It is uncertain whether progress was affected by the 2017 change in

practice, from agencies electing to implement PAKSI in specific sucos based on their own priorities and donor funding, to being asked to take on responsibility for completion of PAKSI implementation across whole municipalities. Certainly, this change should have made monitoring and data collection simpler.

The current goal of reaching ODF by 2024 seems highly feasible (Figure 15), with two major agencies and the MoH aiming to trigger latrine building in approximately 11,000 currently OD households across four municipalities by 2022. The combined budget is over USD$625,000. Subsequent to that achievement, only Oecusse would remain without full latrine access (3,730 OD households) and UNICEF has indicated that it expects to restart sanitation programmes there soon.

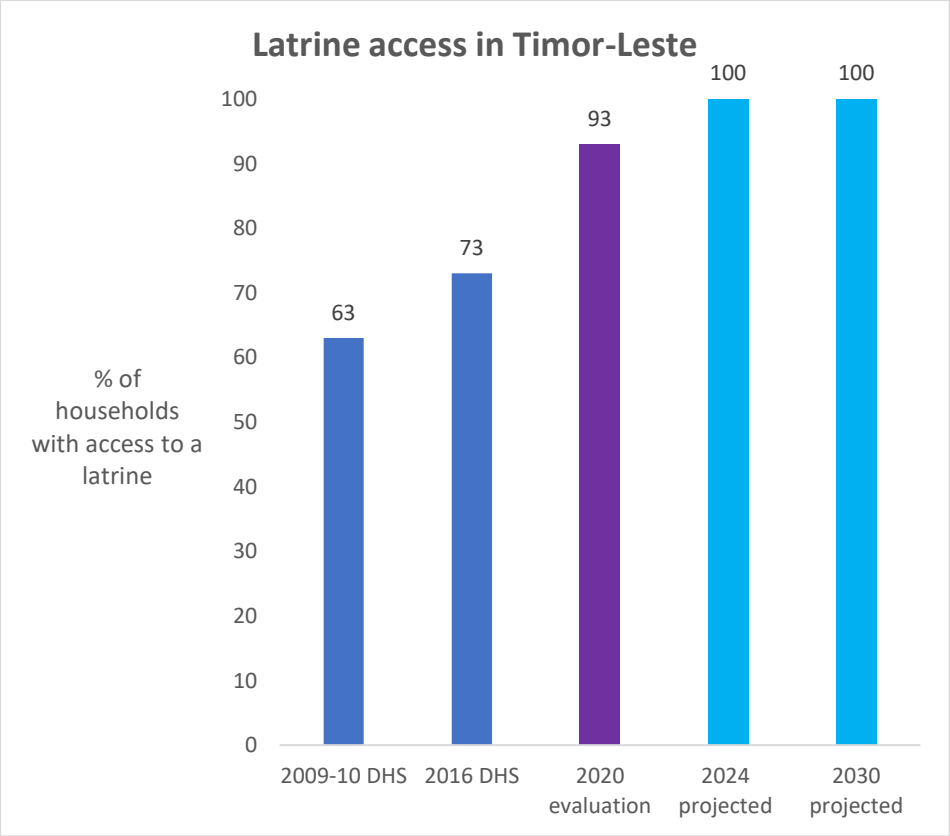


Figure 15 Progress towards latrine access in Timor-Leste

4.4. Impact

Impact 1

Were there any unintended impacts from CLTS interventions?

Summary of assessment

Unintended impacts of PAKSI/CLTS-style programmes were uncommon and tended to be localised rather than systemic. They included positive, neutral and negative consequences.

Evidence for assessment

Unintended impacts of PAKSI/CLTS-style programmes were assessed based on the data collected across the entire evaluation. Unintended impacts may also have unintended targets, and broad-

ranging discussions with wider audiences are where these impacts are mentioned. Unintended impacts were identified during FGDs, KIIs and casual conversation in aldeias when something unexpected arose and follow up conversations indicated that it was related to a PAKSI programme in some way.

There were only four unintended impacts that were attributed to CLTS-style programming:

- During triggering, the focus on flies as vectors of disease led to hygienic food covering practices in parts of Ainaro and Oecusse. This is a **positive** unintended consequence, and resulted from triggering practices that included introduction to the F-diagram[82] and showing of the film *Zeta Nia Domin*.
- Workload for rural health workers has changed to include CLTS-style triggering and follow-up. This is a **neutra**l unintended consequence and a positive aspect of contextualisation of CLTS-style programmes to Timor-Leste.
- Several chefe suco have threatened to refuse to sign official documents for households without a latrine. This impact could be either **neutral or negative** depending on the way that these threats are used now and in the future.
- Households in some communities expressed disappointment that materials for latrine building were not supplied or that water supply programmes were not initiated as part of CLTS-style programmes in their areas. This is a **negative** unintended consequence; it indicates that PAKSI programmes have been perceived in some cases to promise more to communities or individuals than intended. The problem with this is that these communities and individuals risk becoming averse to further engagement with development activities. This may be partially caused by cultural understanding that a discussion about what you would like can be construed as an offer to provide it. Hence, needs analysis exercises may also cause disappointment within communities.

4.5. Sustainability

Sustainability 1

To what extent did the ODF status and the associated social norms such as handwashing sustain since certification (in communities certified in the earlier years of the evaluation period), and what were contributing factors, both at community level and in the enabling environment?

Summary of assessment

There is evidence that in ALFA communities the social norm towards private ownership and use of a latrine use is strong, and that this social norm is sustained over time. The evidence shows that the social norm towards regular handwashing is reasonable, but not as strong as that for latrine ownership and use.

Evidence for assessment

This question was assessed using a 'voting' activity that explored personal normative beliefs and empirical and normative expectations[83] among community members with regard to latrine ownership,

[82] The F-diagram shows the faecal-oral transmission route of disease. See https://wedc-knowledge.lboro.ac.uk/resources/factsheets/FS009_FDI_A3_Poster.pdf

[83] Applying Social Norms Theory in CATS programming, Bicchieri & Noah (2017)

latrine use and handwashing. It was also assessed based on apparent slippage back to OD as measured in the household survey.

In the social norms activity, participants were asked to indicate their opinion on a series of questions (Table 12) by placing a marble in a basket that aligned with their opinion. This technique was used rather than a show of hands or other indicators as a means to allow voters to maintain a sense of anonymity (reducing shyness) and to avoid a 'follow the leader' scenario that is inclined to occur with a show of hands or other public declarations. Participants were encouraged not to discuss their thoughts during the exercise, and community leaders were encouraged not to be the first to vote.

The results of this activity in ODF communities, shown in Table 12, indicate that there is a very strong personal normative belief that 'having a latrine at home is very important' (over 80%) and that this correlates with the strong normative expectation that 'most others believe that everyone should have a latrine' (80%). This correlation between personal normative belief and normative expectation, coupled with the empirical expectation[84] from broadly stated beliefs within the FGDs that 'most people' or 'everyone' in the village still uses a latrine, indicates a strong social norm developing towards latrine ownership and use.

The social norm for handwashing was less strong, with personal normative beliefs reaching 80% when handwashing is considered 'important' (rather than 'very important') and normative expectations reaching 80% at the level of 'half or more' (rather than 'most') people believe that 'everyone should wash their hands with soap'. This aligns with the finding from the FGDs that most people believed that handwashing was something everyone does, and that handwashing behaviours are more common since the COVID-19 pandemic and public health messaging around handwashing. Overall, this indicates that there is a social norm developing around handwashing, but that it is currently weaker than the social norm for latrine use.

Many people in FGDs indicated that lack of access to water is a barrier to handwashing. Research in Timor-Leste[85] and elsewhere[86] indicates that hand hygiene is the first 'optional' water-using activity that households give up during times of water stress. This does not mean that hygiene is completely disregarded; people still wash and they still wash their hands at certain times. It does mean that handwashing at all critical times is less likely to occur, and that the behavioural habits that can help drive changes in personal normative beliefs are therefore unlikely to be formed.

There is another possible reason why the social norm for handwashing is lagging behind the social norm for using a latrine. It is likely that handwashing is less 'detectable' than OD and therefore is less likely to be a strong norm, because the lack of detectability means that there are fewer risks of social sanctions for lack of handwashing than there are for OD[87].

Building on current changes requires reinforcement of the desired social norm, through overt example setting and discussion of the positive social norm, the reasons for it and the values that drive us to want that norm. All of these things can be locally driven or could be featured in national media and social media, including specific ways for residents to join the discussion and share their own feelings and values around sanitation and hygiene. Work in this area should build on previous formative

[84] During analysis of the data it was noticed that the questions asked to determine empirical expectations (what people think other people actually do) were not fit for that purpose. Discussion from the general FGD is used to assess empirical expectations instead.

[85] Developing a Systems Understanding of Rural Water Supply in Timor-Leste, Neely (2015)

[86] WASH and its Links to Nutrition, Technical Brief 3, USAID Water and Development Technical Series (2020)

[87] Theory and Practice of Social Norms Interventions: Eight Common Pitfalls, Cislaghi & Heise (2018)

research by BESIK and the Ministry of Health investigating behaviour change communications for HWWS (2012-2013) as well as the comprehensive pilot of BCC and CLTS in Bobonaro[88].

Table 12 Responses to Social Norms Activities during FGDs

		Responses (total %)		
	Question	**Very Important**	**Important**	**Not Important**
Personal normative beliefs	Having a latrine at home	88	11	1
	Using a latrine rather than defecating outside	64	35	1
	Having a handwashing facility at home	55	45	0
	Washing your hands regularly with soap	59	41	0
	Your friends and neighbours use a latrine rather than defecating outside	44	54	1
	Your friends and neighbours wash their hands regularly with soap	44	55	1
		Most	**Some Half**	**Very few**
Normative expectations	How many other people from this village do you think believe that everyone should use a latrine?	80	17	4
	How many other people from this village do you think believe that everyone should wash their hands with soap?	64	31	6

The household survey was completed a minimum of a year after declaration of ALFA in each municipality. The survey therefore indicates sustainability for at least one year of the behaviours adopted during PAKSI/CLTS-style programs. Overall, 96.2% of households in ODF communities have sustained latrine use (see Table 22 in annex XIV), and 73.2% have sustained handwashing (see Table 31 in annex XIV), again indicating the stronger norm for latrine use than handwashing.

Sustainability 2

When some sections of a community have returned to their original habit of OD, despite their villages attaining or being accredited with ODF status, how have GoTL duty bearers at municipal and central levels managed such slippage?

Summary of assessment

Slippage has been reverted or reversed through the actions of <u>local</u> duty bearers, hence national duty bearers have had little need to respond to slippage at this point.

Well-trained health staff and chefe aldeia and chefe suco follow up and encourage latrine building as part of their duties. A lack of monitoring or reporting of data over the long term may impact on the municipal and central government ability to identify and act on slippage to OD.

[88] Evaluation of Bobonaro ODF Initiative. Clark and Willets UTS:ISF (2016)

Evidence for assessment

Post-ODF monitoring of latrines/latrine use is seen as a local issue. Generally, chefe aldeia and local health workers respond to slippage to ensure sustained behaviour change and maintenance of infrastructure. These local interventions, which consist of reminders, education and threats of sanctions (rarely carried out) are generally adequate to ensure that most latrines are maintained or rebuilt as needed, and that they continue to be used in preference to OD. This continual work by chefe aldeia and health workers is prompted by the commitments to build a latrine that are made during PAKSI programmes, or household visits that are regularly undertaken as part of the family health programme.

In cases of significant slippage or non-compliance, the chefe suco may step in and call a meeting to encourage, embarrass and/or threaten individuals into building or fixing their latrines.

The next level of duty bearer is municipal ALFA secretariats, a group that includes the local environmental health officer, municipal administrator and representatives from local policing, education and health services. This group is responsible for verification and ongoing monitoring of ALFA/ODF status.

Municipal ODF declarations require verification by the government, this process has occurred only since 2018. While some post-ODF monitoring occurred in 2019, the COVID-19 pandemic interrupted monitoring (and verification) exercises. Moreover, monitoring budgets were affected by national government budget uncertainty. Resumption of budget certainty, and decentralisation, means that ALFA secretariats and environmental health officers are now expected to apply for funding for monitoring and verification activities from within municipal budget processes.

At this point, timely action at the local level means that central and municipal government duty bearers have not been required to respond to significant slippage to OD. There also seems to be no clear process as to how monitoring data should be collected, collated, analysed and acted upon at different levels of governance. For example, the OD rate of over 13% found in Ermera had not been noticed at the municipal level. This lack of clear data governance or explicit trigger points for action carries a risk that data will not be available or acted upon in a useful and timely fashion; that is, a large amount of slippage that requires a centralised response from government will not be noticed or acted on. While the act of monitoring can produce its own results (people maintaining latrine use when they feel they are being monitored), this is not a valuable use of resources if the data does not provide useful insights or responsive action.

Sustainability 3

Is there a relationship between the sustainability of sanitation outcomes after CLTS programmes and the availability of water or co-implementation of water supply programs?

Summary of assessment

A reliable supply of water to a house or yard doubles the sustainability of ODF outcomes.

"Lack of water" is consistently noted by community members, government staff and sanitation agency staff as a barrier to sanitation and hygiene. Water is required for hygiene practises in Timor-Leste, especially in lieu of any cultural norms towards cleansing with ash. Sanitation aspirations tend to be towards wanting a 'modern' (flush) latrine and hence lack of easily available water supply is problematic.

Evidence for assessment

Community-Led Total Sanitation programming is centred on triggering communities to build their own latrines to avoid OD. In theory, CLTS/PAKSI style programmes can be implemented successfully and sustainably in communities with scarce or unreliable water supply. Access to water is a major concern in many communities in Timor-Leste, and the promise of water supply has been used in the past as an incentive to encourage communities to engage in latrine building.

The household survey data (Table 13) tells us that OD rates in communities declared ODF are lowest when there is water available in the yard, and that **the rate of OD doubles when water is carried to the house**.

Table 13 Relationship between water supply and OD in ODF communities

Water supply	Piped to house/yard	Carried for < 30 minutes, rainy season	Carried for < 30 minutes, dry season	Carried for > 30 minutes, rainy season	Carried for > 30 minutes, dry season
% OD	2.8%	4.5%	5.6%	5.5%	5.1%

Communities and key informants within this evaluation consistently told us that 'water is a problem' for sanitation and hygiene. Water is, undoubtedly, a significant facilitating factor for development – it is required for good health and for agricultural livelihoods and the industrial and manufacturing sectors. Effective hygiene and sanitation require a secure supply of 100L of water per person per day available within 100m of the dwelling, whereas the GoTL guidelines recommend a minimum of 60L of water per person per day for all purposes[89],[90]. The other point to note here is that hand hygiene will be neglected[91] if water is scarce, as other activities take priority.

Lack of close and plentiful water has led to at least a few partial solutions:

- Two latrines – a pit latrine for dry season and flush latrine for rainy season
- Bamboo pipe rainwater harvesting just for flushing latrines[92]
- The use of self-closing, non-stick plastic satopans[93] for pit latrines

Figure 16 Satopan in use (left), Rainwater harvesting (right)

For households without access to a close and plentiful supply of water, appropriate sanitation options in Timor-Leste are few. They are described below.

Pit latrines

[89] Developing a Systems Understanding of Rural Water Supply in Timor-Leste, Neely (2015)
[90] The National Water Resources Management Policy 2020 does not indicate a minimum water supply
[91] WASH and its Links to Nutrition, Technical Brief 3, USAID water and Development Technical Series (2020)
[92] Several survey respondents indicated that drinking rainwater is thought to cause illness
[93] Satopans are affordable and appropriate for the context of Timor-Leste. They were introduced by WaterAid and sold commercially through local stores. They were no longer available at the time of the evaluation but were observed to be used at some households.

Pit latrines are the easiest and cheapest form of waterless latrine, and the most commonly implemented waterless latrine in Timor-Leste. There are many variations on pit latrines that can be implemented with a little knowledge; these include ventilated (VIP) improved pit latrines and the arborloo, which is a smaller pit that is covered and planted over when full. VIP latrines can be comfortable and long-lived if constructed and maintained properly. Observations from the household survey and the FGDs indicate that pit latrines tend to be built as a temporary sanitation solution, with the expectation that households will eventually build a pour-flush latrine with solid superstructure.

Where pit latrines exist in the surveyed communities, only 16% have a solid slab that would indicate a sense of permanence, and only 30% of pit latrines are classified as private/secure – two of the main drivers for latrine ownership and maintenance.

Composting latrines

Composting latrines tend to be in tourist destinations; they are expensive and require training to build and maintain and to safely manage the waste. Composting latrines are also generally less accessible than other latrines and have a larger footprint. However, composting latrines provide compost, which could be a valuable commodity under the right conditions.

High-tech dry latrines

Dry latrines like the Nano Membrane Toilet (http://www.nanomembranetoilet.org) are rapidly gaining global acceptance. The technology may be a game changer in cities like Dili, where land and water issues preclude the building of more pit latrines or septic tanks for flush latrines and the building of sewage infrastructure would require the demolition of many houses and possibly neighbourhoods.

Oecusse

Oecusse and Baucau are the municipalities with the least coverage of latrines in Timor-Leste at this point. UNICEF has started PAKSI programmes that should see Baucau reach ODF status by 2022. At least two previous CLTS/PAKSI style programmes in Oecusse have failed to successfully trigger whole-of-community latrine building. However, some communities in Oecusse have high rates of latrine ownership and use. There is no evidence that retriggering would be effective in low-sanitation communities, so a different approach to sanitation needs in Oecusse is required. Given that the next aspect of the GoTL's plan to achieve SDG 6 is to implement hygienic suco programs, it would not be unreasonable to see programmes in Oecusse use a hybrid model of CLTS-style programme and hygienic suco programmes to build on what is already known and achieved in the municipality and to provide incentive for behaviour change. Work by the MoH and BESIK in Bobonaro in 2016 presents a positive model of institutional triggering, municipal commitment and broad sectoral involvement through ALFA secretariats, supported by sanitation supply and behaviour change communication activities.

From a sociological perspective, it is worth noting that communities who work together to achieve a small outcome develop a greater sense of community cohesion during the process, and are then more likely to work well together on larger projects. It is possible that sanitation programmes would be more effective if implemented in the wake of smaller, less onerous community-building exercises which give everyone a feeling of achievement.

The evaluators noted that the framing of OD in Oecusse is different to the framing of OD in other parts of Timor-Leste. Whereas noticeboards in most sucos indicate the percentage of the population with access to a latrine (or who are ODF), in Oecusse these noticeboards indicated the numbers of households known to be OD. From a sociology perspective, this type of negative framing makes it

more difficult to change the social norm to the preferred norm of latrine use and regular handwashing. Using statistics that indicate that 'most' people are changing their behaviours is more likely to create change in the minority than vice versa.

4.6. Equity and Inclusion

Equity and Inclusion 1

To what extent has CLTS been implemented in the communities where there was a stronger need for it, with the intention of reducing inequities?

Summary of assessment

The five municipalities identified in the 2013 Timor-Leste National Strategic Plan for Sanitation as having the strongest need were not given priority within CLTS-style implementations. However, donors and NGOs do react to needs assessments as part of the planning process for implementation of CLTS/PAKSI style programs.

Evidence for assessment

This question was answered by comparing identified equity needs with activities, and through data from the KIIs and the sanitation stakeholder questionnaire relating to decisions about planning and identification of priority communities.

The GoTL identified in its 2013 Timor-Leste National Strategic Plan for Sanitation that there were five 'deficient sanitation' priority municipalities based on their high rates of OD (43–61%). Of those municipalities only one (Bobonaro) has achieved ALFA status at this point, although Covalima simply requires verification of its status, an activity delayed by the COVID-19 pandemic.

None of the five municipalities appears to have been prioritised before 2015, judging by level of programme activity and/or sanitation achievement (Table 14) compared to other municipalities. This was certainly the case in Bobonaro from 2015, when sanitation programming was strengthened by the Australian-funded BESIK 2 programme, including Timor-Leste's first CLTS Institutional Triggering with Kamal Kar, alongside pilots of sanitation marketing and behaviour change communication strategies. Other 'priority' municipalities were not prioritised, while NGOs continued to make progress in the municipalities in which they were already working.

To avoid the problems of under- or over-servicing of some municipalities, in 2017 the government agreed with agencies that remaining work in CLTS-style programming would be completed under the auspices of a single agency per municipality. This has led to better sanitation progress in the priority districts, and at present means that there are only two large agencies, working in partnership with local NGOs to achieve the 'final push' for ALFA across seven municipalities.

Interviews and surveys indicate that the MoH selects sites for CLTS/PAKSI style programmes in negotiation with large donor-funded agencies. These agencies do not use common criteria for site selection, because selection is necessarily dependent on donor funding requirements. Hence, site selection is partially based on GoTL identification but also partially donor driven, for example, UNICEF's site selection is based on rates of malnutrition (which is strongly linked with sanitation and hygiene needs).

Implementation agencies (local NGOs) are not usually part of these decisions, because they bid for sanitation work on a tender/contract basis once sites have been selected. ALFA secretariats also

appear to respond to the plans presented by NGOs rather than applying their local knowledge to direct programmes in areas of particular need.

Table 14 Proportion of ODF households by municipality

Municipality	Year declared ODF or %ODF
Aileu	2018
Liquica	2018
Ermera	2018
Ainaro	2019
Bobonaro*	2019
Manufahi	2019
Covalima*	98%
Viqueque*	92%
Lautem*	90%
Oecusse*	74%
Manatuto	99%
Dili	97.5%
Baucau	70%

*Identified as a 'deficient sanitation' municipality in 2013

A further equity issue is that of vulnerable households. From the survey, households in the poorest quintile were four times more likely to have either an unimproved pit latrine, or no latrine than those in the wealthiest quintile. A vulnerable households' subsidy was mooted in the NBSP but was never actioned, despite cost-benefit evidence[94] that delivering sanitation to the poorest of the poor provides greater overall benefit due to larger potential improvements in health.

Table 15 Sanitation status of the poorest and wealthiest quintiles surveyed

Sanitation	Poorest quintile	Wealthiest quintile
Safely managed	3.2%	9.0%
Basic	48.4%	73.5%
Limited	7.2%	8.7%
Unimproved	31.7%	8.8%
Open defecation	9.5%	0.0%

Equity and Inclusion 2

To what extent has the programme effectively mainstreamed gender equality and empowerment of women and girls?

[94] Water and Sanitation Assessment Paper; Benefits and Costs of the Water and Sanitation Targets for the Post-2015 Development Agenda, Hutton (2015)

Summary of assessment

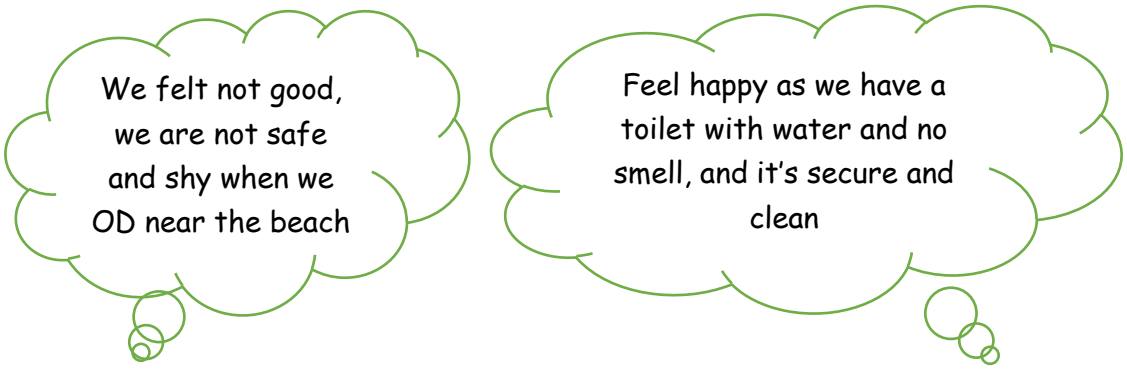
Some gender equality progress has been made. The programme has contributed to women's access to hygienic, safe and secure sanitation and reinforced messages of equality.

It was not possible to assess the level of empowerment of women, or changes to empowerment that can be ascribed to PAKSI programming. However, access to private latrines reduces women's fears of being watched or attacked while defecating or urinating. It also improves family health, thereby reducing the workload of caring for sick family members. Both of these outputs provide women with greater freedom to choose and prioritise activities. It is also likely that gender-positive PAKSI programming reinforces other programmes that aim to change gender norms in rural communities through, for example, ensuring that women are represented on local decision-making bodies.

Evidence for assessment

Gender, in particular the empowerment of women, has been a significant cross-cutting theme in WASH globally since around 2005. CLTS programming in its original form requires the participation of whole communities, including women and girls. In ALFA communities in Timor-Leste, there are a range of attitudes about women's contribution and participation in community affairs, ranging from very positive to quite negative, from both women and men.

For women and girls, the impact that CLTS/PAKSI style programmes have is clear in their statements about use of latrines over OD. Access to a private space for defecation and hygiene creates a sense of security or safety that is valued by women, and is valued by men for women. Men rarely noted that this was of value to them personally.



While pit latrines are an improvement in safety from open defecation, evidence from the survey showed that less than 30% of pit latrines were adequately private and secure (see Figure 17), so pit latrines, as an outcome of CLTS-style programmes do not fully meet the sanitation needs of women.

Figure 17 Over 70% of pit latrines are not private or secure

One aspect of safety and security that is often neglected (and was neglected during this evaluation) is that of lighting for latrines. Women indicated that they were reluctant to use the latrine in the dark, but the drivers and barriers to latrine use at night, including the possibility of either permanent or mobile lighting, were not followed up by the evaluation team.

The process involved in the PAKSI programmes are intended to be equitable and inclusive. Women in some FGDs noted that the:

> *NGOs insist on their attendance, but they felt that they were not encouraged to speak or given the opportunity to make decisions.*

There was a clear difference, noted by the FGD facilitators in 17 of the 21 communities, in women's bearing and willingness to speak when the community was split into gendered groups. In some communities, women were happy to speak up in front of men; for example, in Ainaro, one FGD was predominantly female, and the female chefe suco attended as well. In both ALFA and non-ALFA communities it was common to hear from the women's groups that they did not participate in the triggering activities because they were not invited or did not know about them (it is possible that other women *were* present, this was not checked with implementing NGOs).

It is notable that information from women's FGDs often conflicts with information from the combined FGDs:

Combined group: '*The NGO involved the same number of women as men, the NGO gave an opportunity for women to express their ideas*'.

Women's group: '*We didn't attend the meeting, there were only men who attended the meeting'.*

In one aldeia, the women's group yielded this very positive statement:

'The chefe aldeia always includes women in activities and women are seeing more opportunity to make decisions and more gender equality'.

The PAKSI guidelines emphasize inclusion and support for women and girls. The guidelines give examples of how to ensure that women are able to speak, and that their expertise within the home

and their concerns about OD are recognised. Notably, the PAKSI guidelines also show how men can be given more options and encouraged to take up gender equity within the scope of the program.

All of the 13 sanitation stakeholders who responded to the questionnaire indicated that they were aware of gender equity principles and made efforts to ensure that women are involved in PAKSI programmes in equal numbers and with equal status as men. Two of the local implementation agencies indicated that they sometimes face social barriers to the full inclusion of women, and that it is difficult if the chefe suco or chefe aldeia is not supportive.

As part of the broader development sector, it is important that gender-positive sanitation programming continues to support gender equality. In this respect, 'walking the walk' is crucial to the message of gender equality. NGOs should ensure that women are equally represented within NGO teams implementing CLTS-style programs. Of 13 NGOs which responded to the questionnaire, only one had at least as many women as men in their WASH team; most had ~2:1 male to female representation. There is still significant progress to be made in gender equality within communities and within the sanitation sector.

Health concerns for women and children

This issue was not brought up as part of the evaluation, but arose from experience of the evaluator. Having developed chronic diarrhoea, she sought medical advice and was asked, in several screening procedures if she had a urinary tract infection. Curiosity about why this question was broadly asked led the evaluation team to investigate the academic and local knowledge linking UTIs and WASH outcomes.

Urinary tract infections (UTIs) are the most common non-intestinal infection in women, with approximately half of all women in Australia contracting at least one in their lifetime[95]. There is no data available for the rate of UTIs in Timor-Leste, but Dr Bethany Nelson, Deputy Director of Maluk Timor, indicated that it is high (pers. comm.). It has also been noted that '*a tropical climate coupled with poor sanitation and contaminated drinking water likely fosters a dangerous combination of dehydration and diarrheal illness*', leading to high rates of UTIs[96].

The consequences of UTIs include:

- Pain and discomfort on urination and throughout the lower abdomen
- Continence issues
- Blood in urine
- Kidney damage and renal disease in children, leading to dialysis needs when older
- Higher risks of sexually transmitted diseases in young women
- Risks of miscarriage and pre-term birth in pregnant women
- Low birth weight infants
- Poor quality of life
- Risk of overwhelming infection and fatal urosepsis in the elderly.

[95] Rising antibiotic resistance in UTIs could cost Australia $1.6 billion a year by 2030. Here's how to curb it. The Conversation. Morgan, van Oijen and Rollin (2020) https://theconversation.com/rising-antibiotic-resistance-in-utis-could-cost-australia-1-6-billion-a-year-by-2030-heres-how-to-curb-it-149543

[96] Evaluation of the Prevalence of Urinary Tract Infection in Rural Panamanian Women. August & De Rosa, PLoS ONE, (2012)

In addition, UTIs may be linked with poor mental health[97],[98].

Dr Nelson indicated that adequate provision of adequate water and private spaces for sanitation and hygiene can significantly reduce the prevalence of UTIs

Because there is very little data on this emerging issue, the prevalence and effects of UTIs in developing countries, including Timor-Leste, it is probable that they are not accounted for in measures of the benefits of WASH programs. Further research on the causes, prevalence, duration and impacts of UTIs in developing countries could provide insight into WASH designs for better outcomes in this area.

Including Children in Sanitation

The PAKSI programme explicitly includes children and recommends a dedicated "Children's Session" a part of the triggering activities within a community. The evaluation team didn't ask directly about these activities but note that these sessions were not mentioned within communities nor by NGOs or other agencies during discussions. In the children's sessions of the evaluation children indicated a wide range of behaviours around defecation and handwashing, including the use of latrines at school and at home (depending on proximity and comfort), but generally indicated a dislike of open defecation (especially older girls) unless it was unavoidable. They also showed a desire to use soap whenever possible and many indicated that they would ask for soap if it wasn't available when they were ready to wash their hands.

Children of school age demonstrated handwashing practises that were taught within schools as part of the COVID-19 response, while younger children (who are often allowed to open defecate) showed less knowledge of handwashing procedures. It was also noted (and not surprising) that children who were asked to wash their hands were more scrupulous about handwashing if they were clearly being observed than when this was not the case. Answers from children about 'who was likely to remind them to wash their hands' included teachers, parents, siblings and friends. Hence, children can and will remind each other about good hygiene. Regular reminders from adults, including stories or activities that feature handwashing, can reinforce this behaviour. Using other media that children have access to, to develop regular messaging may also be possible, for example, Lafaek magazine is distributed to all schools and could include different types of activities to remind children about good hygiene (it may already do this).

Equity and Inclusion 3

To what extent has the programme been inclusive of and responsive to the needs of people with a disability?

Summary of assessment

People with a disability have been partially included and have had some benefit from CLTS programming.

NGOs implementing CLTS-style programmes help to design latrines for people with a disability within communities. They also make an effort to ensure that people with a disability are included in community sanitation programming. Social and physical barriers still exist, and more effort needs to be made to ensure that all people with a disability have appropriate sanitation options and are

[97] https://www.sciencedaily.com/releases/2013/04/130403112746.htm
[98] Anecdotal evidence from health workers

included in decision making regarding this. People with a disability are slightly more likely to have access to safely managed sanitation, and slightly less likely to OD than on average in ODF communities

Evidence for assessment

CLTS programmes are envisioned as an activity in which all community members are fully involved in recognising and rectifying the issue of OD within their household and within their community. The locally contextualised version of CLTS is PAKSI. The PAKSI guidebooks for implementation highlight the need to support people with a disability to participate actively in the PAKSI process and to be consulted about sanitation facilities to enable their independent use.

Information provided by trainers, healthcare workers, sanitation implementation agencies, organisations representing people with a disability and community members with a disability suggests high levels of recognition that people with a disability should be included, and may need support to be included, in CLTS-style activities. However, there are still significant barriers to be overcome in ensuring that this knowledge is translated to action and that people with a disability are consistently invited and supported to engage in PAKSI processes and the subsequent design and construction of latrines. Two KIIs with the directors of organisations representing people with a disability indicated that attitudes to disability are changing and the government is taking steps to ensure that rights of people with a disability are protected and that actions are taken by government agencies to be inclusive. The WASH sector is actively working with these, and other, organisations to ensure that program processes and outcomes are appropriate and inclusive of people with a disability. The Disability Inclusive WASH Training Guide[99], produced and piloted by PHD and CBM in 2018, provides a comprehensive guide to introducing disability inclusive WASH for WASH practitioners in Timor-Leste, this training could be provided to all sanitation practitioners on a regular basis to ensure that inclusion is 'top of mind' during sanitation programming.

Despite attempts to ensure that FGDs were accessible to people with a disability, only six people with a disability attended.

Interviews with six people with a disability who did attend FGDs produced the following results.

- A man with a mobility impairment was present but did not participate in PAKSI activities. He said that he would benefit from a pedestal latrine but was not given an opportunity to make this known. He currently uses his walking crutch wedged into a corner to create a firm surface to support himself to lower and raise his body.
- A woman who suffers fainting spells was not included in the PAKSI programme because the local chefe did not invite her to attend.
- A young man with a vision impairment was not included in the PAKSI activities. He reported speaking to his family about his needs, but observation showed several obstacles to access to the household latrine, such as a very small doorway and a step up to the squatting pan.
- One man with a mobility impairment felt that he was included in PAKSI activities, although he had little opportunity to speak. His latrine is accessible.
- Two people with vision impairment from one aldeia were not given information about the PAKSI program, but their families ensured that the latrines were accessible for them.

Surveys of NGOs indicated that effort is made to be inclusive and to ensure that people with a disability are invited and supported to attend PAKSI events. These efforts (as with the evaluation) tend to involve asking the local chefe to issue an invitation and offer of support. Chefe sucos and chefe aldeias

[99] https://www.cbm.org.au/wp-content/uploads/2019/02/CBM_PHD_Wash_facilitators_guide_ENG.pdf

are, however, unlikely to be familiar with inclusive practices. Hence, it is unsurprising that they make individual decisions about the capacity of their community members to participate or contribute in workshops and events, as exemplified in the following comments.

They do not involve the disabled people, because the Chefe Aldeia thinks that it is difficult for them to understand the whole issue, he thinks that the disabled people are also too shy to talk.

They cannot be invited to participate in any meeting since they are mentally unstable.

In a good sign that attitudes are changing, these comments arose in FGDs:

There are six people with disability in [our] Suco. The Chefe Suco said they are also an important element in the community so their participation matters.

NGO involved all people with disabilities with leg, communicating and hand. They gave their opinion based on their necessities. Majority of latrine that have built accessible for people with disabilities.

On another positive note, the household survey (Table 16) reveals that for ODF/ALFA communities, households in which someone has a disability (34.6% of households) are **more likely to have safely managed sanitation** and less likely to use OD than other households, despite the lack of implementation of formal government support for sanitation for vulnerable households. It is unclear whether this outcome is a result of additional support provided through government or NGO programmes or some other factor.

Table 16 Sanitation status of households with a member with a disability

JMP sanitation scale	Total (households)	Households with person with a disability
Safely managed	4.6%	11.3%
Basic	64.3%	56.4%
Limited	9.0%	14.1%
Unimproved	18.4%	17.1%
Open defecation	3.8%	1.1%

5. Evaluation Conclusion and Lessons Learned

5.1. Conclusion

This evaluation was focused on CLTS-style implementation for ODF as a whole-of-country program, led by the GoTL. Since the introduction of the NBSP in 2012, the WASH sector in Timor-Leste has achieved remarkable progress in delivering sanitation and hygiene programs, but did not reach the goal of 100% ODF by 2020. However, sanitation programs, supported by international donors, have reached most areas, and there is a strong likelihood that with continued support Timor-Leste will be ODF by 2024.

Of the 13 municipalities in Timor-Leste, six have been verified and declared ODF, two are waiting for verification, and five require significant work to reach ODF status. Of those five municipalities, PAKSI programmes have commenced in four and there is a reasonable expectation that they will reach ODF status by 2022. The final municipality is Oecusse, where reaching full and sustainable sanitation coverage has seemed relatively unlikely until recently.

Reaching ODF

The application of CLTS-style programmes as the primary sanitation programming tool for households was, and still is, appropriate and well aligned to the goals of the GoTL in reaching the last 7% of the nation. The relevance of CLTS-style programmes to achieving 100% ODF is founded in the existing knowledge and professionalism in the sector in applying CLTS/PAKSI style programmes and the current acceptance within communities of non-subsidised approaches. It is likely that CLTS-style programmes will evolve new aspects in this phase (2020–24) and become hybridised. These last communities to be triggered are likely already aware of the need for sanitation may be aware of the hygienic suco programmes that provide subsidies. Transparency and explicitness about timeframes and the sanitation policy (NBSP) for progressing from ODF to hygienic suco may promote the rapid achievement and maintenance of ODF status.

The choice to promote non-subsidised approaches to sanitation within the NBSP was based on a major study of subsidised and non-subsidised sanitation in Timor-Leste, the Joint Sector Evaluation. The (almost) unanimous sectoral take-up of CLTS/PAKSI style programmes indicates that stakeholders in Timor-Leste, and from donor organisations, recognised non-subsidised approaches were most likely to achieve the desired outcomes in a short timeframe, and with minimal slippage and expenditure. CLTS-style programmes are still considered to be an efficient means of reaching and sustaining ODF status, with the proviso that sanitation programmes and health messaging continue after CLTS-style implementation.

Cooperation between Government and NGOs

The sanitation sector's activities within CLTS-style programmes from 2012 to 2020 were appropriate to achieving the ODF target and evolved with the needs of the population and the capacity and capability of local institutions. A good example of this is the PAKSI programme which was developed primarily for NGOs by the BESIK program. As institutions changed in Timor-Leste, the INS revised PAKSI training and delivered it to a new set of PAKSI practitioners, including health workers, public health officers, and administrative post leaders, who now bear the long-term responsibility for sustained ODF behaviours in their regions.

It is difficult to assess the impact of the cessation of the Sanitation Working Group, except through the frequency with which it was brought up throughout the evaluation. The potential for agencies working independently to inadvertently impede each other's work is high, and one of the advantages of regular communities of practice is to avoid this and other problems. For health workers and District

Public Health Officers (DPHOs), lack of post-training support may be an issue over time, but could be amended by the creation of an online, informal knowledge sharing network.

In reaching this stage of sanitation coverage, the sanitation sector has developed effective techniques for collaboration between NGOs and ALFA secretariats to ensure that communities understand the sanitation is not 'just another' short-lived NGO program. The presence of community leaders, health workers and local policing working alongside the NGO staff imparts both a sense of importance and the knowledge that local people will continue to follow-up on sanitation access after the NGO has moved on. This follow-up, especially by chefes and health workers, was commented on by most communities so is clearly a driver of sustainability.

Sustaining new behaviours and social norms

CLTS-style programming, through its reliance on peer pressure, feelings and values, has provoked positive changes in social norms around handwashing and latrine use. Maintaining and strengthening these changes is an important factor in the sustainability of ODF status and progression towards safely managed sanitation and hygiene. CLTS-style programmes have been effective in creating the desire and the impetus for building safe sanitation over time, encouraging almost 20% of households to improve their sanitation status without assistance. Households without resources for improving their sanitation status generally state that they have the ambition to do so, and in some cases are finding the means to incrementally build new latrines. This sets a solid foundation for following up PAKSI programmes with encouragement to climb the sanitation ladder.

A focus on the involvement of women and the inclusion of people with a disability has been part of sanitation programming in Timor-Leste since at least 2006 and are explicitly incorporated in the PAKSI manual. This focus needs to remain in programming, and would be bolstered by recruitment of more women and people with disabilities into sanitation teams in the implementing NGOs. It should be noted that gender equity and disability inclusion are not the remit of a single sector, but are aims that need to be worked at by the whole of society, with support from good policymaking that recognises the strengths that inclusion and equity bring to communities. The WASH sector, supported by the MoH, should continue to be a strong voice for equity and inclusion, especially in small and remote communities.

At the community level, the building of pit latrines is encouraged because they can be built quickly, cheaply and easily. This makes initial ODF gains a speedy process. However, descriptions of pit latrines from community members indicate that they tend to require frequent maintenance or re-digging. Moreover, pit latrines are rarely as safe and secure as women would like. Many communities are unaware of best practices in building and maintaining pit latrines, hence they are seen as 'poor cousins' to flush latrines. Without follow-up or monitoring that encourages households to maintain or improve their latrine, pit latrines fall into disrepair and disuse. From the survey data and from the FGDs it can be seen that behaviour changes to incorporate handwashing with soap lag behind latrine use, and this is true for both the behaviour and the social norm.

Equity and Access

Vulnerable households are not achieving ODF at the same rates as others: overall, the poorest households have an OD rate of 9.5%, compared with no OD in the wealthiest households. Even with significant progress made towards ODF status, poor households are left behind because residents do not participate in activities due to physical or financial constraints, or through choice. Overcoming these barriers to participation, and remediating the small amount of slippage, will form part of the last push required from the sector to achieve ODF. Slippage was low in most of the ODF communities

surveyed, but it is concerning that where slippage appeared to be over 10% such as in Ermera there was no evidence of remedial activity from the municipal or central government duty bearers. Being able to respond to changes in sanitation status requires an effective monitoring process, along with a process for collating, analysing and responding to the data collected during monitoring.

Women's health is especially affected by sanitation and hygiene in ways that are rarely highlighted. It is important to consider issues that affect women, including menstrual hygiene, UTIs and childhood faeces management within sanitation programmes so that they are part of the consciousness of the sector and of decision-makers. Discussing these issues publicly also ensures that women do not have to hide them and are more likely to access medical intervention when needed. Likewise, children's special needs in regard to sanitation must be highlighted and considered in programming. Security, space and hygiene are important factors in sanitation for women. Adequate hygiene requires at least 100L of water per person per day to the house, and the MoH is well positioned to advocate for significant improvements in water delivery across the country.

Moving up the sanitation ladder

Over the next 10 years the GoTL has committed to achieving the SDG for water and sanitation by 2030. This will mean achieving full ODF status and then transitioning households from unimproved latrines (according to the JMP definition) to safely managed sanitation. This correlates with a transition from ODF to hygienic suco on the Timor-Leste Sanitation Classification (Figure 18).

Figure 18 Timor-Leste sanitation classification

All households in Timor-Leste should be ODF by 2024. Good progress has been made on ODF despite a lack of transparency about which community would be triggered and when, and how those communities were chosen. In the next stage of sanitation – hygienic suco programmes – it will be important that decisions around timing of delivery to communities are based on a set of clear and publicly available criteria, and smart subsidies likewise. Working with donors and NGOs to develop these criteria and ensure that they are applied will be an important coordinating step for the GoTL, and will set a clear plan for progress towards SDG 6.2.

Overall, the evaluators want to emphasise that the sanitation sector in Timor-Leste has followed the leadership of the MoH to provide culturally appropriate, non-subsidised sanitation programmes that have ensured latrine access for an additional 550,000 people in 11 years. Building on the changes in social norms, and the aspiration for 'modern' latrines, should see Timor-Leste reach full ODF status by 2024 and be well on the way to achieving SDG 6.2 by 2030.

5.2. Lessons Learned

This section outlines the lessons identified from the broad-ranging CLTS-style programmes in Timor-Leste.

High-level coordination and policy are important

Ensuring that the sector is working towards the same goal has been an important aspect of achieving the first rung on the sanitation ladder. Coordinating the work of NGOs to enable geographic responsibility has also been a useful strategy, particularly in terms of creating ownership of results and simplifying working relationships for municipal staff.

Institutional triggering has been effective but there is no information about what happens when community leadership changes. In the wake of elections or other leadership changes it will be necessary to consider some form of engagement with new community leaders to ensure that they understand the need and benefits of maintaining ODF status in their communities and that they have the capacity to support the chefe aldeias and health workers in their positions.

Monitoring and evaluation need to be funded, and funding streams need to be transparent

Environmental health officers, when questioned about sanitation monitoring, indicated that while NGOs were funding verification and monitoring exercises these had gone ahead as planned. However, when NGOs felt that CLTS-style programmes were complete there was no ongoing funding for monitoring, and no budget for it in the municipal budget. Hence, there is a dearth of monitoring data since 2019.

Knowledge sharing networks need to be nurtured

Communities of practice enable professionals to share experience and knowledge and improve practice by identifying common issues and solutions. They also provide opportunities to discuss innovations and trial new technologies or techniques as a group. After listening to many people in different communities discussing ideas and innovations in sanitation that are working for them, it became clear that a forum for sharing ideas amongst practitioners is needed. This could be a face-to-face network and/or rely on a social media platform. As with any community of practice, it would need dedicated support to maintain secretariat responsibilities. Health workers and DPHOs should be intentionally included in any community of practice, because they are geographically isolated and sanitation is not the main focus of their work.

Children's needs and learning should be considered in sanitation programs

The COVID-19 response included a lot of school-based handwashing education. In the children's FGDs, which included a handwashing activity, it was clear that school-aged children were taught to wash their hands but younger children were unfamiliar with the task. Most adults reported that children were not encouraged to use a latrine, and that small children face physical hazards in using a pit latrine. Identifying and acting on the needs of children for safe and appropriate sanitation and hygiene is important in ensuring that children are less susceptible to diarrhoea and other sanitation-related enteric diseases.

Gender equity and disability inclusion require continued focus

The sanitation sector has shown leadership in promoting gender equity and disability inclusion through the PAKSI guidelines. Unfortunately, these guidelines are not enough to ensure that equity and inclusion are fully integrated into programs, as the responsibility for inviting people to community

events often rests with chefe aldeia. Other development sectors work in much the same way, and face the same problem. Collaboration with other sectors to work with chefe aldeias on understanding the need to ensure gender equity and inclusion of attendance at community events would be a useful development. This may require an agreement that all sectors will take certain actions to facilitate the inclusion of women and people with a disability.

CLTS-style programmes have failed to have the expected results in Oecusse

The case of Oecusse, where CLTS-style triggering has failed to gain traction within two separate programs, is evidence that CLTS-style programming is not 100% effective. It is important that the sector is prepared to use other strategies to encourage communities to act on sanitation when CLTS-style programming fails.

Separate strategies are required for the few households in each community who can't or won't build or mend a latrine, and where the chefe and health worker are unable to promote change. As problems are rarely the same for any two households, these strategies should be very flexible to deal with the large range of possible contextual issues.

6. Evaluation Recommendations

This section outlines recommendations based on the evaluation outcomes. The evaluators combined survey evidence, the views of key informants and FGD participants, and the evaluation team's understanding and expertise within the WASH sector to recommend ways to complete the project of ensuring that every household in Timor-Leste has, and continues to have, access to a latrine. Organisational stakeholders, via the evaluation reference group, have been provided with the recommendations to review prior to completion of the report. Feedback from the reviewers is incorporated here. The evaluation was requested by the GoTL's MoH, the recommendations mostly identify actions for the MoH to implement or oversee and include other organisations who would be party to these actions.

The prioritisation provided in the table reflects the perception of the evaluation team and should be considered a guide to ordering of priorities where:

- ***High*** – should be undertaken as soon as possible for the best contribution towards sanitation outcomes
- ***Moderate*** – should be considered an essential aspect of sanitation programming and is either already partially in place or not as urgent as high priority actions.
- ***Low*** – is non-urgent, research dependent actions that are likely to inform sanitation programming in Timor-Leste and globally.

	Recommendations and actions	**Reference to report section**	**Responsible actors / *Priority***
1	The push to reach 100% ODF, and ongoing Hygienic Suco Programmes will require funding. Develop a costed action plan (taking into account other recommendations) to meet long term sanitation goals in Timor-Leste. Government commitments and donor commitments should be sought based on this plan.	4.1	MoH and Ministry of Public Works, with support from implementing partners *High priority*
2	Increase collaboration to review and implement water supply guidelines so that water supply meets the needs for good hygiene at the household level, now and into the future.	4.5	Ministry of Public Works with support from development partners *High priority*
3	Coordinate and support efficient and fast transitions between PAKSI and hygienic suco programming at the aldeia level.	4.3	MoH with support from implementing partners *High priority*
4	In conjunction with sanitation agencies, develop a needs-based agenda for implementation of hygienic suco programs.	4.6	MoH and Ministry of Public Works, with support from implementing partners *High priority*
5	Identify the purposes and uses of sanitation monitoring data. Develop and fund a monitoring and data management process to meet those needs. This should include a feedback process that indicates to communities that the government has received and responded to the data.	4.5	MoH with ALFA secretariats and Ministry of State Administration *High priority*

	Recommendations and actions	Reference to report section	Responsible actors / *Priority*
6	Within PAKSI and hygienic suco programmes, present options for low cost, high amenity, dry (pit) latrines in communities with ongoing water scarcity. Encourage those communities to aim for high-quality, well-maintained, permanent dry latrines, rather than flush latrines. Include lighting options.	4.5	Implementing agencies *High priority*
7	Children's faeces are disposed of safely about 50% of the time. This poses a health risk in communities, but is a complex issue involving cultural tradition. Develop a multisectoral team to investigate pathways to changing behaviours around children's faeces collection and disposal.	4.2	MoH *High priority*
8	Set a goal for reaching ODF in Oecusse by 2024. Work with local health workers, WASH professionals and community leaders to develop a strategy that will bring Oecusse in line with sanitation gains in the rest of Timor-Leste. Commit to funding the replication of the effective aspects of the activities that brought Bobonaro to improved sanitation status.	4.2	MoH with support from implementing agencies *High priority*
9	Continue training for PAKSI and Hygienic Suco programs including new and experienced staff from the government and non-government sanitation sector	4.1	MoH with support from INS and implementing agencies *Moderate priority*
10	Ensure that future PAKSI (and other) sanitation programmes continue to highlight the role of flies in disease transmission and the benefits of covering food.	4.4	INS and implementing agencies *Moderate priority*
11	Ensure that future PAKSI programmes do not appear to offer material support for latrine building, if this is not the case. Work with research institutes and NGOs to ensure that other needs analyses are conducted with caution regarding the perceptions/misperceptions of residents.	4.4	INS and implementing agencies *Moderate priority*
12	Implement behaviour change communications using traditional and social media to form and maintain a pro-latrine, pro-handwashing social norm across the country. Use innovative and engaging methods, including feedback and competitions, to maintain interest in sanitation and hygiene and in national progress towards ODF status.	4.5	MoH with support from development partners *Moderate priority*
13	Continue to encourage the use of best practice in gender and inclusion for sanitation and hygiene programming by disseminating best practise information through knowledge networks and by ensuring that training in gender and inclusion for sanitation are held regularly with the expectation that all sector staff will participate. Find ways to ensure that the sanitation sector is an equal opportunity employer.	4.6	MoH with support from development partners *Moderate priority*
14	Review innovative, low water usage latrine designs, in use in Timor-Leste and elsewhere in the world, and assess their appropriateness in different parts of Timor-Leste	4.5	Ministry of Public Works with support from development partners *Moderate priority*
15	Coordinate research to develop and test contextually relevant methods to strengthen pro-handwashing social norms. These could include	4.5	MoH with support from development partners

	Recommendations and actions	Reference to report section	Responsible actors / *Priority*
	behaviour change communications, 'nudges'[100] and personal health tracking activities		*Low priority*
16	Coordinate research to understand the impacts of UTIs on women in Timor-Leste. Consider creating a resource outlining best practices in WASH implementation to help prevent UTI occurrences. This could be complemented by education and health centre resources.	4.6	MoH with support from development partners *Low priority*
17	Coordinate research to investigate why ODF within communities does not include OD 'on the farm' and whether this poses a significant risk to community health.	4.2	MoH with support from development partners *Low priority*

[100] Nudges are environmental cues designed to influence individual's decisions or behaviours in a specified manner

Annexes

I. Evaluation Matrix
II. Key Informant Interview Guidelines
III. Guide for Focus Group Discussions
IV. Household Sanitation Coverage Survey
V. Timor-Leste Sanitation Stakeholders Organisational Questionnaire
VI. Community Co-design Workshop
VII. List of Key Informant Interviews
VIII. Ethics Approval
IX. List of Documents Reviewed
X. WASH Agencies in Timor-Leste since 2002
XI. Timeline of Evaluation
XII. Fieldwork Agenda
XIII. Evaluation Team
XIV. Data tables from Household Sanitation Coverage Survey
XV. Report Back to Communities
XVI. Mission Report
XVII. Terms of Reference

I. Evaluation Matrix

RELEVANCE

Key Evaluation Questions	Approaches and Sources of Data	Indicators
R1 To what extent has CLTS been, and is still, aligned to national priorities and relevant given the country context, the existing WASH challenges, and the higher ambitions set out by the SDGs particularly the government's ODF target by 2020?	**Approach:** CLTS as a model will be assessed against 2020 ODF target and the national SDG targets for sanitation.	**Indicator:** Achieving ODF status across Timor-Leste, using non-subsidised approaches, is perceived by policy stakeholders to be a national priority. See Qualitative Rubric R1 below
	Data Collection/Sources: **Document review:** • Focus of the document review will be detailing sanitation priorities and GoTL SDG ambitions. • Primary sources: ○ Timor-Leste Basic Sanitation Policy (2012) ○ Timor-Leste National Strategic Plan for Rural Sanitation (2013) ○ Timor-Leste Strategic Development Plan 2011 – 2030 ○ Timor-Leste RWASH Sector Strategy 2008 – 2011 ○ Report on the Implementation of the Sustainable Development Goals; Voluntary National Review of Timor-Leste 2019 ○ Institutionalization of CLTS in Timor-Leste. **KIIs:** Focus for the KII will be seeking senior government and other sanitation stakeholder views on the contribution of CLTS to stated GoTL priorities; this will include consideration of both past CLTS performance and potential contribution. • Government Stakeholders • NGO staff Relevant questions: G3, G6, G7, G14, C4, C6, C7	

R2 Were the various activities and outputs consistent to achieve the overall goal and intended impact of	**Approach:** Stakeholder expectations will be explored and CLTS contribution to OD eradication assessed.	**Indicator:** CLTS programmes are responsive to local needs and culture and provide progress towards sustainable ODF outcomes. See Qualitative Rubric R2 below

eradication of open defecation?	**Data Collection/Sources:**
	KIIs:
	Explore with sanitation stakeholders their expectations for CLTS and the activities and outputs involved.
	• Government stakeholders including:
	  ○ Ms Odete Maria Freitas Belo, Minister for Health
	  ○ Ms. Tomasia Ana Maria do Rosario e Sousa - former Head of Environmental Health Department
	  ○ Mr. Carlos Freitas - former sanitation officer of MoH and currently for Alola implementing CLTS projects
	  ○ Mr. Jose Moniz – Head of Environmental Health Department
	  ○ Mr. Joao Piedade – Director DNSB, DGAS
	• NGO staff
	
	Relevant questions: G6, G7, G12, C7, C8
	
	Sanitation Stakeholder Organisation Questionnaire:
	Relevant Questions: S6, S7
	
	Document review:
	NGO programme and annual reports - review of CLTS/PAKSI outputs and activities including (for example):
	• Annual Report 2018: World Vision in Timor-Leste
	• CLTS Manual for Timor-Leste Books 1 -3
	
	Local and regional evaluations – review of CLTS programme and rates of OD slippage including (for example):
	• Evaluation of Bobonaro ODF Initiative
	• CLTS Lessons Learnt from A Pilot Project in Timor-Leste
	• Timor-Leste Rural Water Supply and Sanitation Programme - Bee, Saneamentu no Ijiene iha Komunidade (BESIK 2): Monitoring and Review Group No. 2.
	• A snapshot on Drinking Water, Sanitation and Hygiene in the UNICEF East Asia & Pacific Region	

	• ODF Sustainability Study in East Timor 2015 – 2016	

Assessment Rubric: RELEVANCE

R1: To what extent has CLTS been, and is still, aligned to national priorities and relevant given the country context, the existing WASH challenges, and the higher ambitions set out by the SDGs particularly the government's ODF target by 2020?

Rating	***Criteria***
CLTS is **well** aligned with national priorities	*Policy actors agree that achieving country-wide ODF status is a national priority*
CLTS is **moderately** aligned with national priorities	*Policy actors see the importance of achieving country-wide ODF status, but are focussed on other priorities*
CLTS is **not** aligned with national priorities	*Policy actors are not concerned with achieving country-wide ODF status*

R2: Were the various activities and outputs consistent to achieve the overall goal and intended impact of eradication of open defecation?

Rating	***Criteria***
Activities were **likely** to achieve eradication of OD	*CLTS programmes were designed and implemented in ways that responded to local needs and culture and were effective in creating local ODF achievements*
Activities and outputs were **somewhat likely** to achieve eradication of OD	*CLTS programmes were implemented without significant adjustments for local needs and culture. Some progress was made towards ODF communities*
Activities and outputs were **somewhat unlikely** to achieve eradication of OD	*CLTS programmes were implemented without adjustments for local needs and culture. Little progress was made towards ODF communities*
Activities were **unlikely** to achieve eradication of OD	*CLTS programmes were NOT designed and implemented in ways that responded to local needs and culture and were NOT effective in creating local ODF achievements*

EFFECTIVENESS

Key Evaluation Questions	Approaches and Sources of Data	Indicators
E1 To what extent were the CLTS programme objectives achieved / are likely to be achieved, and in particular has the collective practice of Open Defecation (OD) disappeared and the practice of handwashing at critical moments been taken up as a result of CLTS (at the time of certification, or shortly before or after)?	**Approach:** Secondary data will be assessed to measure success of major CLTS programmes in eradicating ODF and promoting handwashing at critical times.	**Indicator:** Number and % of ODF communities
	Data Collection/Sources: **Document review:** ODF Sustainability reports for Timor-Leste (for example): • ODF Sustainability Study in East Timor 2015 – 2016 • Evaluation of Bobonaro ODF Initiative • Total Sanitation Campaign Evaluation Report **Implementing agency monitoring data** • WaterAid, Plan, UNICEF, ADRA, PHD raw or reported data as made available by NGOs **Monitoring data from ALFA secretariats** • ODF ceremony/certification/verification reports • Post-ODF monitoring reports	Municipal declarations of ODF, verified by MoH, indicate the numbers of communities that have been declared ODF. Combined with census information this provides data for the population in ODF municipalities. Data from NGOs or ALFA secretariats for the remaining 5 municipalities will provide information on ODF coverage for the remaining population. Slippage rates will be tested through the Household Sanitation Coverage Survey Communities declared ODF have been verified to have handwashing facilities, so the same data set can be used. Persistence of handwashing facilities and evidence of soap for handwashing will also be tested through the Household Sanitation Coverage Survey.

E2 To what extent has CLTS effectively motivated households in the communities targeted to effectively climb up the sanitation ladder and improve the quality of their latrines after achieving ODF?	**Approach:** Assessment of sanitation infrastructure in ODF communities, and community-level exploration of experiences and motivation in relation to improving sanitation infrastructure.	**Indicator:** Number and % of households with post -CLTS self-improved sanitation facilities. Households attribute motivation for improved sanitation to CLTS programs. See Qualitative Rubric E2 below
	Data Collection/Sources: **Sanitation Implementation reports** (specifically with respect to latrine types in ALFA communities) • Plan, WaterAid, UNICEF, PHD **Monitoring data from ALFA secretariats** • Post-ODF monitoring reports **Community FGDs** • Stories of households moving up sanitation ladder • Community feedback, what motivated households that have moved up the sanitation ladder since triggering or ALFA declaration. Relevant questions: F5, F6, F7 **Community observation** Household Sanitation Coverage Survey will provide data on individual households	The Household Sanitation Coverage Survey will be used to ascertain numbers of self-improved sanitation facilities and triangulated with FGD questions and chefe interviews about assistance and encouragement to move from unimproved to improved sanitation in the area.
E3 Does a declaration of ODF have meaning and	**Approach:** Investigation of community attitudes concept to and experiences of becoming ODF contrasted with perspective of Municipal level Government.	**Indicator:** Communities show that they are proud of achieving ODF status.

value to residents? Is ODF status something that individuals/communities strive for? Why? Is it perceived to change anything?		See Qualitative Rubric E3 below
	Data Collection/Sources: **Community FGDs** • Investigation of attitudes towards non-ODF communities Relevant questions: F3.9, F3.10, F3.11, F16 **KIIs:** Will explore implementer experience and understanding of how ALFA is perceived by communities. • Sanitation leads for NGOs • Implementers • ALFA secretariats • Chefe Aldeias Relevant questions: G15, C14, L13, A16	

Assessment rubric: EFFECTIVENESS

E2: To what extent has CLTS effectively motivated households in the communities targeted to effectively climb up the sanitation ladder and improve the quality of their latrines after achieving ODF?

Rating	***Criteria***
CLTS provides **significant** motivation for households to move up the sanitation ladder	*Households that have improved sanitation with no assistance attribute the motivation for this to CLTS programmes that ensured that households were ODF*
CLTS provides **some** motivation for households to move up the sanitation ladder	*Households indicate a desire for improved sanitation after CLTS, and have made some improvements to their latrine*

CLTS provides **little** motivation for households to move up the sanitation ladder	*Households indicate a desire for improved sanitation after CLTS but haven't acted on that desire*
CLTS does **not** motivate households to move up the sanitation ladder	*Households are content with their latrine, post-CLTS*

E3: Does a declaration of ODF have meaning and value to residents? Is ODF status something that individuals/communities strive for? Why? Is it perceived to change anything?

Rating	***Criteria***
Communities are **proud** of being declared ODF and **maintain** their sanitation facilities	*Communities report being proud or pleased to have achieved ODF status and most sanitation facilities are well maintained (clean and in good working order)*
Communities are **satisfied** at being declared ODF and **do some maintenance of** their sanitation facilities	*Communities report being content with having ODF status and there is some evidence that facilities are maintained (most latrines are working but a majority show signs of degradation and/or are not clean)*
Communities are **ambivalent** at being declared ODF and **do minimal maintenance of** their sanitation facilities	*Communities members express little interest or enthusiasm for ODF status and there is little evidence that sanitation facilities are maintained (less than half are working, undegraded and clean)*
Communities are disinterested in ODF status and **do not maintain** their sanitation facilities	*Communities report little enthusiasm for ODF status and most facilities are not working and/or dirty*

EFFICIENCY

Key Evaluation Questions	Approaches and Sources of Data	Indicators
EC1 Is the level of achievement of outputs and outcomes related to the eradication of open defecation, use of improved sanitation, handwashing practices, and sector coordination satisfactory when compared to the level of financial and human resources mobilized/used?	**Approach:** Analysis of programme achievements against objectives from programme documentation and questionnaire, with focus on unit costs and quantification of HR inputs. Assessment of sector coordination by senior government staff, with focus on over- or under-serviced areas.	**Indicator:** Cost per latrine per ODF community Stakeholder perception that good sector coordination has helped to achieve positive sanitation outcomes. See Qualitative Rubric EC1 below
	Data Collection/Sources: **Document review:** Implementing agency documentation as made available by NGOs: • Planning, progress and completion reports, evaluations **Sanitation Stakeholder Organisations Questionnaire:** Relevant questions: S6, S7, S8, S9 **KIIs:** Explore the perceptions of stakeholders of the benefits of applying CLTS • Senior Government staff • ALFA secretariats Relevant questions: G4, G11, C8, A11	The cost per latrine will be determined through the NGO survey. NGOs will be asked to indicate the material costs, voluntary time and organisational costs per latrine.

EC2 Were the objectives achieved on time or have there been any significant delays in programme implementation and achievement of results, and if so, why?	**Approach:** This will be evaluated using programme documentation and triangulated with senior government and programme staff perspectives.	**Indicator:** Number and % of ODF communities and projected numbers for future programming, compared to targets for 2020 and 2030
	Data Collection/Sources: **Document review:** Implementing agency programme documentation as made available by NGOs: • planning and reporting docs **Sanitation Stakeholder Organisation Questionnaire:** Relevant questions: S6, S7 **KIIs:** Explore the expectations of stakeholders: • Government staff • NGO staff Relevant questions: G3, G7, G16, G17, C7, C8	Municipal declarations of ODF, verified by MoH, indicate the numbers of communities that have been declared ODF. This provides data for the population in ODF municipalities. Up-to date figures from NGOs or ALFA secretariats for the remaining 5 municipalities will provide information on ODF coverage for the remaining population. NGOs will be asked to indicate their future ODF programming intentions. These figures will be compared with Government policy intentions.

Assessment rubric: EFFICIENCY

EC1: Is the level of achievement of outputs and outcomes related to the eradication of open defecation, use of improved sanitation, handwashing practices, and sector coordination satisfactory when compared to the level of financial and human resources mobilized/used?

Rating	*Criteria*
Progress towards ODF has been **very effective**	*Actors in the sector agree that it is well coordinated and this has been integral to achieving ODF outcomes*
Progress towards ODF has been **moderately effective**	*Actors in the sector agree that the sector is coordinated to achieve ODF outcomes*
Progress towards ODF has been **ineffective**	*Actors in the sector agree that the sector has little coordination from government*

IMPACT

Key Evaluation Questions	Approaches and Sources of Data	Indicators
I1 Were there any unintended impacts from CLTS interventions?	**Approach:** Opportunities will be provided throughout the evaluation for stakeholders to reflect on and identify unintended consequences arising from CLTS programming, both negative and positive.	**Indicator:** Anecdotal evidence will be provided for unintended impacts. Where possible, corroborating evidence will sought from further sources.
	Data Collection/Sources: **Community FGDs** Relevant questions: F4, F5, F12, F13 **KIIs:** Open ended questions with • Implementing agency staff • Government staff • ALFA secretariats Relevant questions: G18, C15, L14, A17	

SUSTAINABILITY

Key Evaluation Questions	Approaches and Sources of Data	Indicators
S1 To what extent did the ODF status and the associated social norms such as handwashing sustain since certification (in communities certified in the earlier years of the evaluation period), and what were contributing factors, both at community level and in the enabling environment?	**Approach:** Secondary sources will be used to estimate slippage and HWWS rates, and the reasons explored with communities and key government staff.	**Indicator:** % of households in ODF communities that show evidence of sustained use of latrines % of households in ODF communities that show evidence of HWF and soap.
	Data Collection/Sources: **Community FGDs** Relevant questions: F1, F2, F3.11, F8, F10, F14, F15 **Household Sanitation Coverage Survey:** Determine number of households with evidence of persistent sanitation and hygiene practises **Document reviews:** ODF Sustainability reports for Timor-Leste (for example): • Evaluation of Bobonaro ODF Initiative • Timor-Leste Rural Water Supply and Sanitation Programme - Bee, Saneamentu no Ijiene iha Komunidade (BESIK 2): Monitoring and Review Group No. 2. • A snapshot on Drinking Water, Sanitation and Hygiene in the UNICEF East Asia & Pacific Region • ODF Sustainability Study in East Timor 2015 - 2016 **KIIs:** Exploring interaction of municipal staff with communities, for sustained sanitation outcomes • ALFA Secretariats Relevant questions: A4, A5, A6, A7	Persistence of latrines and evidence of use will be tested through the Household Sanitation Coverage Survey Persistence of handwashing facilities and evidence of soap for handwashing will also be tested through the Household Sanitation Coverage Survey.

S2 In situations where some sections of the communities have returned to their original habit of open defecation, despite their villages attaining/accredited with ODF status, how have the Government duty bearers at municipal and central levels managed such slippage?	**Approach:** Responding to this question will involve questioning key government staff and triangulating their responses with the experiences of community members in communities that have reverted to OD.	**Indicator:** Slippage is identified and responded to by duty bearers Qualitative Rubric S2 below
	Data Collection/Sources: **KIIs:** Exploring the data flow and response at the municipal level • ALFA Secretariats • Government staff responsible for training ALFA secretariats Relevant questions: A5, A6, A7, A8, G19 **Community FGDs** Relevant questions: F8	
S3 Is there a relationship between the sustainability of sanitation outcomes after CLTS programmes and the availability of water or co-implementation of water supply programs?	**Approach:** Compare household observation data of latrine use and HWWS against the different programmes (CLTS vs CLTS + water) as indicated by the implementation agencies. Also compare household observation data of latrine type, latrine use and HWWS against availability of water at household level.	**Indicator:** Correlation between availability of water and sustained use of latrines and HWWS
	Data Collection/Sources: **Household Sanitation Coverage Survey:** Questions and observations on distance to water points and seasonality of water and latrine usage. **Sanitation Stakeholder Organisational Questionnaire:** Relevant Questions S4, S5	The two surveys include questions and observations on latrines, handwashing and water supply. The data will be analysed to look for trends around the sustainability of behavioural outcomes under differing conditions of water supply.

Assessment rubric: SUSTAINABILITY

S2: In situations where some sections of the communities have returned to their original habit of open defecation, despite their villages attaining/accredited with ODF status, how have the Government duty bearers at municipal and central levels managed such slippage?

Rating	***Criteria***
Slippage has been **averted or reversed** through the actions of duty bearers	*There are processes in place to identify and respond to reversion to OD and duty bearers have acted on these appropriately*
Duty bearers have **attempted to avert or reverse** slippage to OD	*There are processes in place to identify and respond to reversion to OD, and duty holders respond appropriately some of the time*
Slippage to OD has been **ignored** by duty bearers	*There are no process in place to identify and respond to reversion to OD, duty holders show little concern for maintaining ODF environments*

EQUITY AND INCLUSION

Key Evaluation Questions	Approaches and Sources of Data	Indicators
EQ1 To what extent has CLTS been implemented in the communities where there was a stronger need for it, with the intention of reducing inequities?	**Approach:** Compare implementation approaches with criteria in national sanitation strategy, and triangulate with KII data from key government staff.	**Indicator:** % of prioritised communities triggered
	Data Collection/Sources: **Document review:** • Timor-Leste National Strategic Plan for Rural Sanitation • NGO planning documents **KIIs:** Whether equity is a criterion in selecting programme locations • ALFA secretariats • Implementing agency staff • Government staff involved in allocation of resources to communities Relevant questions: L9, A10, G12, G13	2013 Basic Sanitation Strategy sets out areas for sanitation prioritization. This will be assessed against list of ODF declarations and further data from NGOs. Other prioritization will be noted in qualitative interviews.
EQ2 To what extent has the programme effectively mainstreamed gender equality and empowerment of women and girls?	**Approach:** Assess gender equality measures taken by implementing agencies, focussing on both implementation processes and programme outcomes. These will be triangulated against data from community processes (particularly women's FGDs).	**Indicator:** Numbers of women participating in triggering events. Women indicate positive status changes because of CLTS programs See Qualitative Rubric EQ2 below

	Data Collection/Sources: **Document review:** Implementing agency manuals and programme reports (for example): • The CLTS Manual for Timor-Leste Book 1 – 3 • A Facilitator's Manual for Community Sanitation and Hygiene Planning Book 1 -3 **KIIs:** Looking for examples of inclusivity in programme implementation • Implementing agency staff (GESI officer) • ALFA Secretariats Relevant questions: G9, C10, L10, L11, A9, S13, S14, S15, S16, S17, S18, S19 **Community FGDs, women's group** Relevant questions: F18	The NGO survey includes an indication of gender ratios at triggering events.
EQ3 To what extent has the programme been inclusive of and responsive to the needs of people with a disability?	**Approach:** Assess inclusivity measures taken by implementing agencies, focussing on both implementation processes and programme outcomes. These will be triangulated against data from community focus groups and interviews with people living with a disability.	**Indicator:** People with a disability report that they are included in CLTS programs. See Qualitative Rubric EQ3 below
	Data Collection/Sources: **Document review:** Implementing agency manuals and programme reports (for example): • The CLTS Manual for Timor-Leste Book 1 – 3 • A Facilitator's Manual for Community Sanitation and Hygiene Planning Book 1 -3 **KIIs:** Looking for examples of inclusivity in programme implementation • Implementing agency staff (GESI officer) • ALFA Secretariats	

	Relevant questions: G9, C10, L11, A9, S13, S14, S15, S16, S17, S18, S19 **<u>Community FGDs:</u>** Relevant questions: F19 **<u>Interviews with people with a disability:</u>** Relevant questions: FD1, FD2, FD3, FD4, FD5, FD6	

Assessment rubric: EQUITY

EQ2: To what extent has the programme effectively mainstreamed gender equality and empowerment of women and girls?

Rating	***Criteria***
Significant gender equality progress has been made	*Women report positive changes to their lives and status as a result of CLTS programs* *CLTS programming applies gender equality principles* *NGOs have internal gender equity targets*
Little gender equality progress has been made	*Women report some positive change to their lives and status as a result of CLTS programmes* *CLTS programming applies gender equality principles* *NGOs show no regard for gender equity within their organisation*
Gender **inequality has been reinforced**	*Women report negative changes to their lives and status as a result of CLTS programs* *CLTS programming does not apply gender equality principles* *NGOs are resistant to hiring women in 'non-traditional' roles*

EQ3: To what extent has the programme been inclusive of and responsive to the needs of people with a disability?

Rating	***Criteria***
People with a disability have been **fully included, and benefitted from** CLTS programming	*People with a disability report that they attended and participated in triggering events and decisions about facilities and can access their household latrine comfortably*

People with a disability have been **partially included and have some benefit from** CLTS programming	*People with a disability report that they attended triggering events but felt that they had little input into facilities OR they had input but were not included in the triggering event. They have some difficulty accessing their household latrine*
People with a disability were **NOT included and did not benefit from** CLTS programming	*People with a disability report that they did not attended triggering events, had no input into facilities and their household latrine is inaccessible to them*

II. Key Informant Interview Guidelines

Semi Structured Key Informant Interview – (GoTL)

Introductions and consent forms

G1. Name and position
G2. Could you provide a brief history of your work in the sanitation sector?
G3. What is your perception of the policy process and relevance of the policy now?
G4. Can you tell me how you first heard about CLTS, what you thought of it?
G5. What events, people, policy do you think have been important in sanitation and in CLTS in TL (date if possible but chrono order is fine)
G6. Do you have any concerns about the widespread uptake of CLTS that we have seen in TL?
G7. What do you think is required for TL to reach safely managed and sustainable sanitation?
G8. CLTS in Timor-Leste is used differently from its original methods – what changes have you seen, - good bad indifferent?
G9. When and why were gender and disability highlighted? Did it make a difference?
G10. Which organisations have had the biggest influence? Why?
G11. There have been several monitoring reports on sanitation in TL, what monitoring data is collected at the different levels of government and how is the data used to inform future sanitation programs? For example, is there any data that correlates improvements in health (especially for under 5s) with PAKSI programs? Is there data that would be useful in planning but which is not currently available? Do you have data that shows sanitation coverage?
G12. The documents we have read indicate that there was an intention that subsidies would be available for vulnerable households. Do you know of a programme that provides subsidies? (follow this up with perception of subsidies).
G13. How are sanitation programmes for different places prioritised? For example, is it based on the needs of communities, their vulnerability, health data, political expediency, the ease of gaining quick results or something else?
G14. What sanitation related activities are funded by the government?
G15. What do you think that people who live in communities think (or feel) about open defecation and about becoming open defecation free?
G16. How long do you think it will take for all of Timor-Leste to be ODF?
G17. What delays have there been? And what problems might there be in reaching ODF by then?
G18. Is there anything that has surprised you, that has happened as a result of PAKSI programs?
G19. How do you see your department's role in trying to either avoid or remediate issues where some communities slip back to open defecation?

Semi-Structured Key Informant Interview—(INGOs/Consultants)

Introductions and Consent forms

Introdusaun no Formuláriu Konkordánsia

C1. Explain how you have been involved in the sanitation sector, and in Timor-Leste, and for how long?
(Esplika to'ok oinsá ita boot involve iha seitór sanitasaun, no iha Timor-Leste, no komesa horbainhirak?)

C2. Can you tell me how you first heard about CLTS, what you thought of it?
(Bele esplika to'ok ita sente oinsá bainhira primeira vés rona kona-ba CLTS, ita-nia hanoin kona-ba CLTS oinsá?)

C3. What (or who) convinced you to use it in sanitation interventions (with dates if possible)
(Saida (ou sé) mak halo ita fiar hodi uza CLTS iha intervensaun sanitasaun? (bele temin data karik posível).

C4. What is your understanding of how the NBSP came to be written in such a way as to point sanitation programming towards non-subsidised CLTS-style interventions?
(Oinsá ita boot nia kumpriensaun kona-ba modelu Polítika Nasionál Saneamentu Báziku ne'ebé elaboradu ho maneira atu aponta programa sanitasaun ba intervensaun ho modelu não-subsídiu?)

C5. Please draw a timeline of the things – events, people, policy - that you think were important in CLTS in TL (date if possible but chrono order is fine)
(Halo favór dezeña sekuénsia ou kronolojia kona-ba buat hirak hanesan; eventu, ema, polítika ne'ebé ita boot hanoin importante tebes ba CLTS iha Timor-Leste (karik posível temin mós data)

C6. Do you have any misgivings about the widespread uptake of CLTS that we have seen in TL?
(Ita boot iha dúvida ruma kona-ba implementasaun CLTS ne'ebé ita haree iha Timor-Leste to'o agora?)

C7. Do you have a sense of what would be required for TL to reach ODF and safely managed and sustainable sanitation? And when these might happen?
(Ita boot iha hanoin ruma kona-ba rekézitu saida mak Timor-Leste presiza hodi jere sanitasaun sustentável ho seguru?)

C8. Do you have a sense of what makes CLTS effective? And the opposite?
(Ita boot iha hanoin ruma kona-ba saida mak halo CLTS efetivu no la efetivu?)

C9. CLTS in Timor-Leste has been altered from its original methods – what changes have you seen, - good bad indifferent?
(CLTS iha Timor-Leste hetan ona melhoramento ou mudansa husi ninia métodu orijinál – mudansa saida mak ita boot haree?)

C10. When and why were gender and disability highlighted? Did it make a difference?
(Horibainhirak no tanba sá mak tau importánsia ba Igualidade Jéneru? Iha mudansa ruma ka lae?)

C11. What changes in international discourse have influenced T-L sanitation sector?
(Mudansa saida mak iha diskursu internasionál ne'ebé influensia seitór sanitasaun iha Timor-Leste?)

C12. Which organisations have had the biggest influence? Why?
(Organizasaun saida mak iha ona influensa boot liu? Tanba sá?

C13. Which organisations have the most power? Explain.
C14. How do you think people who live in communities where PAKSI is/has being implemented feel about becoming ODF? Do you think it is important to them?
C15. Is there anything that has surprised you, that has happened as a result of PAKSI programs?

Semi-Structured Key Informant Interview—(Local NGOs)

Introductions and Consent forms

L1. What is the activity that your NGO is doing with the community?
L2. How close do they follow manual (matadalan) PAKSI?
L3. Did you change anything in the manual?
L4. What did they use to get CLTS done? (Did they pay, or threaten the community or any other means)?
L5. Do they do water supply and CLTS at the same time? If they do separate what are the difference?
L6. Do they have any difficulty getting people with a disablity, and women and children involved?
L7. What should different actors (government, NGOs, communities) do to improve WASH sector?
L8. What data do you collect before, during and after sanitation programs? (can we have a copy of it). What data do you access, or would you like to access, for planning purposes?
L9. How do they select the aldeia in their project?
L10. How do you integrate gender equality in sanitation programs? How does your programming contribute to women's empowerment
L11. Are your programmes inclusive of people with a disability? What do your programmes do to reduce inequality for people with a disability?
L12. Is the WASH sector in Timor-Leste co-ordinated through any high-level (formal or informal) groups? If so is your NGO part of this group, or another group that meets to exchange information?
L13. For the communities where you implement PAKSI, how do you think they feel about becoming ALFA/ODF? Do you think that it is something that they strive for or even care about much when they achieve it?
L14. Is there anything that has surprised you, that has happened as a result of PAKSI programs?

Semi-Structured Key Informant Interview—(ALFA Secretariats)

Introductions and Consent forms

A1. What are the important impacts that the Alfa secretariat should have?
A2. What activities do you (each) do to achieve that?
A3. Who do you talk to from communities? (positions – chefe, sisca etc..) A4, A5, A6,A&
A4. Do you think that communities stay ODF (and maintain HWWS) after the verification and declaration?
A5. What do you (as a group/individuals) do to help communities stay ODF?
A6. What else helps communities to stay ODF?
A7. What do you do when 'slippage' back to OD occurs?
A8. How do you find out when it happens?
A9. What do you do to ensure that women and people with a disability are considered and included in the activities of the ALFA secretariat?
A10. Is the ALFA Secretariat involved in selecting communities for sanitation programs? If so, how are communities selected (process)? Are there criteria? If so what?
A11. What training have you each received in CLTS/PAKSI?
A12. What data do you collect before, during and after sanitation programs? (can we have a copy of it).
A13. What do you do with the data? Uses? Reporting to..? What data do you access, or would you like to access, for planning purposes?
A14. Do you have any evidence that ODF villages have lower rates of diarrhoea diseases and death in under 5 year olds than villages that don't use latrines?
A15. Do you think that the WASH sector in Timor-Leste is well co-ordinated? How is it coordinated?
A16. For the communities where you implement PAKSI, how do you think they feel about becoming ALFA/ODF? Do you think that it is something that they strive for or even care about much when they achieve it?
A17. Is there anything that has surprised you, that has happened as a result of PAKSI programs?
A18. What should different actors (government, NGOs, communities) do to improve the WASH sector?

III. Guide for Focus Group Discussions

Target participants:

- From communities that have been through CLTS process and been declared ODF, at least:
  - One female teen, one male teen
  - One female in 20s, one male in 20s
  - One older women, one older man
  - One mum with small child, one dad with small child
  - 2x village leaders
  - 2x natural leaders
  - One local health worker
  - Children (age 6 – 15)
  - People with a disability

1. Introduction
2. What we are doing and why and how
3. Where the information will go, what we will do with it
4. Consent forms for research and for photographs and filming (show a UNICEF brochure)
5. Explain that as we do different activities we might split the group up at various times (by gender) and we might need to talk to some people by themselves (this will include xefe aldeia, person with a disability and maybe others like the health worker).

Data/question	**Activity**
F1. Social norms & attitudes 3x baskets and marbles	***F1. Starting with a couple of questions about what each person feels is important. We will ask you to vote with a marble in a bucket if you think the following things are "important", "very important" or "not important" to you.*** 1. Having a latrine at home 2. Using a latrine rather than shitting outside 3. Having a handwashing station at home 4. Washing your hands regularly 5. Washing your hands regularly with soap 6. Your friends and neighbours use a latrine rather than shitting outside 7. Your friends and neighbours wash their hands regularly 8. Your friends and neighbours wash their hands regularly with soap 9. How many other people from this village do you think believe that everyone should use a latrine? (most/half/few) 10. How many other people from this village do you think believe that everyone should wash their hands with soap? (most/half/few) ***If this generates spontaneous discussion let it run while recording for a few minutes.***
F2. Sustainability of latrines and handwashing 2x flipcharts to record answers	***F2. Ask participants to walk to different areas of the room depending on whether they were living in the village in (year) when (NGO) visited and started a sanitation programme here.*** If YES: Did you already have a latrine? What sort? Did you build a latrine? What sort?

	Do you still use the latrine that you built then? Why? Why not? Did you make a handwashing station? Did you buy soap? Do you still wash your hands with soap? If NO: When did you move here? Did you build a house? Do you have a latrine? Why? Why not? Do you have a handwash station? Why? Why not? Bring the group back together.
F3.- F7. Changes and reasons for change: • Reminders of what occurred Ball, Barriers to safe sanitation Sanitation ladder	***As a group:*** We would like to hear your story about what has happened in the aldeia since (year) and we want everyone to contribute so lets sit in a circle and (notetaker) will write as we talk. We are going to use this ball to select people to tell the story – this is so that everyone can have time to tell us about what has been important to them. ***Individuals get passed the ball and asked a question.*** F3.1 Tell us what happened when (NGO) came to start their sanitation programme here? F3.2 How did you feel about having someone looking for your shit on the ground? F3.3 How did you feel about building a latrine and handwashing station? F3.4 Do you still feel like that? F3.5 What were the best parts of the program? Why? F3.6 What were the worst parts of the program? Why? F3.7 After everyone built a latrine what else did (NGO) do? F3.8 Did the government do anything? F3.9 When was your aldeia declared ODF? F3.10 How did you feel about being declared ODF back then? Does it mean anything to you now? F3.11 In order to be ODF, everyone has to use their latrines, do you think that your aldeia is still ODF? F3.12 One of the reasons that the government wants all of Timor-Leste to be ALFA is to protect children from being sick or dying, especially from diarrhoea diseases. After the programme did anyone notice a change in how often children get sick or die? F4. Can anyone share their story about why they stopped using their latrine? (as many as possible) *(If not share one of the stories we have prepared and discuss…)* F5. Can someone share a story of improving their latrine since (NGO) was here? *(If yes, also ask if anyone else has improved their latrine)* F6. Does anyone want to make changes to their latrine? Why? What would you like to do?

	F7. If you wanted to change your latrine, where would you go to get new parts?
F8. Government response to reverting to OD	***F8. All*** Since the government has declared this whole municipality ODF, do you think that the government cares if some people have stopped using their latrine? Has anyone from the government collected information about this?
F9. Enabling environment	F9. Has anyone encouraged or paid or threatened people in order to get them to build/use a latrine? F10. Do NGOs or health-workers (SISCa) or anyone else visit regularly and encourage you to have good sanitation habits? F11. Do the school kids participate in handwashing or latrine day?
F12. – F13. Unexpected Changes and local innovations. Flipchart Local Innovation	F12. Has anyone noticed any changes since the aldeia was declared ODF? These might be good changes or they might be bad changes or just changes. Like…STORY ***(More difficult)*** *If the response is a bit vague like "we are healthier" ask what the person has noticed that makes them think that they are healthier. And why they think it is related to using latrines and handwashing.* F13. Has anyone tried anything different to ensure that their household has a toilet? Has there been any surprising (unexpected) successes in building or maintaining a toilet?
F14. Handwashing sustainability	***F14. Ask the participants to put themselves in a line based on when they last washed their hands with soap – most recent to least recent. Note the range from first to last.*** Also - ask if participants if they wash their hands more NOW than they did before the coronavirus/COVID pandemic and note numbers YES/NO. If anyone says YES, ask what the difference is – when do they wash their hands now?
Break the group in two by gender and go to separate spaces	
F15. Enabling environment	F15. Is there a local kiosk? What does it sell? Can you buy soap there? Do you buy soap there? Does anyone use ash to wash their hands, or anything else?
F16. ODF meaning	F16. Do you ever visit someone who doesn't have a latrine? If yes - does it annoy you that they don't have a latrine?
F17. Children's faeces	F17. Do you have small children in your household? Can you describe how their poo is disposed of? Who is most likely to be responsible for that job?
F18. Women's empowerment	F18. When (NGO) started their sanitation programme did they insist that women should be involved? Were women given the same amount of decision-making power as men? Has this changed anything for women in the aldeia (either individually or collectively)? Has this changed anything for men in the aldeia (either individually or collectively)
F19. Inclusion of those with a disability	F19. Is there anyone in the aldeia who has a disability? If yes..

	When (NGO) started their sanitation programme did they insist that people with a disability should be involved? Were people with a disability given the same amount of decision-making power as everyone else? Has this created any change in how the person with a disability is treated?

Finish up with thanks for the participants time and efforts.

Organize to visit several houses to observe latrines - based on information gained during workshop of success and failure and innovation.

Children's group:

The children's group will be held concurrently with the main FGDs, will be supervised by two facilitators and will be visible to the main group but distant enough for noise not to be a problem. This will ensure that parents and carers will be able to observe the activities and that children are safeguarded during the activities.

Asking children about sanitation and hygiene habits

1. Start with a song or a game
2. Get everyone to wash their hands – observe and note how many are familiar with doing this.
3. Offer the group some fruit each and (if ~6-10 years old) get them to sit while you read the story "Lakohi Moras? Fase Liman Ho Sabaun" (Don't want to be sick? Wash your hands with soap) from UNICEF. If (~11 – 15 years old) just ask questions 2 to 5. If the group is mixed asked the older kids to be patient while you read to the younger ones and get them to join in the discussion after.
4. Ask the following questions, but emphasise that they should just tell you what they think and do, there is no problem:

    FC1. Do you think you are more like Marta or Atina in the story? Why?
    FC2. Do you wash your hands often or do you forget to wash your hands a lot?
    FC3. Where do you like to be when you go to the toilet? At home, at school, outdoors or somewhere else? Why?
    FC4. Does anyone remind you to wash your hands? Who?
    FC5. Is there always soap ready to wash your hands with?
    FC6. If there is no soap, do you ask someone to give you soap?.

Thank the children for listening and answering your questions.

End with a song or a game. If you can't bring the kids back to the larger group then do some other fun activities (drawing, ball games, singing).

Questions for individual conversation with community members with a disability:

These questions may vary depending on the abilities of the interviewee.

FD1. Were you included in the sanitation triggering exercise?
FD2. Do you have a toilet and handwashing station that you can access easily?
FD3. Did you decide what you wanted in regards to these?
FD4. In what way are they different to 'ordinary' sanitation facilities?

FD5. Did you receive financial or other assistance to build your facilities, or did you assist in building your family facility?

FD6. (If appropriate) what arrangement did you have to make for your sanitation needs previously?

IV. Household Sanitation Coverage Survey

The survey is designed as a mobile phone enabled application on the 'smap' platform.

For each question there is a logic that determines the following question or instruction based on the answer. Questions have choice architecture built into the app with multiple appropriate answers available. The survey is also available on the app in Tetun language.

Location
1. What is the name of this Municipality?
2. What is the name of this Suco?
3. What is the name of this Aldeia?
4. Who has completed this survey?
We are conducting a household survey as part of an independent evaluation requested by the Ministry of Health. Do you consent to us asking you questions about your household and your access to water, sanitation and hygiene and to visiting your water, sanitation and hygiene facilities where we will take photographs and record the location? We will share the outcomes of this survey with the Ministry of Health and NGOs
Interviewee
5. What is your gender?
6. Are you over 17?
7. Is there someone over 17 that we can interview?
8. Are you the head of this household?
Thank the person for their time. Please go to next house Press go-back button and discard survey
Household Demographic Data
9. Is this a female-headed or child-headed household?
10. How many adult women live in the household?
11. How many adult men live in the household?
12. How many girls (2 - 17 years) live in the household?
13. How many boys (2 - 17 years) live in the household?
14. How many babies under 2 live in the household?
15. Did any child under 2 have diarrhoea in the past two weeks?
Disability
We would like to talk to you about anyone in your household who finds it difficult to do things
17. Is there anyone in your household who has difficulty with seeing, even if wearing glasses?
18. Is there anyone in your household who has difficulty with hearing, even if wearing a hearing aid?
19. Is there anyone in your household who has difficulty with walking or climbing steps?
20. Is there anyone in your household who has difficulty with remembering or concentrating?
21. Is there anyone in your household who has difficulty with self-care such as washing all over or dressing or looking after themselves?
22. Is there anyone in your household who has difficulty communicating?
Water Questions

W1. Do you have a water supply in your yard?
W2. Where does this water come from (what is the source)?
W3. Is water always available in your yard when needed?
W4. When is water not available?
W5. Where do you get water when your water supply is not working?
W6. Normally, how long does it take you to collect water from this source?
W7. Where do you mainly get water from?
W8. Normally, how long does it take you to collect water for your house in the wet season?
W9. Normally, how long does it take youto collect water for your house in the dry season?
W10. Is there anyone in your household that has difficulty collecting water or accessing the water point?
W11. If yes, why?
W12. Please describe
Sanitation Questions
S1. Does your household have a toilet?
S2. Where do people in your household usually go to defecate?
S3. Please describe
S4. What is the main reason you don't use your toilet?
S5. What is the main reason you do not have a toilet?
S6. Please describe
S7. How many other neighbouring households use your toilet?
S8. Did your household received any assistance to build your toilet?
S9. What help did you receive?
S10. Who provided the assistance?
S11. Where do you dispose of infant's faeces?
S12. Please describe
S13. May we visit the main toilet used by your household?
S14. Observation: toilet type
S15. Please describe
S16. How far is it from the water source (in metres)?
S17. Observation: is the toilet being used?
S18. Observation: is the toilet accessible?
S19. Please take a photo of the accessible feature(s)
S20. Is there anyone in the household that cannot use this toilet?
S21. If yes, why?
S22. Please describe
S23. Where does this toilet flush to?
S24. Observation: is there a washable, permanent slab
S25. Observation: Is there a lid or cover for the toilet?
S26. Observation: Is the lid or cover over the toilet?
S27. Observation. How clean is the toilet pan/slab and the surrounds?
S28. Observation. Does the toilet allow for security and privacy during use?

S29. Please take a photo of the toilet showing the inside including the slab
S30. Please take a photo of the toilet showing the outside and superstructure
S31. Does your household have another toilet that gets used occasionally?
S32. Why would you use this other toilet?
S33. Observation: toilet type
Hygiene
H1. Does your household have a facility or place where people regularly wash their hands after going to the toilet?
H2. Why don't you have a handwashing facility?
H2a. Please describe
H3. May I visit your hand washing place?
H4. Observation: What type of HWF is it?
H5. Observation: Is there soap or ash present at the facility
H6. Observation: Is there water present at the facility
H7. How far (in metres) is the HWF from the toilet
H8. Please take a photo of the hand washing facility
H9. Please list all the times you washed your hands in the last 24 hours (since this time yesterday).
H10. Have you ever been given information about handwashing?
H11. Who gave you this information?
H12. Please describe
Wash Investment
I1. In the last year, has anyone in your household (or the landlord, if you rent this house) spent any time or money to build, improve or maintain the toilet or hand washing facility?
I2. What types of investment have been carried out?
I3. Do you know where you can get spare parts or help when you need to make repairs to your toilet or handwashing facility?
I4. Where can you get spares or help
I5. Please describe
I6. Has your toilet pit or septic tank ever filled up?
I7. What did you do?
I8. Please describe
Conclusion
Thank you for taking the time to provide this information. It will be shared with the Ministry of Health and NGOs to help ensure the sanitation and hygiene services are reliable and effective.
Take the GPS location at the toilet

V. Timor-Leste Sanitation Stakeholders Organisational Questionnaire

Thank-You for taking time to fill in this questionnaire. It will help us to understand changes to the sanitation sector in Timor-Leste over the last 8 years.

The questionnaire is in a word document format so that you can add comments at any point or make notes about anything else you feel is relevant as you fill in the form.

S1. Name of Your Organization:
S2. Name of Person completing form:
S3. Contact phone number/email:

S4. In terms of sanitation, what type(s) of programming was your organization implementing in each year (place an x the table)?

	Subsidized latrine building	**Subsidized latrine building, integrated with water supply**	**CLTS-style**	**CLTS-style, integrated with water supply**	**Hygienic Suco**	**Other – please describe**
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						

S5. If your organization changed its programming over this period, please describe the main reasons and influences for those changes.

S6. For each of those years please provide the numbers of households and/or aldeia your organization planned to reach and what it achieved.

	Sanitation goal		**Sanitation achievement**		**ODF achievement**	
	Households	***Aldeias***	***Households***	***Aldeias***	***Aldeias***	***Sucos***
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						

2023						

S7. For those years where goals and achievements are not the same, please comment on why:

S8. For each year of sanitation programming what were the overall costs? If possible, please indicate both inclusive and exclusive of staff costs.

	Cost of sanitation programs including staff	**Cost of sanitation programmes excluding staff**	**Cost of WASH programmes including staff**	**Cost of WASH programmes including staff**	**Notes on these –**
2012					
2013					
2014					
2015					
2016					
2017					
2018					
2019					

S9. For each year of sanitation programming please describe the number of people in your organization who were working in sanitation programmes and what internal or external training they received that year:

	N° of sanitation programme staff	**Training**
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		

S10. If your organization contracts sanitation work **to** other agencies, please list for each year which other agencies you contracted and locations they worked in:

	Agencies you contracted to deliver sanitation implementation. Location for each
2012	
2013	
2014	
2015	
2016	
2017	
2018	

2019	
2020	

S11. If your organisation is funded or contracted **by** another organization to do sanitation work, please list for each year which agencies you were paid by and what programme and location you worked in.

	Agencies that contracted you to deliver sanitation programs, programme and location
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	

S12. For each year please describe how the sites of sanitation work that your agency undertook were selected.

	Sanitation programme site selection process and criteria
2012	
2013	
2014	
2015	
2016	
2017	
2018	
2019	
2020	

S13. Please describe the policies (or provide copies) that your organization has in place to ensure that gender and social inclusion are considered in programming?

S14. Are you confident that these policies are followed consistently?

S15. Can you give example of an action that is taken to be inclusive of women and people with a disability in your programming or implementation?

S16. Please describe (or provide copies of) the policies that your organization has in place to ensure that gender and social inclusion are considered as part of your employment strategy?

S17. How many male employees do you have both overall and in your WASH team?

S18. How many female employees do you have both overall and in your WASH team?

S19. How many people with a disability does your organization employ both overall and in its WASH programs?

Could you please provide the following documents along with your answers above:

- WASH Programme handbooks used between 2005 – 2019
- Gender and Social Inclusion policies

Thank-You! If you have any questions or comments please feel free to contact:

Dr Kate Neely

Email: kateneely@fhdesigns.com.au

WhatsApp & Australian phone: +61 417868158

Phone after 21st October: 78334197

VI. Community Co-design Workshop

Date of Workshop 9/2/2020

Municipality: Aileu
Suco: Seloi Craic
Aldeia: Talifurleu
Chefe Suco: Marcelo Pascimoro + 10 local adults
Start time: 9:30

1. Introductions and consent (all) 30mins
2. Purpose of the evaluation and purpose of the co-design workshop (Therese) 20 mins
3. Group discussion of the Key Evaluation Questions and the use and phrasing of questions to communities (all) 1.5 hours:

Key Evaluation Questions	Community relevant activities/questions
Effectiveness	
To what extent were the CLTS programme objectives achieved / are likely to be achieved, and in particular has the collective practice of Open Defecation (OD) disappeared and the practice of handwashing at critical moments been taken up as a result of CLTS (at the time of certification, or shortly before or after)? To what extent has the CLTS effectively motivated households in the communities targeted to effectively climb up the sanitation ladder and improve the quality of their latrines after achieving ODF? *In order to clarify the usefulness of ODF declarations we recommend additional questions:* Does a declaration of ODF have meaning and value to residents? Is ODF status something that individuals/communities strive for? Why? Is it perceived to change anything?	Direct questions: Before CLTS did your household already have (use) a toilet? If yes did you improve your toilet during or after the intervention? …If no.. After CLTS did your household have a toilet? Now – does your household have/use a toilet? If yes have you made any changes to it? And has it needed any maintenance? If you have built a house in the time since the intervention – does your household have a toilet? If your household has a toilet, have you made any changes/improvements to it since the time that you built it? Has it needed any maintenance? Are there other times or places where you think someone might open defecate instead of using a toilet? Narratives of unintended consequences and ODF status

Has CLTS been the most effective approach to achieve the goals and targets set out in the national policy	Value or meaning that residents associate with declarations of ODF: After everyone here had built a toilet the aldeia was declared Open Defecation Free or ODF. Can you remember what happened after that? How did you feel when your village was officially declared ODF? Do you ever mention it to anyone outside the village? How do you think other villages feel when they are declared ODF? Do you think that they talk about it? Is there a sign? Public recognition? If you know that another village is ODF how do you feel about the people who live there? What changes did you notice after everyone in the village built a toilet? Are there good changes? Are there bad changes?
Impact	
Has there been a reduction in diarrhoea in communities that reached ODF status? Has there been a reduction in under-five mortality in the communities that reached ODF status? Attribution of impact of CLTS on health and mortality is notoriously difficult in complex environments. As it is well accepted that improvements in sanitation and hygiene contribute to health outcomes, *we propose that these questions be reframed around proxy indicators such as evidence of handwashing with soap.* Additionally as social norms tend to be interdependent. In changing one social norm (OD) it is possible that communities experience changes in other areas. *Have there been other/unintended impacts of CLTS implementation?*	Changes to management of infant faeces Who should teach the little kids how to use the toilet so they don't make a mess? Direct questions: In terms of handwashing do you… • Have a place near the toilet to wash your hands? • Does it have water.. always, most of the time, sometimes, never • Does it soap? always, most of the time, sometimes, never • Does it have a clean cloth to dry your hands with? always, most of the time, sometimes, never Narratives of unintended consequences of CLTS triggering: What changes did you notice after everyone in the village built a toilet? Are there good changes? Are there bad changes?

Sustainability	
To what extent did the ODF status and the associated social norms such as hand washing sustain since certification (in communities certified in the earlier years of the evaluation period), and what were contributing factors, both at community level and in the enabling environment? In situations where some sections of the communities have returned to their original habit of open defecation, despite their villages attaining/accredited with ODF status, how have the Government duty bearers at municipal and central levels managed such slippage? *We suggest re-framing this question in terms of slippage.* To what extent have households reverted to OD, and what are the reasons for this? To what extent do households maintain and use handwashing facilities?	Community perception of the barriers and drivers to sustained safely managed sanitation, including activities by local health clinics and other duty bearers Narratives of post-WASH programme engagement with implementing agencies and municipal and central government duty bearers After everyone here had built a toilet the aldeia was declared Open Defecation Free or ODF. Can you remember what happened after that? Did anyone 'follow up' support or encourage you to continue with healthy habits, including making sure that your toilet is useable? Open-ended query of "what could be done better"? Why do think they would stop using their toilets? Do you think that it's okay, after everyone has their toilet and everyone knows that if you shit on the ground it can cause other people to get sick – do think its okay to not use a toilet? Is there anything that you think the people in the other village could have done to get everyone to use their toilets all the time? and what could be done about that specific reason.
Equity, gender equality and human rights	
To what extent has CLTS been implemented in the communities where there was a stronger need for it, with the intention of reducing inequities? Have equity considerations been integrated at each stage of the programme cycle? To what extent the programme effectively mainstreamed gender equality and empowerment of women and girls?	Gendered perception of inclusion in decision making and changes to workloads, safety, health, economic security, education etc Impacts on households and individuals experiencing exceptional vulnerability due to poverty, gender, disability or other factors

BREAK for LUNCH/SNACKS (45mins)

4. Activity trials
    a. Drawing a timeline of sanitation programs/events in the aldeia (Azerino) 40 mins
    b. Story telling (all) and responses – do these make sense, would they get you talking? 20 – 30 mins
    c. Physical line up in order of time since handwashing (Azerino) 10mins
    d. Observations – walking to houses, trialling observation checklist (1 – 2 hours)

FINISH and thanks and photos: 3pm

VII. List of Key Informant Interviews

Person	Date	Org	Mode	Interviewer
Andy Robinson	22/1/2020	Consultant (past)	Email (multiple)	KN
Keryn Clark	22/1/2020	Consultant (past)	Phone	KN
Ross Kidd	22/1/2020	Consultant (past)	Email (multiple)	KN
Alex Grumbley	29/1/2020	WaterAid, BESIK (past)	Email	KN
Heather Moran	29/1/2020	BESIK, PHD (past)	Email	KN
Michelle Whalen	30/1/2020	Consultant/PHD (past and present)	In person	KN
Lamberto Pinto	29/1/2020	PHD	In person	KN
Edmund Weking	30/1/2020	WaterAid TL	In person	KN
Rodolfo Pereira	31/1/2020	UNICEF	In person	KN
Alexios Santos	3/2/2020	Plan International	In person	KN
Nica Correia	10/3/2020	UNICEF	In person	KN
Joao Pinto	4/2/2020	CVTL	In person	KN
Jose Moniz		MoH	In person	TT
Joao Piedade	5/2/2020	DNSB	In person (multiple)	KN
Nelson da Conceicao	6/2/2020	DNSB	In person	KN
Koko Valentin	4/2/2020	FHTL	In person	KN, TT
Fransisco Viera Carlos Belo	10/3/2020	HealthNet	In person	KN
Victor Carvalho		ETADEP	In person	TT
Gilberto Rodrigues	14/2/2020	Haburas Ita Moris (HIM)	In person	TT
Delfin de Almeida	16/12/2020	Alola Foundation	In Person	KN
Reinato Soares	14/1/2021	INS	In Person	KN
Cesario da Silva	6/1/2021	ADTL	In person	KN
EliasPereira Moniz	5/3/2020	Ex- Sec State for Water Sanitation and Urban Dvelopment	In person	TT
Isabel Gomes	2/2/2021	MoH Dir.Public Health	In person	KN
Joaoazito dos Santos	7/1/2021	RHTO	In person	KN
Odete Maria Belo	11/2/2020	Minister for Health	In person	KN, TT
Milana Jacinto Jose	10/12/2020	Oxfam Bifanu AFOSS	In person	KN
Fustino Da Costa Mendonca	27/11/2020	Ex-DPHO Aileu	In person	KN, TT
Antonio Ximenes	1/12/2020	DPHO Ainaro	In person	KN,
Joni Alves	8/1/2021	DPHO Ermera	In person	TT
Bento Martins	13/1/2021	DPHO Liquica	In person	KN
Gastao Poto	8/12/2020	DPHO Oecusse	In person	KN

VIII. Ethics Approval

MINISTÉRIO DA
SAÚDE

INSTITUTO NACIONAL DE SAUDE
Gabinete do Diretor Executivo
INS

Ref^{a}.: 184 MS-INS/DE/II/2020
Dili, 17th February 2020

Dr. Kate Neely
FH Designs/UNICEF

Project Title: Conducting a formative evaluation of Community – Led Total Sanitation in Timor-Leste

Thank you for submitting the above research project for ethical review. This project was considered by the Institute National of Health-Research Ethics & Technical Committee (INS-RETC) at its meeting held on 13th February 2020.

I am pleased to advise you that the INS-RETC has granted **Ethics & Technical approval** of this research project.

Please note that if additional sites are engaged prior to the commencement of, or during the research project, the coordinating Principal Investigator (PI) is required to notify the INS-RETC. Notification of withdrawn sites should also be provided to the INS-HREC in timely fashion.

The Approved documents include:

1. INS-RETC Application form
2. Questionnaires
3. Inform Consent

This approval is for period of Twelve (12) months. An ANNUAL/FINAL Project progress report is required on or before 20 of August 2020.

APROVAL IS SUBJECT to the following conditions being met:

1. The Coordinating PI will immediately report anything that **might warrant review** of ethical approval of the project.
2. The coordinating PI will notify the INS-RETC of any event that requires **a modification to the Protocol or other project document** and submit any required amendments and accordance with the instructions provided by the INS-RETC.
3. The Coordinating PI will submit any necessary report related to the **safety of research participant (i.e. Protocol deviation, protocol violations)** in accordance with INS-RETC policy and procedures.
4. The coordinating PI will **report** to the INS-RETC, **Annually** in the specified format and notify the HREC when the project is completed at all sites.

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Rua:Comoro, Dili Timor Leste,
Telf.(+670)3331025
Web.www.ins-gov-tl.com

5. The coordinating PI will notify the INS-RETC if the project **is discontinued at a participating site before the expected completion date**, with reason provided.
6. The coordinating PI will notify the INS-RETC of any plan **to extend the duration of the project past the approval period listed above** and will submit any associated required documentation.
7. The coordinating PI will notify the INS-RETC of his or her inability to continue as coordinating PI including the name of and contact information for a replacement.
8. The safe and ethical conduct of this project is entirely the responsibility of the investigators and their institution(s).
9. Researcher should report immediately anything which might affect continuing ethical acceptance of the project, including:
   - Adverse effects of the project on subject and steps taken to deal with these;
   - Other unforeseen events;
   - New Information that may invalidate the ethical integrity of the study; and
   - Propose changes in the project.
10. Approval for further Six months will be granted if the INS-RETC is satisfied that the conducted of the project has been consisted with the original protocol.
11. Confidentiality Research participants should be maintained at all times as required by law
12. The patient information sheet and the consent form shall be printed on the relevant site letterhead with full contact details.
13. The Patient Information sheet must provide a brief outline of research activity including, risk and benefits, withdrawal options, contact details of the researcher and must also state that Research Secretary can be contacted (Telephone 3310611 and E-mail elaot2014@gmail.com) for information concerning policies, right of participant, concern or complaints regarding the ethical conduct of study.

This Letter Constitutes Ethical& Technical Approval Only.

Should you have any queries about the INS-RETC's consideration of your project please contact (+670) 3310611.

INS-RETC wishes you every success in your research.

Your Sincerely,

Antonio Bonito, M.Kes
Executive Director of INS

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IX. List of Documents Reviewed

Pub date	Document	Author	Type	Import-ance
No date	The Municipal Open Defecation Free (ODF) Initiative; The example of ODF Bobonaro by 2016	GoTL	process description - includes ALFA secretariat details	high
2016	The CLTS Manual for Timor-Leste Book 1	GoTL	PAKSI manual	high
2016	The CLTS Manual for Timor-Leste Book 2	GoTL	PAKSI manual	high
2016	The CLTS Manual for Timor-Leste Book 3	GoTL	PAKSI manual	high
2013	Timor-Leste National Strategic Plan for Rural Sanitation	GoTL	Govt Doc	high
2012	Timor-Leste National Basic Sanitation Policy	GoTL	Govt Doc	high
2011	Timor-Leste Strategic Development Plan 2011-2030	GoTL		high
2008	Timor-Leste Rural Water, Sanitation and Hygiene Sector Strategy 2008 - 2011	GoTL	Govt Doc	high
2017	ODF Sustainability in Timor-Leste	Moran, H	For PHD	high
2016	ODF Sustainability Study in East Timor 2015 - 2016	Rehema Abdi	Evaluation report	high
2013	Community-Led Total Sanitation in East Asia and Pacific; Progress, Lessons and Directions	UNICEF	regional report	high
2016	Second Review of Community-Led Total Sanitation in the East Asia and Pacific Region	UNICEF, PLAN, WaterAid	regional review	high
2017	Applying Social Norms Theory in CATS Programming	Bicchieri and Noah for UNICEF	Guide	high
2018	Theory and Practice of Social Norms Interventions: Eight Common Pitfalls	Cislaghi & Heise	Journal Paper	high

2011	Total Sanitation Campaign Evaluation Report	Araujo, F., Jesus, D. d., Soares, M. V. d. C., & Whalen, M.	evaluation	medium
2012	RWSSP Activity Completion Report	BESIK	report	medium
2009	Working Paper 1: East Timor - Independent Evaluation of Australian Aid to Water Supply and Sanitation Service Delivery in East Timor and Indonesia.	Buhl-Nielson, E., Giltner, S., Dutton, P., & Donohoe, J.	Evaluation report	medium
2019	Theory-driven formative research to inform the design of a national sanitation campaign in Tanzania	Czerniewska, A., Muangi, W., Aunger, R., Massa, K., Curtis, V.,	journal paper PLoS ONE 14(8)	medium
nd	A journey from subsidy to Community Led Total Sanitation	Dinesh Bajracharya	In Sharing Stories doc	medium
2019	From Ashes to Reconciliation, Reconstruction and Sustainable Development; Voluntary National Review of Timor-Leste 2019	GoTL	Report on implementation of SDGs	medium
2016	Timor-Leste Demographic Health Survey 2016	GoTL	Govt Doc	medium
2012	A Facilitator's Manual for Community Sanitation and Hygiene Planning Book 1: Preparing for Community Sanitation and Hygiene Planning.	GoTL	Govt Manual	medium
2012	A Facilitator's Manual for Community Sanitation and Hygiene Planning Book 2: Triggering the Community	GoTL	Govt Manual	medium
2012	A Facilitator's Manual for Community Sanitation and Hygiene Planning Book 3: Follow-Up with the Community	GoTL	Govt Manual	medium
2002	National Development Plan	GoTL		medium
2014	Enabling Changes in Institutional Approaches to Sanitation in Timor-Leste	Grumbley, A., Kar, K.,	Conference paper	medium

2008	Local NGOs in national development: The case of East Timor	Janet Hunt	PhD Thesis	medium
2017	A snapshot on Drinking Water, Sanitation and Hygiene in the UNICEF East Asia & Pacific Region	JMP	data report	medium
2014	Open Defecation Free Timor Leste by 2015- Could it be a reality?: A visit report of Dr. Kamal Kar and Sisir Kanta Pradhan to re-energize the implementation of CLTS in Timor Leste.	Kar, K., & Pradhan, S. K.		medium
2020	Community-led Total Sanitation in Manufahi, Timor-Leste Chapters 1&2	Naomi Francis	PhD extract	medium
nd	Improving Sanitation in Timor-Leste	PHD	Presentation	medium
2017	Comfortable, Safe and Proud	PHD	focus on sanitation markets/marketing	medium
2015	Low cost latrine designs for rural Timor-Leste	PLAN / BESIK / GoTL	report/manual - includes some costs of latrines	medium
2017	ODF Timor-Leste Action Plan	Tomasia De Sousa, GOTL MoH	presentation	medium
2013	ODF Sustainability Study	Tyndale-Biscoe, Bond, Kidd	Report for PLAN	medium
2016	Evaluation of Bobonaro ODF Initiative, Timor-Leste	UTS:ISF	evaluation for BESIK	medium
2015	Motivations, Barriers and Opportunities for Water and Sanitation Enterprises in Timor-Leste	UTS:ISF	Entreprise in WASH report	medium
2016	Social Audit for Rural Water Supply Services in Timor-Leset Report	WaterAid, LBF, FHTL, PNT		medium
2015	UN-Water Global Analysis and Assessment of Sanitation and Drinking-water (GLAAS): Timor-Leste 2015	WHO	data report	medium
2018	Timor-Leste Water Sector Assessment and Roadmap	World Bank		medium

2015	Water Supply and Sanitation in Timor-Leste: Turning Finance into Services for the Future.	World Bank	service delivery assesment (some finance stats here)	medium
2016	CLTS Timor-Leste		website	medium
nd	Projects: Bee, Saneamentu no Ijiene iha Komunidade programme, Timor-Leste	Aurecon Group	Website	low
2014	Evaluation of Australian Aid to Timor Leste.	Commonwealth of Australia		low
2017	Engagemant of stakeholders in the developmen t of a Theory of Change for Handwashing and sanitation behaviour change	DeBuck, E., Hannes, K., Cargo, M., Van Remoortel, H., Vandeveegaete, A., Mosler, H., Governder, T., Vandekerckhove, P., Young, T.,	journal paper	low
2012	SWA Statement of Commitment: Government of the Democratic Republic of Timor-Leste (RDTL)	GoTL	Stats and commitments	low
2010	Timor-Leste Demographic Health Survey 2010	GoTL	Govt Doc	low
2019	Community-Led Total Sanitation	IDS	website	low
1999	Update No. 99/04 on ICRC activities in Indonesia/East Timor.	International Committee of the Red Cross (ICRC)	report	low
2019	Models of Unsafe Return of Excreta in Four Countries	Kolsky, P., Fleming, L., Bartram, J., for UNC Water Institute	report	low
nd	ODF Initiative in Timor-Leste	MoH	presentation	low
nd	Jean Monnet Sustainable Development Goals Network Policy Brief Series; SDG 6 Clean Water and Sanitation	Naomi Francis	sanitation overview	low
2009	CLTS: Lessons learnt from a pilot project in Timor-Leste	Noy & Kelly	Conference paper (WEDC)	low
2013	Beloved Land: stories, struggles, and secrets from Timor-Leste.	Peake, G	book	low

nd	Hygienic Initiative in Timor-Leste; Results and Lessons learned	PHD	presentation	low
2017	Improving Sanitation in Timor-Leste	PHD	presentation	low
2016	A short history of how we think and talk about sanitation and why it matters	Rosenqvist, Mitchell, Willets	Journal paper	low
2020	Timor-leste	SWA	website	low
2018	Evaluation of UNICEF Viet Nam Rural Sanitation and Hygiene Programme (RSHP) 2012 - 2016	UNICEF	final evaluation	low
2018	Timor-Leste declared the first open defecation-free municipality	UNICEF	website	low
2017	Indonesian National Sanitation Program	UNICEF	final evaluation	low
2011	Timor-Leste Water, Sanitation and Hygiene Sector Brief	UTS:ISF for AusAID	Briefing note	low
2014	Theories of Change in International Development: Communication, Learning, or Accountability?	Valters, C	Asia Foundation, Justice and Security Research Programme paper	low
2010	WaterAid in Timor-Leste Country Strategy 2010-2015	WaterAid, LBF, FHTL, PNT	strategy doc	low
2019	Health, Safety and Dignity of Sanitation Workers; An Initial Assessment	World Bank	Report	low
nd	WASH for Timor-Leste		website	low
nd	Community Governance for Sustainable Water Supply in Oecusse	Walsh, M., Whalen, M.,	report for World Neighbors (focus on water)	low
2017	Institutionalization of CLTS in Timor-Leste.	Grumbley, A., Moran, H.,	unpublished work	
2015	Past, Present and Future: Why the Past Matters	In S. Ingram, L. Kent, & A. McWilliam (Eds.), A New Era?: Timor-Leste after the	book chapter	

		UN: ANU Press.		
2015	Timor-Leste Rural Water Supply and Sanitation Programme - Bee, Saneamentu no Ijiene iha Komunidade (BESIK 2): Monitoring and Review Group No. 2.	Renneberg, R., Bond, M., & Patrocinio, S. O.	report	medium
2019	Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on inequalities.	JMP	data report	medium
2016	Malnutrition in Timor-Leste: A review of the burden, drivers and potential response	Provo et al for World Bank	Report	medium
2013	Timor-Leste Food and Nutrition Survey	DHS	Report	medium
2015	Water and Sanitation Assessment Paper; Benefits and Costs of the Water and Sanitation Targets for the Post-2015 Development Agenda	G Hutton for Copenhagen Consensus Center	Report	medium
2020	WASH and its Links to Nutrition, Technical Brief 3	USAID	Technical Brief	medium
No date	Terms of Reference for the ODF Initiative Secretariat	No author	ToR	medium
2018	Disability Inclusive Water, Sanitation and Hygiene (WASH) Training	PHD/CBM	Facilitator's Guide	medium
2021	State Budget 2021, Development Partners, Book 5	RDTL	Report	medium
2020	Journal da Republica Decree Law 41/2020	RDTL	Creation of Bee Timor-Leste	medium
2020	Journal da Republica Decree Law 38/2020	RDTL	Establish National Authority for Water and Sanitation	medium
2021	Improving Uptake and Sustainability of Sanitation	Clarke et al	Journal Paper	low

	Interventions in Timor-Leste: A Case Study			
2012	Evaluation of the Prevalence of Urinary Tract Infection in Rural Panamanian Women.	August & De Rosa	Journal Paper	low
2010	Water and Sanitation infrastructure for Health: The Impact of Foreign Aid.	Botting, M et al	Journal Paper	low
2018	Timor-Leste Population and Housing Census 2015, Volume 12; Analytical Report on Agriculture	RDTL, FAO, UNFPA	Report	low
2009	Timor-Leste Joint Sanitation Evaluation; A Study of Sanitation Program Outcomes	Shapiro et al	Report	low
2020	Rising antibiotic resistance in UTIs could cost Australia $1.6 billion a year by 2030. Here's how to curb it. The Conversation	Morgan, van Oijen and Rollin	Media article	low
2019	The World Bank in Timor-Leste	World Bank		low

X. WASH Agencies in Timor-Leste since 2002

These tables are collated from websites, documents and personal recounting from several people. The information within is put forward with reasonable certainty but may include some errors.

INGOs, Multilateral and Bilateral programmes

Year	World Bank	UNICEF	ADB	USAID	AusAID/DFAT	Oxfam	Care	Plan	World Vision	CVTL/Red Cross	WaterAid	ADRA	Triangle GH	Concern	AFMET	Caritas	Child Fund	Stromme Foundation
2002		x			x		x			x				o		x		X
2003		x			x					x				o		x		X
2004		x			x					x				o				X
2005		x			x			x		x	x		x	o				X
2006		x			x	x		x		x	x		x	o				X
2007		x			x	x		x		x	x		x	o				X
2008		x			x	x		x		x	x		x	o				
2009		x		x	x			x		x	x		x	o				
2010		x		x	x			x		x	x		x	o				
2011	o	x		x	x	x		x	x	x	x		x	o				
2012	o	x			x			x		x	x		x	o				
2013	o	x			x	x		x		x	x	x	x	o	x			
2014		x			x					x	x	x	x	o				
2015		x			x			x	x	x	x	x	x	o				
2016		x			x					x	x	x	x	o				
2017		x			x					x	x		x	o				
2018		x			x					x	x							
2019		x			x					x	x							
2020		x			x					x	x							

"x" - organisation was working on WASH programmes in Timor-Leste in a particular year.
"o" - organisation was NOT working on WASH programmes in Timor-Leste in a particular year
blank square - lack of information

Local NGOs

Year	F/HTL	HIM	Fraterna	ETDA	Maledoi	NTF	CPT	Natilos	AMAR	ETADEP	Tuna Mutin	HealthNet	Bia Hula	TimorAid	SERVBFUTIL	LBF	Alola Foundation
2002	x									x			x				
2003	x						x			x			x				
2004	x						x			x			x				
2005	x						x			x			x		x		
2006	x									x		x	x		x		
2007	x												x				
2008	x												x				
2009	x												x				
2010	x					x							x				
2011	x			x									x				
2012	x				x								x			x	
2013	x	x	x	x	x	x	x	x	x	x	x		x			x	
2014	x				x						x		x			x	
2015	x	x	x		x	x			x	x	x	x	x	x	x	x	
2016	x				x					x		x		x			
2017	x									x		x		x			
2018	x		x							x		x		x	x		
2019	x		x							x		x		x	x		x
2020	x		x			x				x		x		x	x		x

“x” - organisation was working on WASH programmes in Timor-Leste in a particular year.
“o” - organisation was NOT working on WASH programmes in Timor-Leste in a particular year
blank square - lack of information

XI. Timeline of Evaluation

Activities	Deliverables	Timeline	Intended date	Actual date & Comments
Conduct preliminary meeting by Skype with MoH and UNICEF Conduct desk review on relevant policies, statistics, reports and other knowledge products and information	Skype meeting Meeting minutes Weekly update	Week 1	End 17/1/2020	End 17/1/2020
Conduct desk review on relevant policies, statistics, reports and other knowledge products and information	Weekly update	Week 2	End 24/1/2020	End 24/1/2020
Inception mission to conduct interviews with key government and other stakeholders at central level	Weekly update Stakeholder introduction meeting	Week 3	End 31/1/2020	End 31/1/2020
Analyse pre-CLTS sanitation landscape (including enabling environment, supply and demand), construct ToC, refine methodology, including sampling and questionnaire proposal, and design a data collection schedule, including field travel plan	Weekly updates	Week 4	End 7/2/2020	End 7/2/2020
Analyse pre-CLTS sanitation landscape (including enabling environment, supply and demand), construct ToC, refine methodology, including sampling and questionnaire proposal, and design a data collection schedule, including field travel plan. Submit draft inception report to reference group	Draft inception report Weekly update	Week 5	End 14/2/2020	End 14/2/2020
		Week 6		
Submit finalised inception report	Finalised inception report Weekly update	Week 7	End 6/3/2020	End 6/3/2020 No response to draft inception report was received so finalised report not submitted.
Present reconstructed Theory of Change, data collection sampling and questionnaire, and data collection field travel plans to stakeholders through a workshop	Stakeholder Workshop Weekly update	Week 8	End 14/3/2020	End 14/3/2020

Pilot data collection tools and conduct field-based data collection	Mission report including quotes and high-resolution photos Weekly updates	Weeks 8-11	16/3/2020 – 20/3/2020	16/3/2020– 19/3/2020
On 19/3/2020, UNICEF requested that the evaluation be put on hold due to the COVID-19 pandemic. During the hiatus, the inception report was rewritten in response to significant constructive responses from the EMG/ERG, including an agreement to include a statistically significant household survey of sanitation coverage. Discussions about recommencing work on the evaluation started in October 2020, and the evaluation recommenced on 16/11/2020. The section below shows the timeline proposed for recommencement. The final column shows the actual dates of activities and explains delays in milestone achievement.				
Present to stakeholders for feedback: -reconstructed ToC - household sanitation survey - FGD outlines Training of enumerators Pilot data collection tool	Stakeholder Workshop Weekly update	Week 1	End 6/11/2020	End 20/11/2020 Delays due to permission to enter Timor-Leste and flight cancellation
Field-based data collection	Mission report including quotes and high-resolution photos Weekly update	Weeks 2–6	9/11/2020 – 7/12/2020	23/11/2020– 22/1/2021 (9 weeks) Additional delays due to interruption for Christmas & New Year, and travel times extended due to seasonal rains and flight cancellation
Analyse data and draft evaluation report	Weekly updates	Weeks 7–12	14/12/2020– 22/1/2020	25/1/202– 5/3/2021
Present preliminary findings for feedback to stakeholders at a workshop and to ERG	Preliminary findings document	Week 7	End 18/12/2020	End 12/2/2021
Submit draft report to ERG	Draft report	Week 12	End 22/1/2021	End 5/3/2021
Submit final report along with summary and brochure on evaluation results for dissemination and advocacy purposes	Executive summary and brochure	Weeks 13–4	25/1/2021 –5/2/2021	19/3/2021– 31/3/2021

XII. Fieldwork Agenda

Municipality (Agency with sanitation responsibility)	Date	From	To	Night / Return	people
Aileu (Plan)	25/11/2020	Dili	Fatumirn	Dili	9
	26/11/2020	Dili	Atoin	Dili	9
	27/11/2020	Dili	Tatilisame	Dili	9
Ainaro (Plan)	30/11/2020	Dili	Raebuti Udo	Ainaro	9
	1/12/2020	Reabuti Udo	Canudu	Ainaro	9
	2/12/2020	Canudu	Poelau	Dili	9
Oecusse (UNICEF)	7/12/2020				
	8/12/2020	Oecusse Town	Oebaha	Oecusse Town	9
	9/12/2020	Oecusse Town	Maquelab	Oecusse Town	9
	10/12/2020	Oecusse Town	Baqui	Oecusse Town	9
	11/12/2020				
Bobonaro (PHD)	16/12/2020	Dili	Biacou	Bobonaro	9
	17/12/2020	Biacou	Futurasi	Bobonaro	9
	18/12/2020	Futurasi	Rairobo	Dili	9
Ermera (UNICEF)	6/1/2021	Dili	Centro Hatugao	Ermera	9
	7/1/2021	Centro Hatugao	Poeana	Ermera	9
	8/1/2021	Poeana	Bura	Dili	9
Liquica (WaterAid)	12/1/2021	Dili	Darumuda Pu	Dili	9
	13/1/2021	Dili	Manu Colohata	Dili	9
	14/1/2021	Dili	Raeme	Dili	9
Manufahi (WaterAid)	18/1/2021	Dili	Nalolo	Manufahi	9
	19/1/2021	Nalolo	Caikasa	Manufahi	9
	20/1/2021	Caikasa	Kledik	Manufahi	9
	21/1/2021	Kledik	Dili	Dili	9

XIII. Evaluation Team

Position	Name	Role
International team leader	Dr Kate Neely	Chief researcher
International technical expert	Paul Tyndale-Biscoe	Co-researcher, reviewer
National technical expert	Dr Therese Tam	Co-researcher, facilitator
Research assistant	Ajerino Vieira	Facilitator, scribe, enumerator, translator
Research assistant	Antonio do Carmo	Facilitator, scribe, enumerator, translator
Research assistant	Nilton Xavier	Facilitator, scribe, enumerator,
Research assistant	Abya Assuncao	Facilitator, scribe, enumerator, translator
Research assistant	Mariana Jenica Junior	Facilitator, scribe, enumerator,
Research assistant	Noviana dos Dores Faria Simoes	Facilitator, scribe, enumerator,
Research assistant	Ria Tavares Da Costa	Facilitator, scribe, enumerator,
Research assistant	Nicolau Da Cruz	Facilitator, scribe, enumerator,
Research assistant	Marcos Martins	Facilitator, scribe, enumerator,
Research assistant	Isabela Rosales	Facilitator, scribe, enumerator,
Research assistant	Macha Da Cruz	Facilitator, scribe, enumerator, translator
Research assistant	Joao Freitas	Facilitator, scribe, enumerator, translator

XIV. Data tables from Household Sanitation Coverage Survey

Demographics

Table 17 General demographics

Characteristic	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Oecusse	Total
Total households sampled	181	122	167	211	247	254	177	1359
Household members (average)	6.4	6.5	6.5	7.7	7.2	6.9	5.4	6.9
Number of women (average)	1.7	1.6	1.8	1.9	2.0	1.8	1.5	1.8
Number of men (average)	1.7	1.4	1.8	2.1	1.9	1.9	1.3	1.8
Number of girls (average)	1.4	1.5	1.3	1.6	1.5	1.3	1.2	1.4
Number of boys (average)	1.2	1.5	1.4	1.7	1.4	1.4	1.1	1.4
Number of babies (average)	0.5	0.4	0.3	0.4	0.4	0.3	0.3	0.4
Member with a disability (%) - D1	47.0%	36.9%	32.9%	28.0%	26.7%	36.2%	39.0%	34.6%
Member with a disability (%) - D2	5.0%	1.6%	3.0%	6.6%	4.5%	5.9%	6.2%	4.4%
Member with a disability (%) - D3	0.6%	0.0%	0.6%	0.9%	1.2%	0.8%	0.0%	0.7%
Female-headed households (%)	14.9%	13.9%	16.2%	15.6%	17.0%	16.9%	11.9%	15.8%
Child-headed households (%)	0.0%	0.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.1%
Vulnerable households (%)	23.2%	34.4%	25.1%	19.9%	17.0%	16.5%	23.7%	22.7%

*D1 impairment (vision, hearing, mobility, speech, cognition) is some or a lot or total, D2 impairment is a lot or total, D3 impairment is total

Table 18 Household wealth quintiles

	Municipality							
Characteristic	**Aileu**	**Ainaro**	**Bobonaro**	**Ermera**	**Liquiça**	**Manufahi**	**Oecusse**	**Total**
Wealth quintiles								
Quintile 1 (poorest 20%)	11.0%	11.5%	24.6%	34.1%	20.6%	5.5%	22.0%	18.5%
Quintile 2	35.4%	18.9%	34.7%	22.7%	32.8%	24.4%	35.6%	29.4%
Quintile 3	27.1%	32.8%	18.0%	19.9%	23.1%	26.0%	20.3%	23.5%
Quintile 4	22.1%	30.3%	18.6%	17.1%	13.4%	35.8%	17.5%	22.0%
Quintile 5 (wealthiest 20%)	4.4%	6.6%	4.2%	6.2%	10.1%	8.3%	4.5%	6.6%

Table 19 Households with someone who has difficulty using the latrine

	Municipality							
Characteristic	**Aileu**	**Ainaro**	**Bobonaro**	**Ermera**	**Liquiça**	**Manufahi**	**Oecusse**	**Total**
All households	5.0%	9.8%	3.6%	8.5%	5.7%	0.4%	3.4%	5.5%
Female headed household	7.4%	11.8%	7.4%	6.1%	4.8%	0.0%	4.8%	6.2%
Household w person w disability	22.2%	50.0%	20.0%	28.6%	27.3%	6.7%	9.1%	25.8%
Households in hygienic suco			0.0%		12.7%			

Table 20 Households with babies with diarrhoea

	Municipality							
Characteristic	**Aileu**	**Ainaro**	**Bobonaro**	**Ermera**	**Liquiça**	**Manufahi**	**Oecusse**	**Total**
Households w babies + diarrhoea	21.4%	22.7%	13.6%	41.4%	28.7%	26.9%	20.8%	25.8%
Households w babies + diarrhoea in hygienic suco			23.8%		29.4%			

Sanitation

Table 21 Joint Monitoring Program definitions of service levels for sanitation

Service Level	**JMP Definition**
Safely managed	Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site
Basic	Use of improved facilities which are not shared with other households
Limited	Use of improved facilities shared between two or more households
Unimproved	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines
Open defecation	Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open spaces or with solid waste

Table 22 Sanitation in all households

Total (households)	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Safely managed	11.0%	2.5%	2.4%	1.9%	5.3%	4.3%	4.6%	2.3%
Basic	60.8%	64.8%	88.0%	47.4%	58.3%	66.5%	64.3%	46.3%
Limited	7.7%	8.2%	5.4%	12.3%	6.9%	13.4%	9.0%	6.8%
Unimproved	19.9%	23.8%	4.2%	25.1%	21.9%	15.4%	18.4%	23.7%
Open defecation	0.6%	0.8%	0.0%	13.3%	7.7%	0.4%	3.8%	20.9%

Table 23 Sanitation in households in hygienic suco programmes

	Municipality		
Hygienic Sucos	Bobonaro	Liquiça	Total
Safely managed	2.4%	1.4%	1.9%
Basic	85.5%	63.4%	74.5%
Limited	7.2%	2.8%	5.0%
Unimproved	4.8%	25.4%	15.1%
Open defecation	0.0%	7.0%	3.5%

Table 24 Sanitation in female headed households

Female-Headed Households	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Safely managed	3.7%	5.9%	3.7%	0.0%	9.5%	9.3%	5.4%	4.8%
Basic	51.9%	64.7%	92.6%	39.4%	54.8%	58.1%	60.2%	33.3%
Limited	7.4%	5.9%	3.7%	9.1%	2.4%	7.0%	5.9%	19.0%
Unimproved	33.3%	23.5%	0.0%	42.4%	21.4%	23.3%	24.0%	38.1%
Open defecation	3.7%	0.0%	0.0%	9.1%	11.9%	2.3%	4.5%	4.8%

Table 25 Sanitation in households with a person with a disability

Households with PWD	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Safely managed	22.2%	0.0%	0.0%	7.1%	18.2%	20.0%	11.3%	0.0%
Basic	66.7%	0.0%	100.0%	57.1%	54.5%	60.0%	56.4%	18.2%
Limited	0.0%	50.0%	0.0%	21.4%	0.0%	13.3%	14.1%	18.2%
Unimproved	11.1%	50.0%	0.0%	14.3%	27.3%	0.0%	17.1%	27.3%
Open defecation	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	1.1%	36.4%

Table 26 Sanitation in the poorest quintile households

Quintile 1	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Safely managed	5.0%	0.0%	4.9%	0.0%	2.0%	7.1%	3.2%	2.6%
Basic	65.0%	35.7%	85.4%	23.6%	45.1%	35.7%	48.4%	25.6%
Limited	5.0%	14.3%	2.4%	13.9%	7.8%	0.0%	7.2%	5.1%
Unimproved	25.0%	42.9%	7.3%	27.8%	37.3%	50.0%	31.7%	30.8%
Open defecation	0.0%	7.1%	0.0%	34.7%	7.8%	7.1%	9.5%	35.9%

Table 27 Sanitation in the wealthiest quintile households

Quintile 5	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Safely managed	12.5%	25.0%	0.0%	0.0%	12.0%	4.8%	9.0%	0.0%
Basic	62.5%	50.0%	85.7%	76.9%	80.0%	85.7%	73.5%	100.0%
Limited	12.5%	12.5%	14.3%	0.0%	8.0%	4.8%	8.7%	0.0%
Unimproved	12.5%	12.5%	0.0%	23.1%	0.0%	4.8%	8.8%	0.0%
Open defecation	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 28 Lack of private/secure latrine

Latrines NOT private/secure	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Total	37.6%	32.8%	26.9%	10.9%	32.4%	24.0%	27.4%	27.1%
Female headed	33.3%	47.1%	44.4%	12.1%	38.1%	23.3%	33.1%	28.6%
Disability	33.3%	50.0%	40.0%	14.3%	54.5%	33.3%	37.6%	18.2%
Quintile 1	55.0%	14.3%	17.1%	12.5%	21.6%	21.4%	23.6%	35.9%
Quintile 5	37.5%	37.5%	14.3%	0.0%	20.0%	33.3%	23.8%	12.5%
Hygienic Sucos			20.5%		28.2%			

Table 29 Quality of pit latrines

Pit toilets	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Proper slab	0.0%	7.7%	no pits	0.0%	15.8%	57.1%	16.1%	10.0%
Lid	33.3%	30.8%	no pits	0.0%	5.3%	0.0%	13.9%	25.0%
Lid over hole	33.3%	23.1%	no pits	0.0%	0.0%	0.0%	11.3%	25.0%
slab + lid over hole	0.0%	7.7%	no pits	0.0%	0.0%	0.0%	1.5%	0.0%
slab+lid+HWF+water	0.0%	7.7%	no pits	0.0%	0.0%	0.0%	1.5%	0.0%
slab+lid+HWFWWS	0.0%	7.7%	no pits	0.0%	0.0%	0.0%	1.5%	0.0%
Private/secure	0.0%	53.8%	no pits	25.0%	36.8%	28.6%	28.9%	30.0%
Clean	66.7%	30.8%	no pits	25.0%	63.2%	85.7%	54.3%	80.0%
All	0.0%	0.0%	no pits	0.0%	0.0%	0.0%	0.0%	0.0%

Handwashing hygiene

Table 30 Joint monitoring program definitions of services levels for handwashing

Service level	**Definition**
Basic	Availability of a handwashing facility on premises with soap and water
Limited	Availability of a handwashing facility on premises without soap and/or water
No facility	No handwashing facility on premises

Table 31 Handwashing access for all households

Total (households)	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	59.1%	18.9%	18.6%	19.0%	27.1%	33.1%	29.3%	6.8%
Limited	34.3%	47.5%	43.1%	42.2%	47.0%	49.2%	43.9%	48.0%
No facility	6.6%	33.6%	38.3%	38.9%	25.9%	17.7%	26.8%	45.2%

Table 32 Handwashing access after hygienic suco programs

Hygienic Sucos	Municipality		
	Bobonaro	Liquiça	Total
Basic	20.5%	29.6%	25.0%
Limited	38.6%	36.6%	37.6%
No facility	41.0%	33.8%	37.4%

Table 33 Handwashing access in fameal headed households

Female headed	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	66.7%	23.5%	18.5%	15.2%	26.2%	23.3%	28.9%	9.5%
Limited	29.6%	23.5%	25.9%	42.4%	47.6%	39.5%	34.8%	38.1%
No facility	3.7%	52.9%	55.6%	42.4%	26.2%	37.2%	36.3%	52.4%

Table 34 Handwashing access in households with a person with a disability

PWD Households	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	66.7%	0.0%	20.0%	14.3%	27.3%	33.3%	26.9%	0.0%
Limited	33.3%	100.0%	40.0%	71.4%	36.4%	53.3%	55.7%	54.5%
No facility	0.0%	0.0%	40.0%	14.3%	36.4%	13.3%	17.3%	45.5%

Table 35 Handwashing access in the poorest households

Quintile 1	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	65.0%	7.1%	19.5%	4.2%	21.6%	14.3%	21.9%	2.6%
Limited	30.0%	57.1%	56.1%	38.9%	54.9%	42.9%	46.6%	46.2%
No facility	5.0%	35.7%	24.4%	56.9%	23.5%	42.9%	31.4%	51.3%

Table 36 Handwashing access in the wealthiest households

Quintile 5	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	37.5%	50.0%	0.0%	15.4%	40.0%	57.1%	33.3%	0.0%
Limited	50.0%	25.0%	28.6%	61.5%	44.0%	38.1%	41.2%	50.0%
No facility	12.5%	25.0%	71.4%	23.1%	16.0%	4.8%	25.5%	50.0%

Table 37 Reported occasions for handwashing

Handwashing	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
After defecation	76.2%	57.4%	71.3%	40.8%	62.8%	68.9%	62.9%	63.8%
Before eating	76.8%	45.1%	71.3%	56.4%	65.2%	73.6%	64.7%	62.7%
Before cooking	49.2%	40.2%	39.5%	29.4%	27.5%	27.2%	35.5%	26.6%
Before serving	45.9%	27.0%	16.8%	18.5%	14.6%	9.8%	22.1%	18.6%
After cleaning baby	29.3%	23.0%	16.2%	13.3%	10.9%	6.3%	16.5%	18.1%
Other	21.5%	16.4%	19.8%	36.0%	36.0%	32.7%	27.1%	40.7%
None	5.5%	9.8%	3.6%	5.7%	1.2%	1.2%	4.5%	1.7%

Table 38 Women's reported occasions of handwashing

Handwashing - female respondent	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
After defecation	78.2%	54.7%	66.3%	41.6%	62.8%	71.0%	62.4%	66.0%
Before eating	75.2%	46.5%	68.5%	54.0%	71.0%	74.1%	64.9%	61.3%
Before cooking	49.5%	45.3%	44.6%	37.2%	33.1%	34.0%	40.6%	28.3%
Before serving	41.6%	29.1%	13.0%	22.1%	16.6%	12.3%	22.5%	18.9%
After cleaning baby	37.6%	24.4%	12.0%	15.0%	12.4%	8.0%	18.2%	17.9%
Other	24.8%	15.1%	19.6%	35.4%	35.2%	27.2%	26.2%	34.0%
None	4.0%	9.3%	2.2%	5.3%	0.7%	1.2%	3.8%	1.9%

Table 39 Men's reported occasions of handwashing

Handwashing - male respondent	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
After defecation	73.8%	63.9%	77.3%	39.8%	62.7%	65.2%	63.8%	60.6%
Before eating	78.8%	41.7%	74.7%	59.2%	56.9%	72.8%	64.0%	64.8%
Before cooking	48.8%	27.8%	33.3%	20.4%	19.6%	15.2%	27.5%	23.9%
Before serving	51.3%	22.2%	21.3%	14.3%	11.8%	5.4%	21.0%	18.3%
After cleaning baby	18.8%	19.4%	21.3%	11.2%	8.8%	3.3%	13.8%	18.3%
Other	17.5%	19.4%	20.0%	36.7%	37.3%	42.4%	28.9%	50.7%
None	7.5%	11.1%	5.3%	6.1%	2.0%	1.1%	5.5%	1.4%

Table 40 Reported exposure to messaging about handwashing

Exposure to handwashing messages	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
One source	95.0%	79.5%	92.8%	70.6%	78.1%	85.4%	83.6%	89.3%
Multiple sources	51.9%	38.5%	34.7%	15.2%	14.2%	22.0%	29.4%	41.2%
Sources								
Health worker	71.3%	54.1%	65.3%	51.2%	57.5%	69.7%	61.5%	62.1%
Teacher	9.9%	8.2%	2.4%	0.9%	1.2%	3.9%	4.4%	4.5%
Community Leader	36.5%	27.0%	31.7%	13.7%	14.6%	9.8%	22.2%	21.5%
Other government official	4.4%	0.8%	3.0%	1.4%	0.0%	0.4%	1.7%	1.7%
NGO staff	53.0%	23.8%	31.1%	1.9%	9.7%	5.5%	20.8%	49.7%
TV or Radio	21.0%	27.0%	4.8%	16.6%	12.6%	20.9%	17.1%	10.2%
Other	0.0%	0.8%	0.6%	2.4%	2.8%	1.6%	1.4%	2.3%

Water supply

Table 41 Handwashing access when there is water supply at the house

Water supply in house/yard	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	55.1%	11.5%	16.4%	21.9%	32.8%	39.1%	29.5%	10.3%
Limited	34.8%	38.5%	34.5%	45.8%	43.3%	42.1%	39.8%	44.8%
No facility	10.1%	50.0%	49.1%	32.3%	23.9%	18.8%	30.7%	44.8%

Table 42 Handwashing access when water collection is less than 30mins in the rainy season

Water supply < 30 minutes wet	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	68.9%	15.9%	18.4%	17.3%	17.3%	25.7%	27.2%	5.1%
Limited	31.1%	49.2%	49.0%	37.8%	51.9%	59.3%	46.4%	41.0%
No facility	0.0%	34.9%	32.7%	44.9%	30.9%	15.0%	26.4%	53.8%

Table 43 Handwashing access when water collection is less than 30mins in the dry season

Water supply < 30 minutes dry	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	65.6%	10.0%	19.0%	16.4%	17.6%	27.5%	26.0%	4.0%
Limited	34.4%	70.0%	55.2%	45.9%	51.0%	57.1%	52.3%	64.0%
No facility	0.0%	20.0%	25.9%	37.7%	31.4%	15.4%	21.7%	32.0%

Table 44 Handwashing access when water collection is more than 30mins in the rainy season

Water supply > 30 minutes wet	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	51.6%	30.3%	28.6%	11.8%	28.1%	37.5%	31.3%	7.1%
Limited	38.7%	51.5%	35.7%	47.1%	50.0%	25.0%	41.3%	57.1%
No facility	9.7%	18.2%	35.7%	41.2%	21.9%	37.5%	27.4%	35.7%

Table 45 Handwashing access when water collection is more than 30mins in the dry season

Water supply > 30 minutes dry	Municipality							
	Aileu	Ainaro	Bobonaro	Ermera	Liquiça	Manufahi	Total	Oecusse
Basic	61.7%	22.1%	20.4%	16.7%	22.6%	23.3%	27.8%	6.5%
Limited	33.3%	47.7%	38.9%	31.5%	51.6%	56.7%	43.3%	45.5%
No facility	5.0%	30.2%	40.7%	51.9%	25.8%	20.0%	28.9%	48.0%

XV. Report Back to Communities

Report back to communities - ALFA survey and discussions.

Thank-you for being part of our evaluation, the information that you gave us has helped us to understand what happens during sanitation programmes and what sorts of issues you might have in building and maintaining a toilet that you can keep using forever.

We talked with communities in 21 different aldeia in Timor-Leste and we learned a LOT. Here are some of the things that we want to share with you:

- The government really does care that you have a toilet and that you wash your hands with soap. This will help to make your family and your community healthy. When you are healthy you have more opportunities for fun and learning, and more possibilities for creating a better financial situation for your family.
- It has been difficult for the government to do monitoring, but they will be able to do that again soon.
- We found that most people think that it is very important that everyone should have a latrine and that everyone should have good handwashing habits.
- We found that people who have a latrine are very happy that they have one. A lot of people would like a better latrine, and most people think that means a flush latrine that uses water. BUT you can have a really good, very clean, very nice, safe and secure pit latrine that doesn't need water.
- We are a bit worried that people don't wash their hands with soap when they should. We think that everyone knows that they *should* wash their hands, but it's hard to get into the habit of doing it. If anyone has a good idea of how to get kids or adults to wash their hands more we would love you to share it with us or with your local health worker (SISCa).
- We are very concerned the young children are allowed to poo on the ground and it is usually left for the dogs or pigs. The reason that we are worried is that, even though the children are healthy, their poo has a lot of diseases in it and flies will carry those diseases to people.
- We love that communities have invented ways to make sure that they stay ODF, here are some of the ideas we have seen:

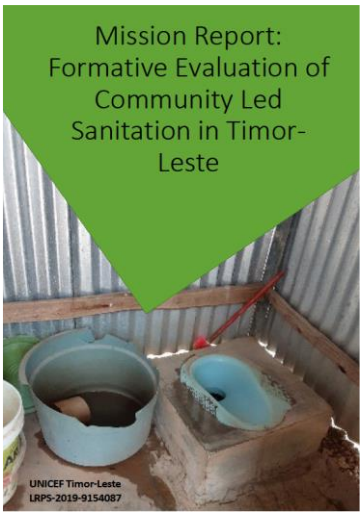
  PIT LATRINES
  - Pit latrines can be built using a bidon with the ends taken out – this stops the sides of the latrine collapsing when it rains, and it gives a solid foundation for the slab of the latrine.
  - Having a lid on your pit latrine, and keeping the surroundings clear is always a good idea
  - Pit latrines can be stopped from smelling bad by, every day, adding a handful of ash and a handful of fresh cut up papaya leaves and a handful of either dry grass or dry leaves or dry rice husks or dry corn husks

  FLUSH LATRINES

  - In the rainy season, water for flushing can be collected from the roof of your latrine using bamboo pipes
  - If your household sometimes doesn't have enough water, you might need a pit latrine as well as a flush latrine.

XVI. Mission Report

Double click the diagram below to open the Mission Report as a PDF.



XVII. Terms of Reference

TERMS OF REFERENCE FOR INSTITUTIONAL CONTRACTS.

UNICEF

Requesting Sections: -Child Survival and Development (WASH) and PME & Social Policy --

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TITLE: Terms of Reference for Conducting a Formative Evaluation of Community-Led Total Sanitation in Timor-Leste

1- Background

1.1 General Context

Timor-Leste is one of the youngest nations in the world. As per 2015 Population and Housing Census, the total population of Timor-Leste is 1,183,643 consisting of 601,112 males and 582,531 females living in 204,597 households. It has 13 Municipalities (districts) with each having further administrative divisions; Administrative Posts (sub districts), Succos (villages) and Aldeias (sub villages or hamlets).

With its restoration of independence in 2002, it was in a state of ruin with tattered infrastructure and a ceased economy. The country has faced numerous political, security and development upheavals since then. However, the nation has made steady progress in peace and democracy, especially after 2008. Timor-Leste has also achieved good progress in some key development targets.

However, as of 2013 data, over half of Timorese under-five children (50.2 %) are stunted (too short for their age); 11 percent are wasted (are too thin for their height) and 37.7 % underweight (have a combination of stunting and wasting). Moreover, access to improved sanitation and availability of hand washing facilities were both found significantly associated with a high prevalence of stunting[1]. A review by the World Bank on malnutrition in Timor-Leste in 2016[2] further revealed that childhood malnutrition was the leading risk factor for under five mortality and that unsafe water, unsafe sanitation and lack of handwashing facilities were strong contributors, ranking as 3rd, 4th and 6th risk factors. WHO and UNICEF Joint Monitoring Program (JMP) in 2019[3] shows that 20% of total population in Timor-Leste still practice open defecation, while it is even higher (28%) in rural population. It further reveals that 46% of the total population are deprived of accesses to at least basic sanitation.

Alleviation of Open Defecation has been a key priority and commitment of the government of Timor-Leste. The National Basic Sanitation Policy of Timor-Leste (NBSP, 2012) has identified "an open defecation free environment" as the first priority in improving sanitation in the country. The community led total sanitation (CLTS) model (described below) has been embraced by the Government of Timor-Leste as the key approach to end open defecation, and was rolled out in 2012

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[1] Timor-Leste Food and Nutrition Survey 2013

[2] Malnutrition in Timor-Leste: A review of the burden, drivers, and potential response, World Bank, 2016 http://pubdocs.worldbank.org/en/487831491465798343/Malnutrition-in-Timor-Leste.pdf

[3] Progress on household drinking water, sanitation and hygiene, 2000 – 2017, (2019), UNICEF-WHO JMP Report - https://washdata.org/

by the Ministry of Health (MOH), which endorsed behaviour change communication (BCC) materials and guidelines, ensuring a standardized approach. No explicit Theory of Change or logical framework is available within the NBSP.

The CLTS process is a community-based, participatory approach designed to create demand for a dignified environment, thus motivating communities to embrace the concept of "domestic latrines." A community is declared ODF when 100% of households have built latrines and use them for defecation and disposing of infant faeces. The CLTS process consists of the following elements:

- Leadership mobilization though institutional triggering at Municipality and Administrative Post level to gain the support of local leaders, sector managers and Suco chiefs;
- Community triggering, action planning, implementation, mentoring and following up on community action in coordination with local health workers, community leaders and sanitation promotion groups in each Aldeia;
- Hygiene promotion events in communities;
- Verification of access and use of sanitation and hygiene facilities; and
- Declaration of ODF achievement in Sucos, acknowledging and recognizing success and to motivate others.

Once achieved, the ODF platform is utilized to bring in hygiene and environmental cleanliness components, with the establishment of Sanitation, Hygiene and Environmental Health Promotion Groups in Aldeias, which lead the change process in the community including post triggering follow-ups.

The government aims to achieve Open Defecation Free (ODF) status nationwide by 2020. To reach this target, the government has been in multiple long-term partnerships including with UNICEF, Australia (the Australia-Timor-Leste Partnership for Human Development (PHD)), WaterAid, Plan International, World Vision, Child Fund, Red Cross (CVTL), and CARE International. These stakeholders have been fully responsible for community level triggering, hygiene promotion and post triggering follow up. The respective Municipal authorities and the Ministry of Health are responsible for verifying and certifying the resulted ODF status.

As of October 2019, 4 Municipalities (Ermera, Aileu, Liquica and Bobonaro) out of the country's 13 Municipalities, have been declared as ODF. Community Led Total Sanitation interventions are ongoing in 6 other Municipalities (Covalima, Ainaro, Oe-cusse, Manufahi, Viqueque, Lautem) with varying level of progress. Commencement of CLTS in the last three municipalities, Baucau, Dili and Manatuto, is expected in December 2019.

CLTS implementation in Timor-Leste has been affected by the following:

- Accessibility to certain communities for CLTS and ODF follow ups is challenged by remoteness and poor road conditions, particularly during the rainy season;
- Prolonged dry weather results in water source depletion thus compelling the communities to compromise maintaining sanitation facilities and continuing improved hygienic behaviour;
- Basic sanitation solutions in reaching ODF such as pit latrines are vulnerable to collapse during the rainy season;
- Community demand on type of latrine and associated technology are diverse, thus compromising timebound CLTS targets.

Moreover, sustainability (of both the CLTS approach and of its results) is a key issue. CLTS and ODF target are still largely managed by non-governmental development partners, and mandated government entities are challenged by lack of inbuilt resources. Overall ODF progress monitoring relies on information provided by implementing partners, rather than on an independent system managed by the Ministry of Health. Moreover, a post ODF assessment by the first ODF declared Municipality

revealed a 13% slippage during the first year, and an ODF sustainability study published in 2017 by PHD revealed a slippage of 20% during a period of two years.[4]

2- Evaluation purpose, objectives, scope and framework

2.1 Evaluation purpose and target audience

After seven years of CLTS implementation in Timor-Leste, and as the government and stakeholders are utilizing substantial amounts of resources on CLTS, it is important to take stock of countrywide CLTS efforts. There is currently only limited quantitative and qualitative evidence on whether CLTS results in a sustainable ODF status in Timor-Leste. Hence UNICEF would like to support the Government in carrying out a formative evaluation of CLTS in Timor-Leste.

The purpose of the evaluation is to produce evidence on the results of the CLTS approach in Timor-Leste to inform decision-making on potential adjustments needed in order to achieve the 2020 ODF target and to ensure that ODF status is sustained. The findings could further influence government policies, strategies and funding priorities to look beyond ODF towards basic and safely managed sanitation by 2030 (SDG target 6.2). Moreover, as several key stakeholders including UN agencies, have started or will soon start to plan for their next programme cycle, the findings of this evaluation would be timely for better planning and resource allocation in sanitation.

The primary target audiences of the evaluation are the Government of Timor-Leste, particularly the Ministry of Health, the Ministry of State Administration, the municipalities, and the development partners implementing CLTS in Timor-Leste (UNICEF, Australia, WaterAid, Plan International, World Vision, Child Fund, Red Cross (CVTL), and CARE International). The findings of the evaluation are expected to inform CLTS-related and possibly broader sanitation planning, financing and implementation among these actors.

Secondary audiences are other Government entities, including the Ministry of Public Works and the Ministry of Education, donor agencies, UN agencies and NGOs working in the field of water, hygiene and sanitation, whose work has a bearing on CLTS implementation. The evaluation findings are expected to inform their planning and resource allocations in other WASH components.

Other WASH sector stakeholders outside Timor-Leste may also be interested in the findings, as Timor-Leste is one of the few countries where CLTS has been officially recognized as the strategy to end open defecation, and where initial observation points to steady progress (to be validated by the evaluation). The evaluation findings could thus be of use in other countries, both as a learning product and an advocacy tool.

The dissemination and use of the evaluation will be supported with a communication plan.

2.2 Evaluation objectives

General objective

To evaluate the impact, relevance, effectiveness, efficiency and sustainability of the Community Led Total Sanitation (CLTS) approach implemented by the government and its partners in making communities Open Defecation Free (ODF) in Timor-Leste

Specific objectives

a) To understand what are the enabling environment, demand and supply factors from 2002 to 2012 that led to CLTS being adopted in 2012 as the main strategy to stop open defecation in the National Basic Sanitation Policy (NBSP).

[4] ODF Sustainability in Timor-Leste: Implications for Achieving and Sustaining Sanitation for All, Partnership for Human Development, June 2017

b) To document and analyse the process of CLTS execution since the adoption of the NBSP to date (2013-2019), including what each implementing partner did, where, when, and how, and covering enabling environment, demand and supply aspects.
c) To examine the qualitative and quantitative results of CLTS since the adoption of NBSP to date (2013-2019).

2.3 Evaluation scope

The evaluation will focus on two distinct aspects, with differing time scopes:

- What led to the adoption of CLTS as the strategy to end open defecation, focusing on the time before and during the adoption of the National Basic Sanitation Policy (NBSP), from 2002 to 2012;
- The implementation of CLTS and the results achieved since the adoption of the NBSP, from 2013 to 2019.

The evaluation will look at CTLS efforts of the Government and its development partners - it will not be restricted to UNICEF CLTS interventions. It will focus on the 10 municipalities where CLTS has been or is being implemented, out of the country's 13 municipalities.

Municipalities	CLTS status	Covered by evaluation	2019 population estimates
Ermera	ODF	Yes	136,010
Aileu	ODF	Yes	54,106
Liquica	ODF	Yes	78,700
Bobonaro	ODF	Yes	99,956
Sub-total	4		368,772
Covalima	CLTS implementation underway	Yes	68,863
Ainaro	CLTS implementation underway	Yes	65,165
Oe-cusse	CLTS implementation underway	Yes	71,486
Manufahi	CLTS implementation underway	Yes	56,844
Viqueque	CLTS implementation underway	Yes	78,599
Lautem	CLTS implementation underway	Yes	66,909
Sub-total	6		407,866
Baucau	Not started	No	126,562
Dili	Not started	No	328,666
Manatuto	Not started	No	56,844
Sub-total	3		512,072
Total	13		1,288,710

2.4 Evaluation framework

The criteria and questions below are provided as initial guidance. One of the key tasks to be initiated at the proposal stage will be to interrogate proposed evaluation questions and criteria in these ToRs and determine if all key issues have been given due prominence. Bidders are required to propose appropriate evaluation criteria. Improvements and/or refinements to the draft questions may be offered at the proposal stage.

Moreover, the evaluation team will finalize relevant criterion and questions at inception phase after finishing the initial contextual review (as explained below in the activities). They will do so in a participatory manner, taking into account the views of the various stakeholders.

Evaluation evidence will be assessed using the Organization for Economic Co-operation and Development (OECD) Development Assistance Committee's (DAC) criteria of *relevance, effectiveness, efficiency, impact* and *sustainability* as well as *equity, gender equality, and human rights*.

Relevance – *Measures the extent to which CLTS interventions are suited to the priorities and policies of the GoTL*

1. To what extent has CLTS been, and is still, aligned to national priorities and relevant given the country context, the existing WASH challenges,[5] and the higher ambitions set out by the SDGs particularly the government's ODF target by 2020?
2. Were the various activities and outputs consistent to achieve the overall goal and intended impact related to the eradication of open defecation?

Effectiveness - *Measures the extent to which the CLTS programme attained its objectives*

1. To what extent were the CLTS programme objectives achieved / are likely to be achieved, and in particular has the collective practice of Open Defecation (OD) disappeared and the practice of handwashing at critical moments been taken up as a result of CLTS (at the time of certification, or shortly before or after)?
2. To what extent has the CLTS effectively motivated households in the communities targeted to effectively climb up the sanitation ladder and improve the quality of their latrines after achieving ODF?

Efficiency - *Measures the outputs, qualitative and quantitative, in relation to the inputs*

1. Is the level of achievement of outputs and outcomes related to the eradication of open defecation, use of improved sanitation, handwashing practices, and sector coordination satisfactory when compared to the level of financial and human resources mobilized/used?
2. Were the objectives achieved on time or have there been any significant delays in programme implementation and achievement of results, and if so, why?

Impact – *Measures the long-term changes resulting from the CLTS programme*

1. Has there been a reduction in diarrhea in communities that reached ODF status?
2. Has there been a reduction in under-five mortality in the communities that reached ODF status?

Sustainability - *Measures whether the benefits of CLTS programme are likely to continue after external funding has been withdrawn*

1. To what extent did the ODF status and the associated social norms such as hand washing sustain since certification (in communities certified in the earlier years of the evaluation period), and what were contributing factors, both at community level and in the enabling environment?
2. In situations where some sections of the communities have returned to their original habit of open defecation, despite their villages attaining/accredited with ODF status, how have the Government duty bearers at municipal and central levels managed such slippage?

Equity, gender equality and human rights - Measures the integration of equity, gender equality, and human rights

1. To what extent has CLTS been implemented in the communities where there was a stronger need for it, with the intention of reducing inequities? Have equity considerations been integrated at each stage of the programme cycle?
2. To what extent the programme effectively mainstreamed gender equality and empowerment of women and girls?

[5] For instance water stress and people' s beliefs and expectations regarding open defecation.

3- Description of the Assignment

3.1 General outline of evaluation methodology

Introduction – The evaluation team is first expected to undertake a literature review and then finalize the evaluation methodology. This will help to identify the most appropriate elements as well as customize standard elements to the context being evaluated. UNICEF will provide the necessary technical guidance on the initial review in terms of information sources and coordination with relevant stakeholders. The overall evaluation design should be non-experimental and the evaluation should employ a utilization-focused and participatory approach, thus accommodating audiences with varying accountabilities and power dynamics as well as the most disadvantaged with the focus on child, gender and disability aspects. The evaluation team should adopt a theory-based approach. As no theory of change exists for CLTS in Timor-Leste, the evaluation team will be expected to reconstruct it. The evaluation should employ a mixed methods approach combining quantitative and qualitative data and using a combination of tools for data collection and analysis. A special focus needs to be put on the social norms and institutional governance components related to the objectives.

Information Sources – The methodology design will include identifying sources of references, information, data and opinions. These may consist of both primary and secondary sources. Available information include: government and stakeholders' annual reports, UNICEF programme documents, progress/completion reports, existing assessments (including the 2017 'ODF sustainability in Timor-Leste' study) as well as policies, strategies, guidelines, and action plans. Moreover, capturing qualitative information from key stakeholders, including duty bearers, rights holders and community volunteers, would be of utmost importance through appropriate modalities such as direct interviews, plenary discussions, meetings, focus group discussions. UNICEF's technical guidance, coordination and logistical support will be available in identifying and setting interviews / meetings with respective audiences.

Field Engagement - Field visits to representative locations /communities will have to be made to observe the results of past CLTS interventions as well as ongoing CLTS processes, and to collect primary information from rights holders and subnational duty bearers. The number of field visits will be proposed by the bidders, depending on the sampling, and will be further refined and endorsed by stakeholders during the assignment, as described below under activities. Observation checklists and survey questionnaires should be designed in a way that ensures accuracy of data collected, minimization of bias, and triangulation between various data sources and categories of respondents.

Data Management - Triangulation of methods and data is required, preferably through the analysis of both quantitative and qualitative data sourced from a range of stakeholders including the government, non-government and community categories at both national and sub national levels. The evaluation needs to analyze the effectiveness of CLTS in terms of indicators while also capturing any trends and evolutions during the period concerned. Analysis of successes and failures as well as resulted added value or disparities across population groups of interest are to be included. Any variation across geographical areas will be highlighted and processes and results will be compared with respect to specific program modalities by varying stakeholders when possible. Good or bad aspects of respective program modalities will be documented.

Contingencies - Potential organizational and methodological challenges to the evaluation need to be identified early on, and appropriate mitigation measures proposed. Not all contingencies can be forecast, so dialogue will be required.

Ethical Considerations - The evaluation team should be sensitive to beliefs, manners and customs, and act with integrity and honesty in relationships with all stakeholders, complying with United Nations Evaluation Group (UNEG) Norms and Standard and Ethical Guidelines for UN Evaluators, the Evaluators' Code of Conduct, as well as UNICEF's revised Evaluation Policy, and UNICEF Procedure for Ethical Standards in Research, Evaluation and Data Collection and Analysis. Moreover, ethical

clearances with respect to Timor-Leste's government requirements need to be sought in a timely manner. Respondents will not be provided with any reward or financial compensation for their participation that may influence their response. The consultant should respect the confidentiality of information handled during the assignment. The consultant will be allowed to use documents and information provided only for the tasks related to the terms of reference of this evaluation. Data will be stored in a secure location with controlled access. The study data will be used only for the purpose of this study.

3.3 Proposed methodology

Based on the purpose and objectives of the evaluation, this section indicates a possible approach, methods and processes for the evaluation. Methodological rigor will be given significant consideration in the assessment of proposals. Bidders are invited to question the approach and methodology outlined in the ToRs and improve on it or propose an approach they deem more appropriate and in line with UNICEF's evaluation policy (2018) and the United Nations Evaluation Group (UNEG) Norms and Standards (2016). In their proposal, bidders should refer to triangulation, sampling plan and methodological limitations and mitigation measures.

The evaluation will take mainly a **formative** stance and **at minimum** may draw on the following methods:

Desk Review: Review of relevant government policies, orders and relevant laws such as Budget Law, Law on local administration and guidelines, National Development Plan, policy papers, plan of actions, sectoral plans, national reports and strategies. The desk review will also make use of UNICEF documentation including country programme, donor and other reports, work plans for CLTS, surveys, assessments, articles, publications, monitoring and evaluation related document, researches, evaluability assessments and evaluations done in other countries, etc. to generate comprehensive information in order to further refine and unfold these ToRs and develop the Inception Report.

Key Informant Interviews (KII): Face-to-face interviews with officials from at least 4 relevant Ministries (Health; State Administration; Public Works; Education), 10 Municipalities, at least 10 local and international agencies, including focal departments, staff and units on CLTS and its supportive services, and a yet-to-be determined number with local-level individuals, including community leaders, other influential / natural leaders, women and children.

Focus Group Discussions (FGD): This will be largely for community settings (Sucos & Aldeias) and will be designed to enable meaningful participation of marginalized groups, including women, children and people living with disabilities.

(**NB:** KIIs and FGDs are expected to be accurately recorded to allow for quotes from participants, together with high quality photos to illustrate findings, that can be used in the evaluation report and in any other communications material.)

Validation Workshops: These would be applied to both methodology design and to initial findings and would consist of sharing and feedback sessions to reach consensus on research design, conclusions and recommendations, with the active participation of relevant stakeholders.

Participation of Children and Women: Methods for consulting effectively with children and young people will need to be developed in consultation with UNICEF with a focus on the 'do-no-harm' principle, i.e., ensuring that the safety and security of families and their children is not compromised by any actions on the part of the evaluators. Methods will also need to be human rights based, equity focused and gender sensitive. The team needs to ensure that the evaluation processes are fully compliant with the UNEG and UNICEF ethical guidelines provided (details are in section 11).

In ensuring quality, the evaluation team is required to adhere to the UN Norms and Standards for Evaluation, as well as to the UNICEF's Evaluation Policy (E/ICEF/2018/14), UNICEF Procedure for Ethical Standards in Research, Evaluation and Data Collection and Analysis, UNEG Ethical Guidelines, UNEG Guidance on Integrating Human Rights and Gender Equality in Evaluation,[6] UN SWAP Evaluation Performance Indicator,[7] UNICEF-Adapted UNEG Evaluation Reporting Reports Standards.

The evaluation should include the following steps:

1. Desk review
2. Inception mission and report
3. Data collection
4. Data analysis
5. Sharing preliminary findings
6. Draft report
7. Finalization of the evaluation report.

4- Deliverables

Activities	Deliverables	Timeline
Steps 1 and 2: Desk review, and inception mission and report		**7 weeks (6 weeks of work for consultancy firm)**
Conduct preliminary meeting by Skype with Ministry of Health and UNICEF	Meeting minutes	Week 1
Conduct desk review on relevant policies, statistics, reports and other knowledge products and information		Weeks 1 and 2
Inception mission to conduct interviews with key government and other stakeholders at central level		Week 3
Analyze pre-CLTS sanitation landscape (including enabling environment, supply and demand), reconstruct Theory of Change, refine methodology, including sampling and questionnaire proposal, and design a data collection schedule, including field travel plan		Week 4 and 5
Submit draft inception report to reference group	Draft inception report[8]	Week 5
Submit finalized inception report	Finalized inception report	Week 7
Step 3, 4 and 5: Data collection, data analysis and sharing preliminary findings		**7 weeks (7 weeks of work for consultancy firm)**
Present reconstructed Theory of Change, data collection sampling and questionnaire, and data collection field travel plans to stakeholders through a workshop		Week 8

[6] Available at http://www.uneval.org/document/download/1294
[7] Available at http://www.uneval.org/document/download/2148
[8] The inception report should present i) background information on evaluation context and evaluation object (based on preliminary desk review), ii) refined evaluation purpose, objectives and scope, iii) evaluation criteria and questions (evaluation framework), iv) detailed proposal of methodology including evaluation approach, data collection and analysis methods (with reference to sampling strategy and methodological limitations), v) detailed work plan including field mission schedule, vi) analysis of pre-CLTS landscape, and vii) reconstructed Theory of Change.

Pilot data collection tools and conduct field-based data collection	Mission report including quotes and high-resolution photos	Weeks 8-11
Analyze collected data and initiate drafting of evaluation report		Weeks 12-13
Present preliminary findings to stakeholders at a workshop	PPT on preliminary findings	Week 14
Present preliminary findings to reference group		Week 14
Steps 6 and 7: Draft and final report		**8 weeks (6 weeks of work for consultancy firm)**
Draft and submit evaluation report to reference group	First draft evaluation report	Week 15
Refine evaluation report and submit second draft		Week 17
Refine evaluation report and submit third draft		Week 19
Present the report at a multi-stakeholder meeting	PPT on evaluation report	Week 20
Submit final evaluation report	Final evaluation report	Week 21
Prepare PPT summary and brochure on evaluation results for dissemination and advocacy purposes	Executive summary and brochure	Week 22

5- Reporting Requirements

Reporting formats in line with the deliverables are as follows.

- Meeting minutes of inception Skype call – Shared electronically (Word)
- Inception report – Shared electronically (Word and Excel as appropriate)
- Mission report - Shared electronically (Word and Excel as appropriate)
- Preliminary findings – Shared electronically and presented at workshop (World and Excel as appropriate, Power Point)
- Draft evaluation report - Shared electronically (Word and Excel as appropriate)
- Final evaluation report (compliant with UNICEF Style Book 2019, UNICEF Brand Book and UNICEF Publications Toolkit) - Shared electronically (Word and Excel as appropriate)
- Executive summary of evaluation results in English and Tetum (compliant with UNICEF Style Book 2019, UNICEF Brand Book and UNICEF Publications Toolkit) – Shared electronically (Word and PowerPoint)
- Brochure on evaluation results (compliant with UNICEF Style Book 2019, UNICEF Brand Book and UNICEF Publications Toolkit)– Shared electronically (Word or Publisher)

6- Location and Duration

- The evaluation team will be stationed at the premises of UNICEF Timor-Leste
  - with walking distance to two main line Ministries accountable for water and sanitation
  - with a close proximity to all the key stakeholders' head offices
  - need to undertake field visits to the Municipalities (described under Admin.)
  - need to prepare own schedules according to the deliverables (with the guidance of supervisor)
- Tentative contract start date – December 2019
- Tentative contract end date – April 2020

- Total contract duration – five months (22 weeks)
- Estimate weeks of work for consultancy firm – 19 weeks

7- Qualification Requirements or Specialized Skills / Experience Required:

The evaluation will be conducted by engaging an evaluation consulting firm that should bring together one international senior-level evaluation consultant (Team Leader) to lead the evaluation, at least one international WASH specialist (Team Member/Technical Expert), and three national consultants (Team Members/National Technical Experts/Enumerators). The consulting firm should identify a gender-balanced and culturally diverse team, to the extent possible.

International team leader:

- Masters level or higher degree
- Extensive evaluation experience (10 years), with an excellent understanding of evaluation principles and methodologies, and UNEG Norms and Standards
- Previous experience in conducting formative evaluations and evaluations jointly conducted with national government or country-led evaluations
- Having in-depth knowledge of the UN's human rights, gender equality and equity agendas;
- Specific water, hygiene and sanitation evaluation experience is desirable but is secondary to a strong mixed-method evaluation background
- Previous experience, knowledge of, and work in Timor-Leste is an asset.
- Fluency in English
- Knowledge of Portuguese and Tetum will be an asset

International technical expert:

- Masters level or higher degree in public health, sanitation, environment, social studies or other relevant field of study
- In-depth understanding of water, sanitation and hygiene and related development landscape
- Experience with community-led total sanitation
- Understanding of equity, gender equality and human rights-based approaches
- Previous experience, knowledge of, and work in Timor-Leste is an asset.
- Fluency in English
- Knowledge of Portuguese and Tetum will be an asset

National technical experts/enumerators:

- Hands-on experience in research, collecting and analyzing quantitative and qualitative data, ideally with some experience in the WASH and/or public health sector
- Good understanding of Timor-Leste institutions and of economic, political, social and cultural issues
- Understanding of equity, gender equality and human rights-based approaches
- Ability to speak, read and write both Tetum and English
- Knowledge of Portuguese will be an asset

8- Application process and methods

Each proposal will be assessed first on its technical merits and subsequently on its price. In making the final decision, UNICEF considers both technical and financial proposals. The assessors first review the technical proposals followed by review of the financial proposals of the technically compliant firms. The proposal obtaining the highest overall score after adding the scores for the technical and financial proposals together, that offers the best value for money, will be recommended for award of the contract.

The technical proposal should include but not be limited to the following:

a) **Presentation of the Institution**, including:

Name of the institution;

Date and country of registration/incorporation;

Summary of corporate structure and business areas;

Corporate directions and experience;

Location of offices or agents relevant to this proposal; and

Number and type of employees.

b) **Narrative Description of the Institution's Experience and Capacity** in the following areas:

Evaluation of WASH interventions;

Formative evaluation of interventions related WASH, ideally implemented through government institutions;

Previous assignments in developing countries in general, and related to WASH programmes, preferably in East Asia and the Pacific; and

Previous and current assignments using UNEG Norms and Standards for evaluation.

c) **Relevant References** of the proposer (past and on-going assignments) in the past five years. UNICEF may contact references persons for feedback on services provided by the proposers.

d) **Samples or Links to Samples of Previous Relevant Work** listed as reference of the proposer (at least three), on which the proposed key personnel directly and actively contributed or authored.

e) **Methodology**: It should minimize repeating what is stated in the ToR. There is no minimum or maximum length. If in doubt, ensure sufficient detail.

f) **Work Plan**, which will include as a minimum requirement the following:

General work plan based on the one proposed in the ToR, with comments and proposed adjustments, if any; and

Detailed timetable by activity (it must be consistent with the general work plan and the financial proposal).

g) **Evaluation Consulting Team:**

Summary presentation of proposed experts;

Description of support staff (number and profile of research and administrative assistants etc.);

Level of effort and time commitment of proposed experts by activity (it must be consistent with the financial proposal); and

CV of each expert proposed to carry out the evaluation.

The technical proposal will be submitted in electronic format.

The presence of a conflict of interest of any kind (e.g., having worked for one of the CLTS implementing partners in Timor-Leste on the design or implementation of CLTS) will disqualify prospective candidates from consideration.

The financial proposal should include but not be limited to the following:

a) **Resource Costs:** Daily rate multiplied by number of days of the experts involved in the evaluation.

b) **Conference or Workshop Costs (if any):** Indicate nature and breakdown if possible.

c) **Travel Costs:** All travel costs should be included as a lump sum fixed cost. For all travel costs, UNICEF will pay as per the lump sum fixed costs provided in the proposal. A breakdown of the lump sum travel costs should be provided in the financial proposal.

d) **Any Other Costs (if any):** Indicate nature and breakdown.

e) **Recent Financial Audit Report:** Report should have been carried out in the past two years and be certified by a reputable audit organization.

Applicants are required to estimate travel costs in the financial proposal. Please note that: i) travel costs shall be calculated based on economy class fare regardless of the length of travel; and ii) costs for accommodation, meals and incidentals.

The financial proposal must be fully separated from the technical proposal, i.e. in a separate file. Costs will be formulated in US$ and free of all taxes.

The proposals will be evaluated against the two elements: technical and financial. The ratio between the technical and financial criteria depends on the relative importance of one component to the other. For evaluation and selection method, the Cumulative Analysis Method (weight combined score method) shall be used for this recruitment:

a) Technical evaluation proposal: max. 70 points (passing score 60%, ie 42 points)

Institutional technical capacity (20 points)
Methodology / approach (30 points)
Proposed team (20 points)

b) Financial proposal: max. 30 points

Only those technical qualified candidates who have attained a minimum of 42 point (ie 60%) in the technical evaluation will be considered. The maximum number of points for the financial proposal shall be allotted to the lowest financial proposal that is evaluated. Other financial proposals will receive points in inverse proportion to the lowest price.

9- Administrative Issues

- The bidder is requested to provide an all-inclusive cost in the financial proposal while factoring in all cost implications for the required service / assignment in the context of Timor-Leste;
- The bidder to decide the timing and methodology of recruitment complying with the deliverables and allocated time to each deliverable
- Travel to and from Timor-Leste should be included in the consultants' fee;
- The consultants will be accommodated office space and basic furniture within UNICEF compound with the access to printers and wi fi;
- The consultants need to arrange their teams' own mobile telecommunication including voice calls and internet data;
- UNICEF will facilitate the logistics and coordination of validation workshops and meetings including traveling to the venues;
- The consultants' team will be entitled to standard DSA and transportation for travel to Municipalities within Timor-Leste, in agreement with the supervisor. UNICEF will provide the necessary guidance and overall coordination for the field visits but the consultants will be

required to arrange their accommodation and manage all field level communication and coordination as required.

10- Estimated Cost of Contract

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11- Chargeable Budget Code for the Activity

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12- Payment Schedule

Unless the bidders propose an alternative payment schedule, payments will be as follows:

1. Approved inception report: 30% of the contractual amount;
2. Preliminary evaluation findings presented at workshop: 40% of the contractual amount;
3. Approved final evaluation report: 30% of the contractual amount.

13- Contract Supervisor

Chief Planning, Monitoring and Evaluation & Social Policy, UNICEF Timor-Leste

(With the technical support from the Chief- Child Survival and Development and the WASH Specialist of UNICEF, Timor-Leste)

Type of supervision that will be provided:
The consultancy firm evaluation team will operate under the guidance and supervision of the **evaluation management team**, composed of the UNICEF Timor-Leste Chief PME & Social Policy, Chief Child Survival and Development, WASH Specialist, and a Ministry of Health representative (yet to be designated). The evaluation management team will be responsible for the contractual aspects, day-to-day oversight and management of the evaluation as well as evaluation budget. The evaluation management team will facilitate the communications with the reference group members (see below) and to other relevant stakeholders. The evaluation management team will be also responsible for the quality of the evaluation, checking whether the findings and conclusions from the evaluation are relevant and recommendations are implementable and proposing improvements to the recommendations. The UNICEF Timor-Leste Chief PME & Social Policy will approve all deliverables and payments. In addition, the evaluation management team will contribute to dissemination of the evaluation findings and to follow-up on the evaluation recommendations with a management response.

A **reference group** will be established with the following people and led by the evaluation management team.

- Two representatives from development partners
- Country Office senior management
- Regional WASH Advisor, UNICEF EAPRO
- Regional Evaluation Advisor, UNICEF EAPRO
- One WASH Chiefs or Specialists from other COs in the region

The reference group will have the following roles.

- Generally, advise the evaluation management team on various aspects of the evaluation and help this team make decisions
- Contribute to the preparation and design of the evaluation
- Provide feedback and comments on the draft inception report and on the technical quality of the work of the consultants
- Assist in identifying internal and external stakeholders to be consulted during the evaluation process

- Participate in review meetings organized by the evaluation management team
- Provide comments and substantive feedback from a technical point of view to ensure the quality of the second draft and final evaluation reports
- Propose improvements/inputs to the preliminary recommendations
- Play a key role in learning and knowledge sharing from the evaluation results
- Contribute to disseminate the findings of the evaluation
- Advise on the management response to the evaluation, and follow up when appropriate

UNICEF will provide quality assurance on all evaluation tools and documents based on the UNEG's and UNICEF's norms, standards, processes and tools and as well as on other best practices related to WASH programme evaluations. Once approved, the final evaluation report will be submitted to the UNICEF's global evaluation reports oversight system (GEROS) for an independent quality rating. The report and the review will be made available on the UNICEF Internet website, in compliance with the commitment for transparency of evaluation findings

14- Any Other Information

Nature of "Penalty Clause" to be Stipulated in Contract:

a. Late Delivery:

Without limiting any other rights or obligations of the parties hereunder, if the Contractor will be unable to deliver the services with sufficient quality by the delivery date stipulated in the Contract, the Contractor shall:

i. Immediately consult with UNICEF to determine the most expeditious means for delivering the services and,
ii. Use an expedited means of delivery, at the Contractor's cost, if reasonably so requested by UNICEF.

b. Non-Performance:

In case of failure by the Contractor to perform under the terms and conditions of this Contract, UNICEF may, after giving the Contractor reasonable notice to perform and without prejudice to any other rights or remedies, exercise one or more of the following rights:

i. Procure all or part of the services from other sources, in which event UNICEF may hold the Contractor responsible for any excess cost occasioned thereby. In exercising such rights UNICEF shall mitigate its damages in good faith;
ii. Refuse to accept delivery of all or part of the services;
(iii) terminate the Contract without any liability for termination charges or any other liability of any kind of UNICEF;

(iv) for late delivery of services or for services which do not meet UNICEF's terms of reference/statement of work and are therefore rejected by UNICEF, claim liquidated damages from the Contractor and deducts 0.5% of the value of the services pursuant to a Contract per additional day of delay, up to a maximum of 10% of the value of the Contract. The payment or deduction of such liquidated damages shall not relieve the Contractor from any of its other obligations or liabilities pursuant to the Contract.

EVALUATION CRITERIA of TECHNICAL PROPOSAL FOR INSTITUTIONS

CATEGORY	MAX. POINTS
1. INSTITUTIONAL TECHNICAL CAPACITY • Professional expertise and experience in similar tasks as in the terms of reference (10) • Evidence of past work, availability of relevant reports (10)	20
2. METHODOLOGY / APPROACH • Quality of the proposed approach/methodology based on the terms of reference, including demonstrated understanding of the scope and objectives of the work (20) • Feasibility of the proposed workplan and schedule of activities (10)	30
3. PROPOSED TEAM • Team leader: relevant experience, qualifications (10) • Team members: relevant experience of similar scope and complexity, qualifications (5) • Number of team members and support staff (5)	20
Passing score for the technical proposal is 60% of 70, i.e. 42 points and above.	
TOTAL MARKS FOR TECHNICAL COMPONENT	70
4. FINANCIAL PROPOSAL - PRICE Full marks are allocated to the lowest priced proposal. The financial scores of the other proposals will be in inverse proportion to the lowest price.	30
TOTAL MARKS	100

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