

## CHAPTER 9

# Beyond ODF: a phased approach to rural sanitation development

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### Abstract

*Community-Led Total Sanitation (CLTS) has proved a powerful approach for triggering open defecation free (ODF) communities, but there is increasing evidence that the sustainability of these collective sanitation outcomes is fragile, and that the most critical households in terms of health benefits – disadvantaged groups with the highest disease burden – are often the first to revert to open defecation (OD). A phased approach to rural sanitation development encourages community progression beyond the ODF outcome to higher levels of service that incorporate other critical sanitation outcomes: institutional sanitation, improved handwashing with soap, solid and liquid waste management, and safe water management. Each phase sets gradually higher targets for collective sanitation outcomes, with carefully designed verification criteria and sustainability checks on previous outcomes. Achievement of the first ODF outcome is taken as proof of genuine demand and behaviour change, after which targeted support is provided to poor and vulnerable households that might otherwise struggle to achieve better sanitation and hygiene.*

**Keywords:** Phased approach, Rural sanitation, Sustainability, Philippines, Handwashing with soap, Policy

### Why is the phased approach relevant to rural sanitation development?

This chapter outlines a phased approach to rural sanitation development that has been developed and implemented by UNICEF in the Philippines (Robinson, 2012, 2013). The phased approach was developed in late 2013, shortly before Super-Typhoon Yolanda hit the central Philippines, and was subsequently adapted for use in the large post-typhoon recovery programme.

The phased approach has since been tested, refined, and scaled-up in both UNICEF development and UNICEF emergency programmes in five different areas of the Philippines. Within two years of introducing the approach, around 600 open defecation free (ODF) communities (known as Zero Open Defecation, ZOD barangays, in the Philippines) have been verified in these areas, and the first group of ZOD communities is currently being verified for the second grade, G2 Sustainable Sanitation barangays.

It is still early days for the phased approach, and too soon for evidence that the approach has been effective in taking communities beyond ODF to the higher and more sustainable levels of environmental sanitation that most people want to see. But the feedback has been very positive. Prior to 2013, only 50 ZOD communities had been achieved in the Philippines in the five years since Community-Led Total Sanitation (CLTS) was first introduced. The ZOD success rate has now dramatically increased and spread, in large part due to the greater ZOD and post-ZOD incentives created by the phased approach. The phased approach sets sanitation and hygiene outcomes for each phase, and encourages implementers to find the best way to achieve these outcomes given their local context, resources, and capacity. Significant learning and innovation has arisen from this outcome-based approach, and the visible results have encouraged large investments by local governments that were previously reluctant to invest in rural sanitation and hygiene. Most importantly, the approach makes sense to lots of people, as it solves many of their concerns about the sustainability and long-term equity of the CLTS approach, with an easily understood framework for progress beyond ODF. Support for the phased approach has grown rapidly in the Philippines, with entire municipalities (district equivalents) verified as 100 per cent ZOD, and now vying with each other to become the first municipalities to reach the higher outcome levels.

As such, the phased approach to rural sanitation development is presented as a promising approach supported by growing evidence from the Philippines, with several other countries already adopting similar phased approaches based on their own experience and thinking. Further time and research will be required to provide firm evidence of the long-term effectiveness of the approach, but it is presented in the hope that its aims and strategies resonate with those looking for solutions to the sustainability and long-term equity challenges of rural sanitation development.

This chapter has been split into two. The first, here, outlines the phased approach to rural sanitation development, and the second, Chapter 14, explains the sanitation finance approaches that were developed to support and accelerate the achievement of the different levels of collective sanitation outcomes set by the phased approach.

### **What is the challenge?**

Post-ODF engagement remains challenging. Despite recognition of the importance of follow-up to, and monitoring of, the sustainability of the new sanitation facilities and practices generated by successful CLTS interventions, few projects or local governments allocate the budget, resources, and capacity needed for long-term support. NGOs often struggle to support ever-growing numbers of triggered and ODF communities, and local governments are rarely ready to take on the longer-term support role. All too often, the ODF gains prove fragile, with disadvantaged households in poor communities often the first to revert to open defecation (OD).<sup>4</sup>

A related challenge is demand for higher levels of sanitation service. CLTS can be effective in creating an intensive drive to build simple toilets from local materials. While most households are proud of their new sanitation facilities, and many work hard to maintain and repair their toilets, some are not happy with CLTS toilets and aspire to higher levels of service, while others build facilities that are unlikely to stand the test of time, which limits government buy-in to the CLTS approach.

Government stakeholders in developing countries, particularly those from infrastructure and engineering backgrounds, are often dissatisfied with these low-cost CLTS toilets. Sustainability studies by WSP (Hanchett et al., 2011), UNICEF (Kunthy and Catalla, 2009), Plan International (Tyndale-Biscoe et al., 2013), WaterAid (Robinson, 2009) and others raise concerns about the durability and hygiene of low-cost toilets, and the risk that badly built or unhygienic home-made toilets may create, rather than alleviate, public health hazards (by bringing the pathogens and risk of contamination closer to the home). Engineers often suggest that more expensive concrete slabs and ceramic pans would be a better and more economical solution over the long term, despite limited evidence that these more costly alternatives provide comparably higher health or other benefits.

Greater scrutiny of CLTS sustainability has also raised concerns about the equity of sanitation outcomes over time. One of the main strengths of the CLTS approach is that everyone has to be reached to achieve an ODF community, which means that even the poorest and most vulnerable have to stop OD and start using a toilet. However, sustainability studies show that previously ODF communities in even the best performing CLTS programmes report some reversion to OD over time.

The extent of this OD reversion often varies significantly. In 2012, a UNICEF regional CLTS review in the East Asia and Pacific region (UNICEF, 2013) compiled the results from seven sustainability studies in Africa and Asia, which found that OD reversion rates varied from 10 to 57 per cent. The disadvantaged groups within CLTS communities are often the first to revert to OD (Robinson, 2015) due to a number of factors, ranging from the construction of less robust or durable facilities, larger household sizes, social marginalization or exclusion, to – sometimes – the use of facilities subsidized or constructed by others in the community, which can lead to lower commitment to sustaining the collective behaviour change or ODF outcome.

The phased approach to sanitation development discussed in this chapter attempts to tackle three areas of weakness: through provision of a structure for post-ODF engagement; through the encouragement of higher levels of sanitation and hygiene service, including management of solid and liquid wastes; and through recognition that disadvantaged households often need external support to build and use more durable and hygienic sanitation facilities.

## Why a phased approach?

The phased approach aims to protect the ODF process, but also introduces incentives to progress beyond ODF status to broader environmental sanitation outcomes. Additional sanitation finance is provided in the later stages, to accelerate progress and reward improved sanitation behaviour. However, it is conditioned on community commitment to sanitation and hygiene improvement as evidenced by verification of ODF status, and it is carefully targeted to those most in need of assistance to build and use durable and hygienic sanitation facilities.

Importantly, the ODF phase is achieved without the use of direct financial assistance,<sup>5</sup> which means that effective demand creation and behaviour change are required, while making sure that local sanitation markets are not skewed or undermined by supply-driven project activities or large hardware subsidies.

In the second stage, the good sanitation behaviour associated with ODF status is rewarded by additional finance and support to assist the community to develop more durable and hygienic facilities, improve school and institutional sanitation facilities,<sup>6</sup> and encourage routine handwashing with soap.

Poor and vulnerable households, who may be able to build simple toilets using local materials during the ODF phase (sometimes with assistance from other members of the community, particularly if they lack sufficient labour to dig pits and construct toilets), often lack the resources or market access required to upgrade their facilities and develop more durable and attractive toilets.

The provision of carefully targeted assistance to these households during the second phase, while encouraging household choice and ownership, increases the chances of the entire community upgrading to the more durable, hygienic, and user-friendly sanitation facilities that are likely to encourage sustainable use and maintenance (see Box 9.1).

The final phase aims to move the community from sustainable sanitation, which focuses on safe excreta disposal and handwashing with soap, to a broader 'total sanitation' status that includes solid and liquid waste management, safe management of animal excreta, and the protection and testing of water supplies.

The phased approach is designed to break sanitation and hygiene development down into smaller and more manageable chunks, with simple messages and goals that are relatively easy to measure and achieve. The multiple phases provide visible and relatively easy achievements, which encourage communities, local governments, and implementing agencies to continue their efforts, and allow regular sustainability checks. Previously targeted outcomes, such as ODF, are checked at each subsequent stage as part of the enhanced verification process. The approach provides a robust and flexible framework for sustainability monitoring, with gradually higher and broader criteria introduced at each stage as local capacity and understanding

**Box 9.1 Action Contre le Faim (ACF), Philippines**

In 2013, ACF implemented a CLTS project in the southern Philippines with support from UNICEF. The project was implemented in a post-conflict area in Mindanao, mostly in poor, remote, and marginalized communities.

ACF utilized a two-stage process, focusing on the successful achievement of ODF status by the community in the first stage, followed by the provision of subsidized latrine components (latrine pans, p-traps and pipework) in a second stage to encourage households to build more permanent and durable facilities. Following verification of ODF status, ACF facilitated the selection and purchase of components for toilet upgrading, providing free transport and subsidizing some of the standard materials, but requiring the households to choose what sort of toilet they wanted (based on information on different options, costs, advantages, and disadvantages) and pay for higher costs associated with more expensive options.

This household choice resulted in a range of different latrine models. A rapid review by UNICEF in mid-2013 encountered non-upgraded 'gallon' designs,<sup>8</sup> plastic pour-flush pans, ceramic pour-flush pans, and ceramic pedestal pour-flush pans. Significantly, almost every household had made some effort to upgrade and improve their toilet during the second phase, with the result that the upgraded facilities were more hygienic and user-friendly, and more valued by the users. UNICEF<sup>9</sup> estimated that for every US\$1 invested by ACF, households invested US\$0.50–2.50 (depending on the context and preferred toilet model).

Evidence of the adoption of several different latrine models (reflecting individual preferences) suggests good participation in the process, and ownership of the facilities, thus increasing the chances of sustainable and beneficial outcomes. This ACF model underpinned the development of a phased implementation strategy for rural sanitation in the Philippines, variants of which are now being used by UNICEF in both its development and emergency programmes.

*Source:* Robinson (2013)

of the approach improves. Wherever possible, monitoring and financing are provided by local governments and communities, with the aim of developing systems and activities that are within their long-term capacity and resources.

The phased approach rewards improved sanitation and hygiene behaviour. Communities that graduate to higher levels receive greater support and finance, providing incentives to work towards higher levels of service, and encouraging other communities to follow suit. In contrast, conventional approaches tend to reward harmful sanitation behaviour. Subsidies are usually provided only to households that do not have toilets, or do not practise improved sanitation behaviour, with little effort to distinguish those who can afford toilets but choose not to build them, and nothing provided to poor households or communities that have already invested in improved sanitation and hygiene.

The phased approach makes becoming ODF a more attractive proposition. Thus, it should increase the speed and success rate of both ODF and sanitation marketing processes, while also encouraging communities to go beyond ODF and achieve higher and more sustainable levels of service. These higher levels of service are also more attractive to government, which greatly increases both local support of the approach, and the likelihood of attracting local government finance for the scaling up and sustainability of the interventions.

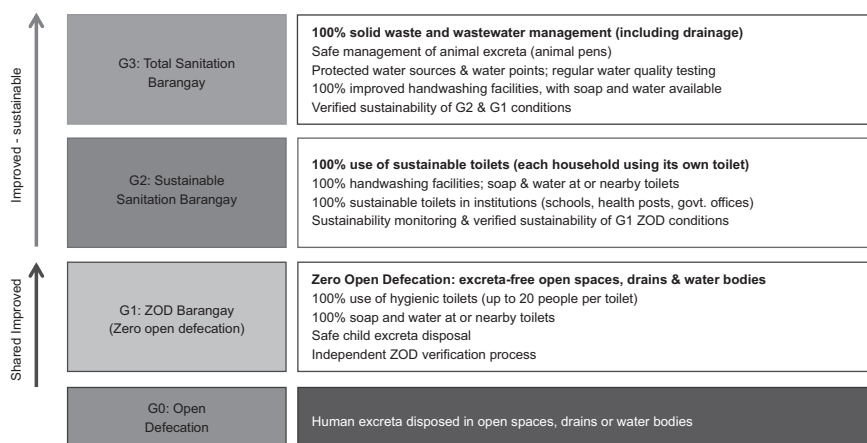
## The phased approach in action

A phased approach to rural sanitation development has been used in the Philippines since late 2013 through several UNICEF supported sanitation programmes in both development and post-emergency contexts, and it is planned in Timor-Leste, through the Australian Government-supported BESIK rural water supply and sanitation programme.

In the Philippines, the phased approach has been entitled the Philippines Approach to Total Sanitation (PhATS). It encourages barangay<sup>10</sup>-wide sanitation improvement with incremental rewards and incentives on attainment of each of the three grades (G1, G2, and G3) (see Figure 9.1).

The criteria for the G1 ODF grade (known as Zero Open Defecation in the Philippines) are simple: toilets must meet the minimum requirements for a hygienic toilet; the use of shared toilets is allowed; all households must have soap and water available at or nearby the toilet; and infant and child excreta must be disposed safely. These conditions are verified by a district (municipality) ZOD verification team, which always includes a third party verifier, and certified by a provincial ZOD verification team, following a well-agreed national protocol.

The G2 Sustainable Sanitation grade requires private toilets, with a higher level of service that includes the potential for safe emptying or replacement of pits and septic tanks. Handwashing facilities with soap and water are required at each household and 'sustainable toilets' must be verified in all institutions (schools, health posts, and government offices). The verification of school toilets includes specific criteria for child-friendly, functional, and clean boys' and girls' toilets, including menstrual hygiene management. The second phase also requires that the community has instituted some form of sustainability



**Figure 9.1** Philippines Approach to Total Sanitation (PhATS)

Source: Adapted from Robinson (2014)

monitoring, including monitoring of what happens to toilet pits and tanks when they fill, and re-verification of the conditions for the G1 ZOD phase.

The third and final grade, known as G3 Total Sanitation, requires that solid and liquid wastes are safely managed, including animal excreta; that water sources and water points are protected; and that regular water quality testing is undertaken. Handwashing facilities now have to be 'improved', which means that they limit re-contamination from dirty hands, and the G1 and G2 conditions have to be re-verified.

### **Incentives for graduation**

The PhATS approach is supported by a sanitation finance framework (see Robinson and Gnilo, 2016, Chapter 14 of this book). Communities that are verified as G1 ZOD Barangays qualify for additional sanitation finance – usually provided by local government – and technical support to help ODF households and communities upgrade from simple sanitation facilities to more durable and sustainable ones, and reinforce the improved behaviours developed during the first phase. Communities that are verified as G2 Sustainable Sanitation Barangays receive additional finance for improvement of the public services required to achieve G3 Total Sanitation Barangay status.

The graduation incentives are designed to encourage sanitation improvement and the achievement of collective sanitation outcomes. In the Philippines, a number of new financing approaches are being tested in the post-ODF phase, including toilet vouchers for the poorest (to be redeemed with local suppliers or sanitation marketing producers) and toilet rebates for the poor, which reimburse part of the toilet upgrading costs to poor households if the toilet is verified to meet the 'sustainable toilet' criteria by the agreed verification date. Conditional grants are then provided to communities that are verified as G2 Sustainable Sanitation barangays, which requires that everyone in the community meets the higher G2 criteria.

Importantly, the phased incentive framework protects the ODF process. No finance is provided to the community until after ODF verification, in order to be more confident that behaviour change has taken place, and that the households and community will use the sanitation finance more effectively. The toilet vouchers and toilet rebates are designed to provide choice to the beneficiary households, and encourage them to make sanitation investments that might otherwise have been delayed until after other household spending priorities. Wherever possible, these household payments (vouchers and rebates) are financed by local government, in order to minimize the level of subsidy (through the constrained local budget), with central government and external agencies providing technical assistance, and conditional grants for the higher levels of service (once the G2 outcome has been verified).



## Evidence base

The phased approach has been implemented in the Philippines since early 2014, with more than 600 communities now verified as G1 ZOD Barangays, five entirely ZOD municipalities verified, and a number of communities being verified for G2 Sustainable Sanitation Barangay status at the time of writing. Only 50 ZOD Barangays were achieved across the Philippines in the previous six years, so in its two years the phased approach has already resulted in a rapid acceleration of ODF progress.

The initial findings are promising. Both the implementing agencies (partner NGOs) and local governments appear to understand and like the phased approach, with evidence that local governments in the development programme are allocating significantly higher amounts<sup>11</sup> to their sanitation budgets since adopting this approach.

A Municipal Acceleration Program for Sanitation (MAPS), which is based on a similar phased development and financing approach to that adopted in the Philippines, is planned in Timor-Leste. The phased approach was built into the 2012 Timor-Leste National Basic Sanitation Policy, and forms the basis for the draft National Strategic Plan for Rural Sanitation, but it has not yet been tested at scale. There is already significant support for the approach from key CLTS and sanitation marketing stakeholders, in recognition of the help it will provide to accelerate and scale up sanitation progress in Timor-Leste.

A two-stage total sanitation approach has also been adopted in Nepal (see Regmi, 2016, this book). The first ODF stage is followed by a second 'totally sanitized' Village Development Committee (VDC) stage, in which every household has to have a toilet, and a broad range of other collective sanitation and hygiene criteria are verified.

## Challenges

One of the key challenges is the risk that the introduction of targeted subsidies during the post-ODF phases will lead to more supply-driven and target-oriented implementation, with the tendency to want to use the subsidies earlier to accelerate ODF achievement. The experiences in the Philippines suggest that this can be resisted once evidence of ODF achievement without subsidies is available, and that there are substantial benefits to using the ODF phase to ensure genuine behaviour change before introducing toilet subsidies.

Joint WSP-IFC (IFC, 2013) work suggested that many households in developing countries prefer to build toilets in one effort (rather than multiple efforts, or through a process of upgrading), with the aim of having a 'toilet that will last forever'. Multiple phases of support and upgrading are also likely to require more time, effort, and resources, as some simple sanitation facilities have to be largely rebuilt at a later stage resulting in a potential waste of scarce materials and resources. For these reasons, some projects have combined CLTS efforts with microfinance support or up-front hardware subsidies from the start, with the aim of building more durable and sustainable toilets in one intervention.



While possible, the higher and more difficult objectives of this 'one-hit' approach make it likely that success rates will be lower, with higher entry barriers for poor households, which tend to reduce the demonstration and incentive effects. In addition, there is a greater risk of effectiveness and sustainability problems, as households that take toilet subsidies or loans may not be fully committed to sanitation improvements, with the risk that significant sanitation finance is wasted.

## Conclusion

The phased approach centres on the importance of achieving collective sanitation outcomes (because of the higher health and other benefits from collective sanitation improvements), and of breaking down the huge challenge of improving sanitation in poor rural communities into a series of well-defined and easily monitored steps. Households and communities can move to the higher levels of service in one step where they prefer more rapid development, but several different levels of verification will still take place. The verification requirements of the phased approach encourage better long-term monitoring of both progress and outcomes, and ensure that monitoring does not stop when ODF status is achieved.

This approach draws on evidence that complex development interventions are more difficult to implement, and that behaviour change communication tends to be more successful when limited to a handful of clear messages. It also encourages good behaviour, by providing more support to communities that exhibit positive sanitation behaviour change, and by recognizing and rewarding progress at regular intervals (rather than setting the bar too high for many households or communities).

The incentive system built into the phased approach has the potential to drive higher ODF success rates, as we are already seeing in the Philippines. Non-ODF communities begin to understand that ODF achievement is rewarded with support to achieve higher levels of sanitation and hygiene improvement (which are often more attractive to both communities and local governments than the relatively simple CLTS outcomes).

Further work is required to produce evidence that the phased approach can work at scale. However, the feedback to date is promising. Local governments in Masbate in the Philippines allocated three times as much budget to rural sanitation in 2015 as in previous years, having seen that the phased approach generated much better and more sustainable outcomes than previous sanitation investments.

Similarly, sanitation stakeholders in the typhoon-affected areas of the Central Visayas region have seen more than 300 ODF communities verified in 2015, despite the catastrophic damage caused to local communities and institutions by the super typhoon. This rapid and highly visible progress has created significant enthusiasm and interest by government, in a region that previously lacked any significant government investment in rural sanitation.

Further progress in 2016 should greatly enhance the prospects that the phased approach can be scaled up into a nationwide government programme for sanitation and hygiene improvement.

There is also growing sector convergence around the idea. Nepal recently introduced a two-stage sanitation improvement process, with ODF VDCs supported to become 'Total Sanitation' VDCs. The national sanitation policies in Pakistan and Timor-Leste advocate a phased approach to sanitation development, starting with an ODF outcome and progressing to higher collective sanitation outcomes; and a number of sector agencies (UNICEF, WSP, and international NGOs) are working on post-ODF strategies and approaches.

CLTS has transformed rural sanitation improvement by demonstrating that poor rural communities can build simple toilets, change their social norms, and achieve impressive collective sanitation and hygiene outcomes. However, in 2015, some 15 years after CLTS was first implemented in Bangladesh, we are now aware that real sustainability problems exist, that the risk of reversion to OD is highest among the poorest and most vulnerable households, and that other sanitation and hygiene issues (beyond ODF) are also important to health and well-being.

The phased approach to sanitation development aims to strengthen the gains from CLTS interventions, and encourage progressive achievements beyond ODF. It provides a practical framework for developing and monitoring the sustainability of community sanitation and hygiene improvements and most importantly makes sure that the poorest and most vulnerable households, those whose children are at the highest risk of stunting and diseases related to inadequate sanitation, do not get left behind. While the early results of the phased approach are promising, further work is required to build on this early promise and develop evidence of what has worked and what has not. One of the strengths of the approach is that it sets collective outcomes with well-defined verification processes, rather than defining in detail how to get to these outcomes. The intention is to encourage innovation and flexibility and an evidence-based process to share the lessons learned in the process.

### About the authors

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## Endnotes

1. Personal experience of the author from reviews and evaluations of CLTS and other rural sanitation programmes in Angola, Bangladesh, Burkina Faso, Cambodia, Ethiopia, Ghana, Kenya, India, Indonesia, Mozambique, Nepal, Niger, Nigeria, Pakistan, Philippines, Sri Lanka, Tanzania, Timor-Leste, Uganda, Yemen, and Zambia.
2. Although some subsidy has been used to support rebuilding and rapid ODF achievement in the post-emergency context in the super typhoon-affected areas of central Philippines.
3. Improved sanitation facilities in schools, health posts, markets, government buildings, and other public spaces.
4. Made from 'one-gallon' plastic containers, which were sliced to create a simple pan with an outlet that could be connected to a bamboo pipe. Many households built this sort of low-cost design during the CLTS phase, and some upgraded them with help from ACF.
5. Personal communication from Michael Gnilo, UNICEF WASH specialist.
6. Village (with each Barangay comprising 4–8 sub-villages).
7. One of the municipalities in Masbate province tripled its sanitation budget after the first year, and increased it by another 600 per cent in the second year.

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