CHAPTER 14

Promoting choice: smart finance for rural sanitation development

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Abstract

Effective sanitation finance is a key factor in the success of a phased approach to rural sanitation development: creating incentives for rural communities and households to invest in sanitation and hygiene improvement, and encouraging more rapid and sustainable progress to higher levels of service. Smart sanitation finance should be carefully designed and targeted to reach the least able, those who are most at risk of reverting to open defecation (OD) over time, and to encourage upgrading and improvement of sanitation services across the entire community. Critically, this finance should provide choice to the households targeted – choice of options and suppliers, and choices around installation – to improve the likelihood of sustained sanitation behaviour change. This chapter proposes a range of sanitation solutions, including targeted toilet vouchers and toilet rebates that can be used to reward certified open defecation free (ODF) communities for their improved sanitation behaviour, and assist poor and vulnerable households to upgrade and improve their sanitation facilities. Conditional grants are also recommended to encourage the achievement of higher level collective sanitation outcomes, including 100 per cent use of improved sanitation facilities, improved institutional sanitation services, handwashing with soap, and effective sustainability monitoring.

Keywords: Sanitation finance, Phased approach, Sustainability, Subsidy, Incentives, Targeting

Why is smart finance relevant to rural sanitation development?

This chapter outlines a framework for rural sanitation finance, which derives from a phased approach to rural sanitation development that has been implemented by UNICEF in the Philippines since late 2013, and from earlier work for the World Bank Water and Sanitation Program and the Asian Development Bank on sanitation finance in Cambodia (Robinson, 2012; UNICEF, 2013). Chapter 9 in this book outlines the phased approach, known as PhATS (Philippines Approach to Total Sanitation), while this chapter provides complementary details on the sanitation finance that supported and incentivized the phased approach.

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This chapter pulls together some best practice on the financing of household and community sanitation and hygiene outcomes, and presents it alongside the adaptations introduced in the PhATS programme. The financing approach was developed explicitly to improve the effectiveness, equity, and sustainability of the sanitation and hygiene outcomes targeted by the phased approach. A key issue is that the poorest often suffer the highest sustainability losses in post-ODF (open defecation free) communities, thus the sanitation finance framework was designed to encourage upgrading and improvement to more durable and resilient toilets, and other higher sanitation and hygiene outcomes, without undermining demand creation and sanitation marketing activities that rely on household commitment and investment.

Why do we need public finance for rural sanitation?

The case for the public finance of sanitation rests on the consequence of individual sanitation behaviour on the health and well-being of other people. The polluter rarely pays for bad sanitation practice, which means that the practice is more widespread than it would be if the individual had to account for the external costs of his or her behaviour. Furthermore, those who suffer from these external costs do so involuntarily, leading to non-optimal social and economic outcomes (Robinson, 2012).

Sanitation improvement is a significant development challenge due to the difficulty of generating private demand for sanitation facilities. Awareness of the private and external costs of inadequate sanitation is generally low in developing countries. Despite widespread diarrhoeal disease and high child mortality rates, health costs are rarely ascribed to unhygienic sanitation practices, toilets are often perceived to be unaffordable, and demand for improved sanitation remains low (Robinson, 2005, 2012).

Everyone without an improved sanitation facility is ‘sanitation poor’ and, therefore, will benefit from public support to improve sanitation. Furthermore, each new improved sanitation facility that is used will reduce the number of pathogens in the environment, thus providing societal as well as private benefits (Robinson, 2012). In a context of low demand for sanitation, this understanding suggests that there is little need for targeting (among those not using improved sanitation facilities) as any new toilet will be beneficial.

The best welfare-enhancing approaches target the poorest first, due to the higher benefit per dollar gained by assisting the poorest. In contrast, sanitation programmes often target the ‘low-hanging fruit’, those without improved sanitation facilities that are more willing to invest, more responsive to promotional programmes, and easier to reach (Robinson, 2012). The intention of this self-selected targeting approach is that, in addition to the benefits from the additional sanitation facilities, the supply of sanitation goods and services to these responsive households will build a larger sanitation market, developing the economies of scale and common good practice that will be needed to change sanitation behaviour and spending priorities among the poorest households (Robinson, 2012).

In practice, these benefits rarely trickle down to the poor, with many sanitation subsidies captured by the non-poor households who respond first to interventions, or who are better connected to local leaders tasked with allocating project resources. A 2009 ADB-WSP review of a toilet subsidy programme in Cambodia (Robinson, 2012) found that, despite explicit targeting of poor communities and households, 90 per cent of the toilet subsidies were received by non-poor households building relatively expensive toilets.

The benefits of public investment in improved sanitation will be limited by an approach that fails to reach the poor, due to the lower disease and mortality burden found among non-poor households. The exact relationship between health outcomes and sanitation status remains uncertain, but children from poor households have significantly higher mortality, morbidity, and malnutrition rates than those from non-poor households.[1] Children from poor households, particularly those who are malnourished, are likely to contribute more pathogens to the environment through unsafe excreta disposal than children from non-poor households (Robinson, 2012).

As a result, sanitation strategies and investments that fail to enable improved sanitation to poor households are likely to have sub-optimal outcomes, with fewer health and economic benefits, than those that succeed in reaching the poor (Robinson, 2012). Ensuring that sanitation programmes reach the poorest and most vulnerable, where the disease burden is highly concentrated, is therefore critical to the benefits generated by these programmes.

CLTS and sanitation finance

The spread and success of Community-Led Total Sanitation (CLTS) has challenged conventional thinking on sanitation finance, demonstrating that hardware subsidies are not required for the construction of low-cost household toilets, and that community-wide improvements in sanitation behaviour can be achieved without external financial assistance.

Nevertheless, close examination of successful ODF achievement sometimes reveals that the poorest and most vulnerable have been assisted in the construction of their toilets, through the donation of materials by other households in the community, or by the village government, and sometimes through the provision of assistance to vulnerable households that lack the labour or technical capacity to build their own toilets.[2] These 'internal subsidies' are considered acceptable because they are designed, targeted, and monitored by the community, which usually means that they are low-cost (within the means of the community) and well targeted (restricted to only those whom the community discern to be genuinely in need of assistance). Other times, ODF status is verified even though some disadvantaged households still do not have or use toilets, due to ineffective verification processes and inattention to the sanitation practices of these marginal groups (Tyndale-Biscoe et al., 2013; Robinson, 2015).

Over the last decade, evidence has emerged of sustainability problems in previously ODF communities. CLTS sustainability studies (Kunthy and Catalla, 2009; Hanchett et al., 2011; Tyndale-Biscoe et al., 2013; UNICEF, 2013) have found that a proportion of the community reverts to OD over time, although with considerable variation from project to project. The quality of the CLTS process, including triggering, follow-up, and the long-term support provided, and the local enabling environment for sanitation improvement, have been suggested as major factors influencing the proportion of the community that reverts to OD (UNICEF, 2013).

The poorest and most vulnerable households are often the first to revert to OD, perhaps because their limited resources and capacity tend to result in less well-built, less durable, and less well-located toilets.[3] These toilets are more likely to collapse, face problems, and discourage use, than those built by better-off households living in less marginal conditions (see Coombes, 2016, this book; Munkhondia et al., 2016, this book). Vulnerable and time-poor households can also be marginalized by CLTS processes that require attendance at multiple triggering activities, or that are led by more prosperous or political community members. Disadvantaged households are sometimes less convinced about the ODF movement, and can be pressured into toilet construction that lacks the conviction or investment made by others. The drive to achieve ODF status can leave these poor households with sanitation facilities that they do not like or want, and are not willing to use or maintain.

The CLTS process does not provide any ready-made solution to these sustainability problems, other than to re-trigger renewed collective pressure against OD, or to encourage and support reconstruction of collapsed toilets. Households and communities who face periodic floods and tropical storms that destroy toilets, or rapid degradation of simple toilets due to termite problems, collapsible soils, or other durability issues, sometimes struggle to maintain their enthusiasm and commitment to ODF status (see Munkhondia et al., 2016, this book; Hanchett et al., 2011). Where the households that revert to OD include the poorest and most vulnerable, those with the highest disease burden, it is likely that the benefits of CLTS are greatly diminished.

Therefore, there is a need to re-examine the use of sanitation finance and how more effective use could encourage sustainability, with an emphasis on how best to provide targeted finance to sustain improved sanitation practices among the poorest and most vulnerable, without undermining the CLTS process or other sanitation improvement processes such as sanitation marketing that are reliant on household investment and self-sufficiency.

Sanitation subsidies for equity and inclusion

The social protection sector has significant experience with effective benefit transfers (through unemployment, pension, disability, food stamps, and a wide variety of other social welfare schemes). One of the central principles of social protection theory is that the poorest should be targeted first for optimal benefits. Hence, that some form of targeting is required. Another is that cash transfers provide the optimal form of transfer, as they allow household choice (recognizing that different households have different needs, priorities, and preferences at different times). In the past, cash transfers were difficult and expensive to distribute or monitor and thus, in-kind subsidies were often preferred. Today, cash transfers are increasingly simple and efficient (using mobile banking, electronic bank transfers, and so on).

Sanitation transfers are often provided as in-kind subsidies, such as concrete slabs or toilet pans, to ensure that the finance is used for sanitation improvement. Where in-kind subsidies are preferred, the social protection theory notes that the goods provided should be those preferred and commonly utilized by the poor, otherwise there is a significant risk of capture by non-poor households.

This principle is important for the sanitation sub-sector, where many previous projects have subsidized relatively expensive toilets in the understanding that poor households often prefer facilities similar to those used by non-poor households, even though cheaper hygienic toilet options could have been provided. As a result, these subsidies become attractive to non-poor households, who often use their greater influence to capture the toilet subsidies. In contrast, the subsidy of cheaper toilet options is more likely to be self-targeting (as fewer non-poor households will find them attractive), and also means that more people can be reached for the same investment, reducing the targeting problem caused by rationing.

The lesson from the social protection sector is that greater attention is required to the size of subsidy provided, and the nature of the subsidy, in order to improve the targeting and effective use of the public finance. The problem is not with the toilet subsidy – as other sectors use targeted subsidies effectively to reach the poor, and households tend to under-value sanitation investments – but the way in which sanitation subsidies have been designed, targeted, and delivered.

Key financing issues

Weaknesses of in-kind hardware subsidies

Few attempts to subsidize the provision of sanitation hardware to the poor have been successful. The design of any sanitation subsidy scheme needs to recognize and address the problems with subsidies for sanitation hardware that have already been identified, including the following:

- Hardware subsidies often encourage supply-driven approaches, which limit the sense of 'ownership' and lower the chances of sustainability.
- Cost sharing approaches may require higher household contributions than poor households can (or are willing to) afford.

- Over-designed project toilets encourage high hardware subsidies, rationing of subsidized facilities, and capture of these attractive facilities by non-poor households.
- Hardware subsidies are often targeted to those without toilets, which penalizes poor households who have invested in private toilets (and rewards households that favour other spending priorities over sanitation), which is a perverse incentive in the long term.
- Ineffective targeting (90 per cent inclusion error[4] found in some projects) (Robinson, 2012).
- Inefficient project supply and distribution of in-kind hardware subsidies (75 per cent reduction in toilet costs achieved by private sector production and distribution in Cambodia) (Robinson, 2012).
- Lower response to CLTS and sanitation marketing interventions in communities nearby previous or current toilet subsidy programmes.
- Potential distortion of markets due to external decisions on priority products and services.
- Crowding out of household investments in sanitation (possibility of receiving hardware subsidies in future lowers household willingness to pay for toilets).

While none of these problems is insurmountable, or sufficient to recommend the discontinuation of sanitation hardware subsidies, it is critical that any sanitation finance framework is designed to minimize these problems.

ODF rewards

There has been significant debate within the rural sanitation sub-sector over how best to reward ODF achievement by a community (or other collective sanitation achievements). Several countries, notably India with its Nirmal Gram Puraskar (NGP) 'Clean Village Award', bestowed financial awards and political recognition for the achievement of collective sanitation outcomes. The results have been mixed, with some researchers (Robinson, 2005, 2011) finding significant benefits from these incentive systems (including much higher government and development partner interest in community sanitation), and others (TARU, 2008; Kar and Milward, 2011) reporting that the incentives encouraged target-driven approaches, fraudulent verification processes (to gain the awards), and short-term interventions with low sustainability.

Nonetheless, many sanitation stakeholders agree that incentives in their broadest sense, which include non-financial incentives (such as political recognition, media coverage, banners, celebrations) and indirect financial incentives (qualification for grants, projects, discounts, and other forms of support), can be useful tools for sanitation development.

Incentive systems require verification of sanitation outcomes to trigger the award of the incentive. Given frequent problems in developing sustainable monitoring systems for rural sanitation, well-designed and phased incentive systems offer a mechanism that encourages more reliable and regular monitoring of sanitation outcomes by both communities and local governments.

The future benefits of ODF rewards, and the opportunity to protect the ODF process from the potentially detrimental effects of hardware subsidies, argue for their inclusion in any sanitation finance framework. Careful attention must be paid to the risk that these awards lead to target-driven implementation and short-term gains, to the detriment of sustainability, but this risk can be mitigated by integrating the ODF rewards into a larger phased approach to sanitation development, with the aim of nudging rural communities towards gradually higher sanitation goals over time. The problem with one-time ODF rewards has been that there is rarely an effective check of the sustainability of ODF outcomes over time, whereas a more phased approach (see Robinson and Gnilo, 2016, this book) encourages regular checks of these collective outcomes.

Size of transfer

The size of any subsidy or transfer needs to be appropriate to the target audience, and at a level that can be sustained by the sanitation financing agency. The lowest acceptable level of service should be ensured, which in most cases is a simple hygienic toilet, in recognition that the provision of subsidies or transfers for a higher level of service would risk capture from non-poor households. Any subsidy or transfer should aim to help poor households to construct the minimum level of service, with the option to upgrade to higher levels of service if they are willing to contribute more to the toilet cost, or want to upgrade at a later date.

Household choice

Sanitation finance should promote household choice, because of the strong links to effective use and sustainability, and encourage the use and development of sustainable local supply chains (rather than temporary project procurement) (Robinson, 2012).

Rural households and communities vary significantly in their socio-economic status, alignment with social and cultural norms, willingness to invest in sanitation and hygiene improvement, and personal preferences. Despite this diversity of demand and context, most projects promote only a few standard toilet designs, notably when construction materials are provided as an up-front toilet subsidy.

There are five main elements of choice related to toilet construction:

- Toilet design;
- Toilet location;

- Toilet suppliers (who supply materials, transport, installation services);
- Amount invested in the toilet;
- Toilet installation timing.

The best way to provide household choice in toilet construction or upgrading is to encourage the user households to make the decisions and build the toilet themselves. However, in many cases, particularly among households who have never previously owned or used toilets, sanitation demand is low, awareness of technical options is limited, and the information and services available through the market may not be suitable for low-cost or affordable solutions.

Therefore, sanitation programmes must include effective demand creation for household toilets; provide information and advice on a range of affordable toilet designs and options; recognize that toilet owners and users will have a range of preferences and requirements; and strengthen local sanitation supply chains to ensure that toilet goods and services are readily available (see also Coombes, 2016, this book; Munkhondia et al., 2016, this book).

Toilet subsidy mechanisms

A number of new financing options are being piloted and used in development programmes, but few of these options have been adopted by the sanitation sub-sector. One of the most popular options is the use of Conditional Cash Transfers (CCTs), where cash transfers are conditioned on the consumption of a particular good, usually pre-specified investments in the human capital of children. For instance, regular payments to poor mothers conditional on the use of health or education services by her child or children (Robinson, 2012).

CCTs recognize that the timing, nature, and recipient of the transfer are important to its effectiveness. The payment of CCTs to mothers (rather than fathers) has been found to increase the chances that the payments are invested in the children (Fiszbein and Schady, 2009), and better monitoring has highlighted the importance of tackling the underlying causes of disease and poverty rather than the symptoms of these problems. For instance, that supplementary feeding does not solve under-nutrition when the children suffer from persistent diarrhoea, enteropathy, and helminth infections (Bassett, 2008; Manley et al., 2012).

Few existing sanitation finance mechanisms recognize that, because the main benefits of sanitation improvement lie in reducing stunting and diarrhoeal disease (and other sanitation-related health issues) in young children in poor households, sanitation interventions need to target the carers of children, and ensure that young children in poor households use and benefit from any sanitation improvements.

Two of the elements within the Cambodia CCT plan (see Box 14.1) provide relatively straightforward mechanisms for sanitation improvement, which

Box 14.1 Grow-up-with-a-toilet plan, Cambodia

A 2010 ADB-WSP working paper on sanitation finance (Robinson, 2012) in Cambodia proposed a 'Grow-Up-With-A-Toilet-Plan' based on a CCT design that would ensure that every poor child born in Cambodia would grow up using a hygienic toilet through the provision of finance for toilet construction and improvement to poor households during the first five years after their first child was born.

The five-year plan targeted poor mothers on the birth of their first child, in the understanding that poor children under five years old are the highest risk group for diarrhoea, malnutrition, worms, and other sanitation-related illnesses;[5] that a number of life habits are engrained by the age of five (after which they become more difficult to change); and that the majority of stunting associated with inadequate sanitation takes place during the first two years of the child's life.

The idea is that once poor mothers have been supported to build a simple sanitation facility for their first child (and themselves), further payments are made to encourage the sustained use and improvement of this facility over time. When additional children are born, the family should already be in the habit of using a hygienic toilet and washing their hands with soap, so that all future children in the family adopt the same improved sanitation and hygiene practices as a matter of course.

Plan: 5-year cycle for each family with a newborn

Year 0:	US$15 toilet voucher (redeemable by local toilet producers).
Plus:	US$5 rebate on construction of a second toilet pit.
Years 1–5:	US$0–10 annual payment on verification of:
	a) Hygienic toilet usage;
	b) Village ODF status;
	c) Completion of hygiene course;
	d) Presence of handwashing facility and soap.

The CCT approach encourages a process of sanitation development over several years, through providing incentives for the upgrading and improvement of facilities, and the adoption of improved behaviours over time. The CCT approach also promotes more efficient demand-side financing through vouchers, rebates, and cash transfers, which in turn encourage the development of sustainable local supply chains for sanitation goods and services.

The Grow-Up-With-A-Toilet plan garnered attention from key sector stakeholders (with a notable reference in a 2011 WSP working paper;Trémolet, 2011) and it was presented to the Advisory Committee of the Global Sanitation Fund in 2009 but has yet to be implemented due to the challenges associated with setting up this new and relatively complex form of sanitation finance.

have already been tried and tested by large-scale sanitation programmes (see below for examples):

- Toilet vouchers: fixed value paper that entitles the holder to goods and services of the stated value from a choice of approved suppliers.
- Toilet rebates: fixed value cash payment made on verification that a qualifying household is using a hygienic toilet (according to agreed criteria).

The concept that sanitation finance should support a medium-term programme designed to inculcate improved sanitation habits in young children and their families during the first five years of the children's lives, rather than just finance household infrastructure such as toilets, is an important one. It can be further developed and explored through a phased approach to sanitation development that allows several different financing and incentive mechanisms to operate within the same programme.

Finance options

Toilet vouchers

Toilet vouchers are printed (or electronic) entitlements that can be exchanged for sanitation goods or services, or for discounts against these goods and services, with approved suppliers. Vouchers allow careful targeting of sanitation finance, with household choice (of options, supplier, and timing), and direct the targeted subsidies through local supply chains, thus helping to strengthen and sustain local production and supply. Vouchers are sometimes sold or fraudulently obtained, but provide ready opportunities for monitoring, and give useful information on local preferences.

The value of the toilet voucher should be set at the minimum cost of the lowest level of service deemed acceptable within the service area, with some proportion of the cost to be financed by the household as a demonstration of commitment (although this amount can also be refunded through a toilet rebate, see below). Any higher level of service or additional goods and services should be financed by the household. The intention is to encourage the household to build its preferred facility, while only providing public finance for the minimum required to meet public health standards.

There should be local competition among the approved suppliers, with beneficiaries encouraged to reward the more reputable, reliable and cost-efficient suppliers. A range of suppliers, from project-initiated to private providers, should be encouraged, providing that all suppliers receive the same level of subsidy and support.

BRAC, the largest development NGO in the world, provided toilet vouchers through its water, sanitation, and hygiene (WASH) programme in Bangladesh to enable 6.6 million people to benefit from hygienic toilets (Castalia Strategic Advisors, 2015). BRAC provided vouchers to poor households (and loans to non-poor households) whose value covered part of the cost of toilet materials from a local supplier. The supplier then used the voucher, and other supporting documentation, to prove that the materials had been distributed to eligible households, and BRAC reimbursed the voucher value to the supplier.

Toilet rebates

Toilet rebates provide a partial refund of the household investment in a hygienic toilet subject to verification on a fixed date (see example in Box 14.2). The aim is to encourage household freedom of choice in the design and implementation of the toilet, within a window of opportunity before the agreed date of the rebate verification process. The rebate verification process

Box 14.2 Toilet rebates in action in Vietnam

The East Meets West Foundation (EMWF) has implemented a community WASH project in Vietnam since 2007, which included sanitation and hygiene promotion, a sanitation credit programme (bank loans facilitated by the Vietnam Women's Union), but no support for toilet hardware. Instead, the project offered the incentive of a toilet rebate to any household from a project community that both met the poverty criteria and was verified to be using a hygienic toilet (at a fixed time 6–9 months after the intervention).

The intention of the rebate was to recognize that the government's new sanitation policy made it difficult for poor households to construct a toilet that met the minimum technical requirements. The toilet rebate was set at US$24, which many onlookers felt was too low to have much effect on demand for sanitation in a context where many households spent US$60–100 to construct a household toilet (Jenkins et al., 2011).

More than 50,000 poor households have now been paid the rebate within the project area, illustrating both that poor households can often find the money to build hygienic toilets, and that a small incentive can be significant in persuading these households to invest in sanitation. Further research is required to determine the significance of the rebate in influencing these households to build their toilets, but it seems likely that ongoing and project promotion has increased awareness of the importance of improved sanitation, and households require only a small nudge to persuade them to invest now rather than later.

One of the weaknesses of the toilet rebate is that it doesn't encourage ODF status or 100 per cent toilet coverage across the community. The EMWF is now working on an Output Based Aid (OBA) system that will combine the rebates with other finance designed to encourage collective sanitation outcomes.

Source: Jenkins et al. (2011)

checks that the household meets the rebate qualification criteria (e.g. the household is either poor, previously had no toilet, or was the owner of a toilet that was damaged or destroyed).

Toilet voucher beneficiaries should also qualify for the toilet rebate, with the toilet voucher designed to help the poorest households build an adequate sanitation facility, and the toilet rebate designed to reward the successful construction and use of a hygienic toilet. Poor and vulnerable households that were already using hygienic toilets before the intervention should also qualify for the toilet rebate, in the understanding that these households are the main target group for the sanitation finance. Hence, that sustainable use of hygienic toilets by this primary target group should be encouraged and rewarded.

Toilet rebates are generally set at around 25–33 per cent of toilet cost, in the understanding that these rebates are not refunding the entire toilet cost (and that the neediest may already have received toilet vouchers to cover the majority of the costs). The toilet rebate is designed to provide a nudge for unserved households to invest in sanitation improvement earlier than they would otherwise have done.

Relevance of sanitation microfinance

The finance gap (between what rural households are currently willing to pay and the cost of a well-built and hygienic toilet) argues for the introduction of credit systems, mechanisms to allow rural households to take loans against sanitation investments, or to pay for toilets in instalments. Significant efforts and innovations are under way in sanitation microfinance, but few large-scale programmes have yet been successful in increasing sanitation coverage among poor rural households. Key constraints include the reluctance of rural households to borrow against a non-productive investment, the high transaction costs associated with the numerous small loans required, and the reluctance of rural banks and microfinance institutions to lend to poor households with no credit history, no collateral, and no formal identification papers.

Microfinance has not yet been widely adopted or accepted in some countries, with sanitation microfinance, in particular, proving hard to scale-up. Some rural households are reluctant to take on formal debt, local banking systems are sometimes under-developed, and few previous microfinance initiatives for sanitation have been successful in reaching poor and disadvantaged households.

Sanitation microfinance, perhaps through less formal savings and credit groups, should still be considered an option (particularly for assisting better off households, who are more likely to meet MFI credit requirements, to construct their own toilets), but the thrust of the sanitation finance framework, with the emphasis on reaching the poorest, has been developed around other financial tools.

Putting it all together: sanitation finance framework

Three critical principles need to be considered in the development of a sanitation finance framework (and implementation strategy). The first is the importance of choice to the sustainability of sanitation outcomes: the beneficiary household must be provided with some choice over the type and location of the toilet, even if from a limited menu of technical options, and within the constraints created by the need for a hygienic outcome. Without this choice, the lower ownership and commitment felt by the household greatly increases the risk of reversion to OD.

The second principle recognizes that rapid demand generation processes such as CLTS can result in poor households building simple, homemade facilities that lack durability in the face of adverse weather conditions like storms and floods. Good technical support and follow-up monitoring can improve the durability and sustainability of these facilities, but it is also important that upgrading options are made available so that households that now place a greater value on their facilities can easily upgrade and improve their facilities (see also Coombes, 2016, this book; Munkhondia et al., 2016, this book).

The third principle is that any transfer provided to poor and vulnerable households does not undermine other sanitation improvement processes, in particular any CLTS-based approaches that encourage the rest of the community to build, use, and maintain their own sanitation facilities. This means that transfers need to be carefully targeted to those perceived by the community to be most in need of assistance; and that the transfers are provided in a way that complements and supports the wider process of sanitation improvement within the community.

Phase 1: ODF achievement

A sanitation finance framework should seek to encourage ODF achievement, and to recognize that many households can build adequate toilets without external assistance, while recognizing that few of the poorest and most vulnerable households, particularly those that lack labour or resources, are likely to build durable and hygienic toilets without some assistance or incentive.

In the past, the prospect of the provision of hardware subsidies has led to some households and communities waiting for assistance rather than building simple toilets that would immediately improve sanitation conditions. However, large-scale ODF achievements confirm that most rural households are capable of building simple toilets, albeit sometimes with community assistance when they lack labour or basic resources. But some of these simple toilets do not last long. The challenge for these disadvantaged households is to upgrade to more durable and hygienic toilets that will provide benefits over several years, as this may require resources and skills that are beyond the capacity of the community.

ODF achievement provides evidence of community commitment and sanitation behaviour change, thus provides a solid entry requirement for the sanitation finance framework. Financial assistance should be provided to communities verified as ODF to assist the poor to upgrade and improve their facilities and hygiene practices so that the community can achieve 'sustainable sanitation' status. The intention is to reward communities that demonstrate improved sanitation behaviour in becoming ODF, to assist them to move up to the next level of phased sanitation development, and to provide incentives that encourage other communities to work towards ODF achievement.

Phase 2: upgrading toilets

The sanitation finance framework should provide support for ODF communities to upgrade and improve their toilets. This support can take several forms:

- Supply strengthening (increased sanitation marketing efforts to ensure that affordable goods and services for toilet upgrading and improvement are available).
- Development of toilet loan schemes (piloting of simple credit schemes to encourage the purchase of new toilets and upgrade packages).
- Provision of toilet vouchers to the poorest and most vulnerable households.
- Provision of toilet rebates to poor households that build durable toilets.

Where national poverty identification systems exist, these should be used to identify the poorest and most vulnerable households for toilet voucher distribution. In their absence, it is important to use objective targeting systems with clear and verifiable criteria that can be checked, as there is a significant risk that the targeted subsidies will be diverted to non-poor households where local power relations influence the targeting. The intention is to assist the poorest and most vulnerable, those with little or no cash to purchase sanitation materials and services from local markets for the upgrading and improvement of the toilets that they have already built as part of the ODF process.

The toilet vouchers should be redeemed through approved local toilet producers and material suppliers. The toilet vouchers should allow the beneficiary households to choose from a selection of toilet packages, toilet upgrade materials, and toilet installation services, up to the voucher value, with any additional costs to be financed by the household. Households who are not eligible for the toilet vouchers are encouraged to upgrade and improve their toilets as part of the government drive to achieve sustainable sanitation status. No financial support is provided to these households, except in particularly remote or poor areas where time-limited toilet discounts should be considered to encourage non-poor households to improve their toilets.

In addition, a toilet rebate should be provided to poor households that are verified to be using a hygienic toilet within a 6–12 month period after the upgrading campaign is launched. The intention is to reward poor households that demonstrate good sanitation practice. The rebate should also be available to poor households that had built a toilet before the ODF or upgrading campaigns started, providing that this toilet meets the minimum standards required and is verified to be in use.

Phase 3: conditional grant to local government

The missing element from the proposed toilet voucher and rebate system is a mechanism that encourages community-level sanitation improvement beyond ODF status. While all of the elements (sanitation supply strengthening, credit options, toilet vouchers, toilet rebates, increased monitoring and follow-up) will encourage toilet upgrading and sanitation improvement, there is no guarantee that this will lead to 100 per cent hygienic toilet coverage, or that every poor household will respond to the voucher and rebate opportunities. Therefore, the sanitation finance framework should also include a conditional grant, which is awarded to each village government on verification and declaration of sustainable sanitation status, and which can be used to assist the community to work towards achievement of Phase 3: Total Sanitation.

Minimum criteria for sustainable sanitation status should include the following:

- Verification of continued ODF status;
- 100 per cent use of hygienic toilets (no sharing, hygienic toilets in all institutions);
- 100 per cent handwashing stations with soap and water at or nearby all toilets;
- 100 per cent safe disposal of infant and child excreta.

Special finance: grow-up-with-a-toilet plan

First-time mothers in poor households (either pregnant or with a first child that is less than one year old) should be identified during a community poverty and vulnerability mapping process at the start of the campaign. First-time mothers in poor households in other ODF communities should also be able to apply to join the grow-up-with-a-toilet plan. Subsequent verification and payment of the annual plan benefits will be the responsibility of the local governments, with finance being provided from central government.

Special finance: sanitation for the disabled

Additional finance should also be provided to assist poor households with at least one disabled member to build a hygienic toilet that can be easily used by the disabled family member, as these facilities can be more expensive and difficult to build than other toilets. Where available, a toilet voucher can be provided to poor households containing at least one disabled member. The voucher should be the same as those provided to the households ranked as the poorest and most vulnerable, hence will be redeemed through approved local toilet sellers for sanitation goods and services suitable for upgrading and improving the household toilet so that it can be easily used by the disabled family member.

Evidence: smart sanitation finance in action

Most elements of the sanitation finance framework described above are now being implemented through UNICEF programmes in the Philippines. UNICEF partners with a number of international and local NGOs in its development and emergency programmes, which are being implemented within the PhATS phased approach to sanitation development described in Chapter 9. These partners were provided with guidelines on sanitation finance, which encouraged them to utilize toilet vouchers, rebates, and some of the other innovative financing approaches described above, in combination with Direct Cash Transfers to local governments (to ensure that the local governments had some funding that could be used for sanitation and hygiene improvement).

The UNICEF partners in the Philippines were set outcome targets in their contracts, to achieve a number of ODF communities and a number of (Phase 2) Sustainable Sanitation communities, but were given the freedom to decide how best to use their finance to achieve these outcomes. The intention was to encourage innovation and flexibility, and to recognize that different approaches were likely to be required in the different contexts and capacities found across the large implementation area.

As a result, a wide range of different approaches have been used, with varying degrees of success. But we are already seeing the effective use of toilet vouchers, which have achieved a 100 per cent redemption rate when implemented by Action Contre la Faim (ACF) in the Masbate region; the development of a range of post-ODF targeted toilet subsidies for different poor groups by the International Medical Corps (IMC) in Leyte; and the use of post-ODF sanitation microfinance and toilet vouchers linked to toilets sold by sanitation marketing entrepreneurs trained by Samaritan's Purse (Robinson, 2013; UNICEF, 2015a, 2015b).

Importantly, the UNICEF partners note that WASH governance strengthening, which has included explaining to local governments how the PhATS approach and sanitation finance are intended to work, has been critical in generating buy-in and commitment to these new approaches from local officials and stakeholders.

The alignment of sanitation finance with local government WASH plans has avoided subsidy policies and mechanisms undermining each other in the same area. Local governments now understand that sanitation demand can be utilized as an indicator of potential sustainability, and that significant investment should be delayed until households and communities have demonstrated demand and commitment to sanitation behaviour change through their efforts to achieve ODF status.

Five municipalities within the UNICEF implementation area have now been verified as 100 per cent Zero Open Defecation (ZOD = ODF), and more than 600 ZOD communities have been verified, which has generated significant political capital for the municipal mayors in the successful municipalities. These high profile achievements have encouraged efforts to verify the first batch of G2 Sustainable Sanitation Barangays, as well as greatly increased the funding provided by local governments to sanitation improvement. Growing understanding of the phased approach, combined with the tangible benefits in the completely ZOD areas, are now raising hopes that the first 100 per cent Sustainable Sanitation municipality in the Philippines may not be far away!

Conclusion

The demand for smarter sanitation finance, which can provide more effective and targeted financial assistance to poor and vulnerable households without undermining demand creation or sustainability, has been growing steadily with the rise of CLTS and sanitation marketing. The key challenge is to provide public finance for sanitation that reaches the poorest and most vulnerable population; that encourages household choice and ownership of the improved facilities; and that rewards good sanitation and hygiene behaviour, thus generating incentives for other households and communities to invest in improved sanitation and hygiene behaviour.

Smart sanitation finance should recognize the varying needs and priorities of different market segments within rural communities and across programme areas, and provide a range of financial instruments to serve these different segments. Current sanitation finance initiatives often focus on a single approach, such as the provision of toilet loans, which rarely reaches a broad enough cross-section of the community to impact either the sanitation practices or disease burden of the poorest.

Wherever possible, smart sanitation finance should also be provided by local governments, with technical assistance from development partners, in order to ensure sustainable finance of these sanitation incentives, and strengthen accountability to the rural households and communities receiving the finance.

Context is often the critical element in development practice, with too many sanitation projects failing because a standardized approach was unable to adapt to the diverse needs, priorities, and practices found across a large project area. Smarter sanitation finance should encourage the achievement of easily verifiable sanitation outcomes, using a toolbox of financing mechanisms and implementation approaches that can be adapted to fit local contexts and capacities. More visible sanitation progress, achieved through the more effective and targeted use of limited sanitation finance and capacity, is the surest way to convince decision-makers to strengthen and enlarge the support provided to large-scale sanitation and hygiene improvement.

About the authors

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Endnotes

1. 2005 DHS household survey data in Cambodia reports under-five mortality rates 39 per cent higher across the bottom two wealth quintiles than in the fourth quintile. Similarly, the proportion of severely underweight children was 76 per cent higher in the bottom two wealth quintiles than in the fourth quintile. UNICEF research in Laos (2012) indicated that severely underweight children aged 0 to 4 years had 2.8 times higher likelihood of diarrhoea than children with normal weight-for-age status, with 3.6 times higher likelihood of diarrhoea found in severely underweight children aged 0 to 11 months.
2. 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.

3. 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.
4. Inclusion error: proportion of non-eligible households that received the subsidy.
5. Diarrhoeal disease and mortality in children peak between the age of six months and two years, often linked to the age of weaning.
6. East Meets West Foundation is now renamed: Thrive Networks.

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