The evolution of rural sanitation approaches in Ghana

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Over the MDG period Ghana made little progress on rural sanitation. Between 2000 and 2015 the proportion of the rural population openly defecating only fell slightly from 32% to 31%; in the context of Ghana's rapid population growth this means there was a large rise in the number of people openly defecating across the period. This paper summaries the current approaches taken in the Rural Sanitation Sub-sector in Ghana, and the evaluation of these approaches over time. The results are based on a series of interviews with key sector actors. The review highlights the modification of approaches over time in response to challenges and concludes by presenting some of the key remaining challenges facing the sector.

Approach and methodology

This paper documents the evolution of rural sanitation approaches in Ghana since the early programmes of the 1990s to the approaches currently taken. It is based on a literature review of programme documents from the last 20 years as well as a series of series of 30 interviews conducted with 14 prominent sector actors[1] conducted over the course of 2017. These interviews formed a part of a much larger operational research programme undertaken by Oxford Policy Management (OPM), MAPLE consult, and IRC in collaboration with UNICEF and the Government of Ghana.

Please note, this paper reflects the views of the research team (OPM, MAPLE, and IRC) and not the Government of Ghana. The research on which this paper is based is also ongoing.

Early approaches – 1990 to 2006

Until the 1990s, basic rural sanitation was not considered an important aspect of national development policy in Ghana. A shift in attention occurred in the early 1990s followed the creation of the Community Water and Sanitation Division of the erstwhile Ghana Water and Sewerage Corporation in 1994 (becoming Community Water and Sanitation Agency in 1998). Also in 1994 the National Community Water and Sanitation Programme (NCWSP) was launched. The NCWSP and other early programmes funded by the World Bank, United Nations Development Programme, Danida, and KfW combined a partial subsidy (either cash or in-kind, usually 40-60%) with latrine artisans training; alongside the construction of institutional facilities. The aim was for the subsidised latrines to act as demonstrations for other households to follow with the latrine artisans marketing the options. The option promoted then are those still most widely promoted today with the Kumasi Ventilation Improved Pit (VIP), sanplat, pour-flush and other variations on the Ventilation Improved Pit still the most common designs used.

During this time CWSA played a major role in programme implementation due to weak capacity within metropolitan, municipal, and district assemblies (MMDAs); and a core element of programming during this period was strengthening MMDAs through the District Water and Sanitation Teams and broader instructional support. Responsibility for environmental health was transferred from the Ministry of Health to the Ministry of Local Government and Rural Development in 1995, where the Environmental Health and Sanitation Directorate (EHSD) lead on sanitation within the ministry.

Challenges in early approaches included: poor targeting and limited uptake of subsidy – benefited wealthier households; limited 'demonstration effect' – limited wider impact of subsidies or Latrine Artisan training on improving household sanitation; and institutional fragmentation, lack of clear policy, limited

MMDA capacity, and limited government funding (as documented in: World Bank (2001 and 2005) and Danida (2006)).

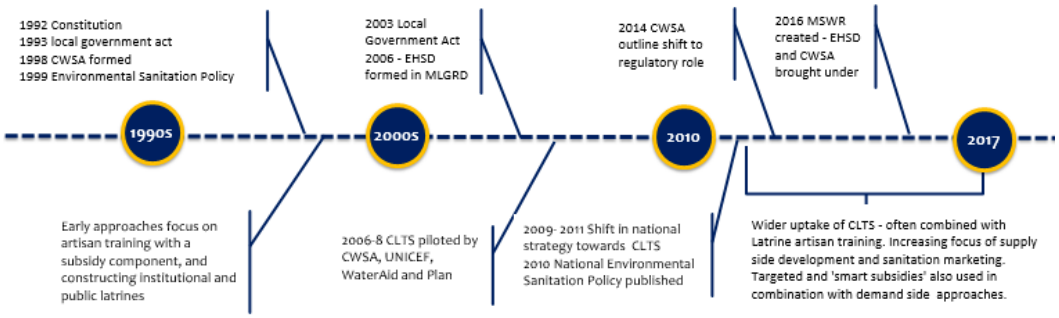

Figure 1. Timeline of key sector developments

Source: Authors own design

Shift in focus to Community Led Total Sanitation (CLTS) and demand side approaches - 2006-2011

Between 2006-08 CLTS was piloted in Ghana by several institutions: in 2005/6 CWSA piloted the approach coupled with latrine artisan training; in 2007 UNICEF piloted CLTS in the Northern Region with an 'incentive' component (provision of latrine slabs), and in 2008 WaterAid Ghana and Plan piloted CLTS combined with community credit models. Prior to the introduction of CLTS sanitation programming had already been shifting towards a greater emphasis on generating demand for sanitation through methodologies such as PHAST and tweaking the subsidy incentive to encourage community level action.

These early pilots showed some promise, and there was a shift towards CLTS in policies and strategies published 2010-11. Notably the National Environmental Sanitation Strategy and Action Plan (2010), MAF Country Action Plan ("Go Sanitation Go"); the SWA compact, and the Rural Sanitation Model and Strategy. Though the 2010 National Environmental Sanitation policy does not promote specific approaches over others, these policies and strategies all place MMDAs at the centre of service delivery. Challenges in early CLTS implementation included: lack of trained facilitators; low buy-in to the approach among implementing institutions; expectation of subsidy at the community level; quality of latrine construction, unsuitable technology options and lack of skilled latrine artisans, poor follow-up post triggering; and poor coordination with MMDAs by implementing NGOs (as notably documented in: GoG/UN (2011) and Magala and Roberts (2009)).

Scale up of CLTS as the national approach - 2011-2016

Following the shift in national policy CLTS was adopted more widely; with MMDAs and the EHSD taking a more leading role. Between 2012 and 2014 EHSD trained over 600 facilitators, including 100 master trainers and developed the Revised ODF Protocol. By 2015 CLTS was implemented in all regions but Ashanti and in roughly 50% of districts. Though as of 2015 organisations were reporting low conversion rate (between 1.5% and 11%) with key challenges related to suitable technology options and trained artisans, especially in areas with difficult soil conditions. The low conversion rate caused the EHSD to halt triggering new communities in 2014/15 and reflect on the approach. The results was to adopt an approach of revisiting triggered communities for more intensive follow-up. During this period increasing sector attention was paid to developing latrine options and credit or finance for producers and households to overcome supply side challenges. For example SNV introduced the SafiLatrine and iDE began working in Ghana with a sanitation marketing programme.

While most organisations moved away from subsidy components completely; some retained a subsidy component (either cash or in-kind). Global Communities combine CLTS promotion with an indirect subsidy for materials (facilitating access to cost price); and USAIDs GWASH programme used a 60% subsidy; though in 2012 CLTS was integrated and the subsidy reduced to 40% in response to the RSMS. This period ends with the creation of the Ministry of Sanitation and Water Resources (MSWR) in early 2017 which brought together responsibilities for rural sanitation and water under the same line ministry for the first time

– a move widely welcomed by the sector. Current sector structures are still evolving; with ongoing discussions surrounding the formation of a national sanitation authority as well as new funding mechanisms.

Current approaches used in rural sanitation

Seven prominent sector organisations were interviewed in depth about the approaches they use in rural sanitation. This review of approaches focuses on how they have evolved over time, innovations, and the challenges faced in implementation. The majority of organisations use CLTS as the main approach for creating a demand for toilets and promoting sanitation/hygiene practice, often combining this with other BCC methods such as interpersonal and mass media promotion. Since 2012 there has been a greater focus on sanitation marketing; notably under programmes established by iDE, SNV, Global Communities, and recently UNIECF. Though all organisations integrate latrine artisan training as part of their approach, several are taking this further in providing support to enterprise development; bringing specific sanitation products to market, and facilitating stronger supply chains, and indirect subsidies to lower the capital costs. Table 1 outlines the key aspects of approaches being used by different organisations in the sector.

It should be noted these are only a brief summary of the key programme elements what are often complex and comprehensive programmes.

Table 1. Key aspects of current implementation approaches in rural sanitation

Organisation	Demand side approaches	Supply side approaches
Global Communities	CLTS with MMDA field facilitators (previously NGO field facilitators)	Latrine Artisan training, product development and marketing, facilitation to access of low cost materials, use of VSLAs and indirect subsidy.
iDE	Door to door sales promotion by recruited sales agents	Market research. Training of Latrine Artisans and support to developing enterprises. Recruitment and training of sales agents. Credit through enterprises and mobile payment. Supply chain strengthening.
Plan	CLTS with. NGO field facilitators, with specific natural leader training.	Latrine Artisan training and VSLAs.
SNV	CLTS with MMDA field facilitators (previously NGO field facilitators)	Training of Latrine Artisans and marketing of SafiLatrine. Use of VSLAs and credit unions. Establishing SaniMarts.
WaterAid	CLTS with mass media promotion, focus on entertaining. Field facilitators from NGOs	Training of latrine artisans. Material subsidy to persons with disabilities.
World Bank	CLTS. MMDA field facilitators (previously consultants/NGOs)	Latrine artisan training. Planned re-introduction of subsidy.
EHSD/ UNICEF	CLTS with MMDA field facilitators. Combined with mass media promotion and advocacy through church networks.	Latrine Artisan training. Initiating sanitation marketing, business development of service providers, developing guidance on technology options

Source: Based on authors' interviews with organisation staff

Demand side approaches

With the exception of iDE CLTS is implemented by all organisations but with subtle variations; a key change in CLTS implementation for several organisations has been to change from working with local partner organisations (usually NGOs) as field facilitators to working in direct collaboration with MMDAs with the EHO/As acting as the field facilitators. The approaches of all organisations stress the importance of the role of natural leaders, which is supported by high quality evidence (Crocker, C et. al. 2016). It is widely noted that CLTS is most effective in smaller and more socially homogenous communities. While all organisations note that CLTS is effective in mobilising demand, the low - but improving - conversion rates across the sector are attributed to challenges related to latrine construction. Key constraints are associated

with the collapsing latrines (in certain locations), access to and affordability of construction materials. As such while *demand* for improved sanitation is often reported to be high following CLTS promotion, *effective demand* for facilities is perceived to be much lower.

Supply side approaches

Until recently the technology options available for rural sanitation had not evolved greatly since the 1990s; with 'basic'[3] latrines and KVIP variations the most widely promoted. Recently several producs/ standard design options have been introduced to the market, notably: the Digni-loo (introduced by Global Communities); the Sama toilet (marketed by iDE), and the Safi Latrine (promoted by SNV). Most organisations report latrine artisan training as part of their approach to rural sanitation. All organisations report challenges related to household ability to construct latrines where there are rock or sandy/loose soils and high water tables. There is also some concern over the sustainability of basic latrines in these areas.

Sanitation marketing is a broad term; here it is used to describe approaches applied to develop and market toilets that go beyond just artisan training. For example, approaches that seek to develop the capacity on the supply side including: the establishment of sanitation enterprises, development of specific products and strengthening supply chains. Both SNV and iDE have developed, or are in the process of developing, standard latrine options; marketed by latrine artisans who are further trained and then given subsequent dedicated support to develop viable enterprises. iDE and Global Communities are also further strengthening the supply chain through working directly with material (e.g. concrete) producers and connecting these with either sales agents or directly to communities.

Household's ability to make capital expenditures is consistently raised as a key constraint to latrine construction and achievement of ODF. There are three broad approaches currently being used to increase access to credit: local savings groups (VSLA), payment options provided by sanitation enterprises and subsidies to lower capital costs. Early VSLA schemes were reported to have made relatively few loans for latrines; though SNV reports greater take-up when combined with entrepreneur development, and other actors are exploring different credit models. iDE undertake its own credit worthiness checks and provides payment options with repayments over an 18 months period (they also make payments easy through mobile money), though in an early stage this is showing promise with few defaulters and some even repaying ahead of schedule. Lastly, indirect subsidies are used by some organisations to lower the capital costs of construction. The CWSA, under a World Bank funded programme, are planning to re-introduce a subsidy component the need to accelerate latrine construction as the financial barriers faced by households are seen to be a key constraint holding back progress.

Funding and financing to rural sanitation

It is worth noting that rural sanitation as a sub-sector is heavily dominated by external funding, and with Ghana's transition to Lower-Middle-Income Country status many donors are preparing to re-direct funds to low income countries and shifting the focus of the aid to Ghana to focus on 'upstream work' (policy, evidence generation, advocacy, accountability, etc.). In Ghana's 2016 budget over 90% of the Environmental Sanitation budget line is recorded as donor funds (MoFEP 2016). The total expenditure by all development partners on rural sanitation is estimated to be nearly 12 times that of government expenditure (DP expenditure is estimated at GHS 903 million and GoG expenditure 76 million GHS in 2014) (WHO 2016). Though both DP and government expenditure are dwarfed by household expenditure on sanitation (estimated at over 3,000 million GHS). NGOs provide a further 38.5 million GHS - roughly equivalent to 50% of government expenditure) (ibid.). In short, households are the major source of finance in the sector, and the government finance provided for rural sanitation is dwarfed by the external funds provided. With external finance to the sector likely to fall substantially in the coming years.

Summary key remaining challenges for rural sanitation programming

The introduction of CLTS brought with it a major shift in national strategy on sanitation approaches away from the direct provision of facilities to focusing on changing the attitude of the community as a whole to instigate behaviour change and community level outcomes, and CLTS promotion now forms a major component of most organisations approaches. Though the low conversion rates attributed to supply side constraints have initiated a greater focus on developing supply side approaches to overcome issues related to suitable designs and accessible and affordable products. While there are emerging success stories across the sector though there are very limited data available on the relative cost effectiveness of different approaches use across the sector.

Progress on rural sanitation in Ghana was slow over the MDG period, and Ghana continues to have some of the highest rural open defecation rates regionally and globally. This paper has highlighted some of the prominent features of implementation approaches used and how these have evolved. Table 2 outlines the five thematic areas identified as central to successful rural sanitation implementation in Ghana and maps these to programme strategies currently employed as well as remaining barriers. These represent the conclusions of the review of approaches undertaken and is important context to the next stage of developing implementation models that can accelerate access. Particularly models that can be applied at scale and by government.

Table 2. Key aspects of effective programming and remaining challenges and barriers

Theme	Strategies used	Remaining barriers
Supporting effective CLTS implementation and demand generation	• Focus on strengthening MMDA staff involvement in CLTS process • Emphasis of empowering and networking natural leaders • Intensive post-triggering and post-ODF follow-up • Engaging religious and traditional leadership	• Large number of previously triggered communities • Community resistance to constructing 'basic' latrines and few options in difficult soil conditions • Few enforcement mechanisms available to MMDA staff • Challenges in applying model in socially fragmented communities • Limited government funds and resources available
Increasing household access to finance	• Utilisation of VSLAs and credit networks • Provision of credit through sanitation enterprises • More flexible payment option • Use of mobile money for easy payments	• High cost of borrowing • Mismatch between willingness to pay and high construction costs
Lowering construction costs	• Bulk buying higher up the supply chain • Subsidy • Refining toilet design and standardising design options • Support to developing enterprises to deliver product	• Scalability of subsidy or models or directly facilitating access to materials • Enterprise development models at early stages of development • Some of these approaches may not work for market segments (e.g. more rural communities)
Developing and promoting suitable technology options	• Strengthening MMDA staff's technical options • Latrine Artisan training • Development and marketing of specific latrine options	• Sustainability concerns for basic latrines with collapsing latrines commonly reported • Limited low-cost options for areas with high water tables or challenging soils
Supporting effective monitoring	• Direct financial support from DPs to government for timely verification and certification of ODF communities	• Limited government funding available for monitoring

Source: Based on authors' interviews with organisation staff and literature cited in this paper

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Notes

[1] EHSD and CWSA – MSWR, DCD, GES-SHEP, Ministry of Finance, The World Bank, UNICEF, Canadian High Commission, WaterAid, Global Communities, SNV, iDE, Plan, and World Vision

[2] Basic latrines are taken to be those constructed using local materials and are most often a simple pit latrine design

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