From CLTS to sustainable sanitation services: contributions, gaps, ideas for improvement

Background paper

West African workshop

“Towards Sustainable Total Sanitation”

12 -14 November 2013 – Cotonou, Benin

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November 2013
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**Abbreviations**

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CLTS</td>
<td>Community-led total sanitation</td>
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<tr>
<td>IRC</td>
<td>IRC International Water and Sanitation Center</td>
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<tr>
<td>JMP</td>
<td>Joint Monitoring programme</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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</table>

**Acknowledgements**

The authors would like to thank Alana Potter, Félix Adégnika and Marielle Snel for their valuable contributions and inputs to the paper. They are also grateful to Anjani Arbella for her inputs on editing and proof reading.
Introduction

There is growing awareness that the sanitation target of the WASH Millennium Development Goals (MDGs) is unlikely to be met by 2015 in most West-African countries (Hickling, 2014). At the current rate of progress, the world will miss its 2015 target—to halve the proportion of people without access to sanitation—by 1 billion people (WHO/UNICEF 2010). Data also shows disparity between urban and rural sanitation coverage tipped in favour of urban areas up to the double (WHO/UNICEF 2012).

A lot is already being done to tackle the issue. In areas where networked sanitation is not feasible, the most common approach is hardware-based, focused on installing subsidised latrines. Since 2006, Community-Led Total Sanitation (CLTS) approaches have been tested to facilitate sanitation improvements in 17 countries throughout West and Central Africa (Kar & Milward, 2011), and already in 2008, CLTS was integrated in at least 11 national policies (IWA, 2013). Despite the institutionalisation of CLTS, coverage rates have not increased dramatically, and where they have had—no one knows for how long they will be sustained.

To achieve sustainable sanitation for all, there is a need to view sanitation beyond one-off (programmatic/ project-level) interventions. Sanitation being a public good, therefore, national and local governments are key in ensuring that sanitation services last for all. An effective sanitation service is not limited to facility provision, but also promotes safe and hygienic use and regular maintenance, and estimates its environmental impact over time. Private and public sectors, in addition to individual households, have a role to play in the delivery of such a service. Interests of different stakeholders are discussed, negotiated and aligned through formal and informal partnerships, and facilitated by an enabling policy and regulatory environment set up by government.

This paper aims at strengthening the foundations on:

(1) The successes and limitations of sanitation implementation interventions/ programmes;
(2) The conditions needed to set up a sanitation service in rural areas; and
(3) How interventions/ programmes, with a focus on CLTS, can better contribute to sanitation services.

It will provide the background threads to the “towards sustainable total sanitation” workshop to be held in Cotonou, Benin, in November 2013. It will be enriched based on the outcomes of the workshop.
What works in current sanitation and hygiene programmes – and what does not?

Approaches and interventions

For the last decades, sanitation interventions have been mainly hardware- and subsidy-driven. Facing the limits of such an approach, international stakeholders and governments looked at more effective and cost-effective ways to increase coverage. First implemented in Asia, CLTS increasingly became a viable alternative, gaining most popularity in West African countries (Kar & Milward, 2011).

Since 2008, at least 11 West African countries have made CLTS central to their national rural sanitation policies—Mali, Mauritania, Sierra Leone, Togo, Nigeria, Niger, Liberia, Guinea Conakry, Ghana, Gambia and Cameroon (IWA, 2013). In countries such as Guinea Bissau, CLTS has been implemented since 2010; although is not part of its national strategy. In Burkina Faso, the national framework encompasses all approaches, including CLTS. However, inconsistencies remain in the practice, as subsidies are still encouraged despite limited funding available. For a number of years, CLTS in Benin has been implemented by NGOs or governmental partnering institutions on an ad-hoc basis. Lack in coordination and lack of consideration of the local sociocultural context, have brought mitigated results so far. However, since 2013, CLTS is a key component of the government’s national strategy as it is expected to boost universal access to basic sanitation and hygiene.

Community led-total sanitation approaches

CLTS approaches prompt the behavioural change needed to facilitate a shift in mentality towards sanitary habits, which in consequence, may lead to improvements in sanitation led by households. CLTS mobilises communities to take action, and enlarges the focus on toilet construction for individual households to the creation of “open defecation-free” areas. The other fundamental component of CLTS—as designed initially—underscores a “no subsidy” arrangement. Behavioural change happens when conditions and/ or images provoke an emotional response and mental understanding of problems/ risks. By raising awareness that everyone is at risk when one person defecates out in the open, CLTS triggers the community’s desire for change. Images and stories on the pitfalls of unsanitary practices propel communities to take action.

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1 From the Institute of Development studies’s website country facts/Guinea Bissau on CLTS available at: http://www.communityledtotalsanitation.org Webpage visited November 5, 2013
Traditional sanitation and hybrid approaches

The following table gives an overview of how a CLTS approach differs from traditional sanitation projects: the latter, focuses on facility construction and the provision of (partial or full) subsidies. It also includes hygiene awareness components, usually provided by local health agents.

**Table 1: Overview of the CLTS approach**

<table>
<thead>
<tr>
<th>Major shifts from the traditional sanitation approach to CLTS</th>
<th>Traditional sanitation</th>
<th>CLTS approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphasis/focus</td>
<td>Toilet construction</td>
<td>People’s empowerment</td>
</tr>
<tr>
<td>Mode of learning</td>
<td>Verbal</td>
<td>Visual</td>
</tr>
<tr>
<td>Role of community</td>
<td>Passive recipients of ideas, technologies and subsidies</td>
<td>Active drivers and innovators</td>
</tr>
<tr>
<td>Areas of major shift</td>
<td>Traditional Sanitation</td>
<td>CLTS approach</td>
</tr>
<tr>
<td>Role of outsiders</td>
<td>Teaches, advises, prescribes and supplies hardware</td>
<td>Facilitates a process of change and empowerment</td>
</tr>
<tr>
<td>Major outcome</td>
<td>Increased number of latrines</td>
<td>ODF communities, absence of faeces in the open</td>
</tr>
<tr>
<td>Toilet designs are undertaken by</td>
<td>Outside engineers</td>
<td>Insiders and community engineers</td>
</tr>
<tr>
<td>Indicators of measurement of change</td>
<td>Number of latrines built</td>
<td>Number of ODF communities</td>
</tr>
<tr>
<td>Major inputs</td>
<td>Sanitary hardware, subsidies in cash or materials</td>
<td>Software/ training and capacity building</td>
</tr>
</tbody>
</table>

Source: Adapted from Ker, 2008 and WSSCC, 2009.

In West Africa, more and more implementers find relevance in applying a modified version of the CLTS approach to better address the issue of location-specific poverty. For example, some programmes include both a subsidy component to the poorer community members and the behavioural interventions/empowerment activities from the CLTS approach (i.e., SaniFaso programme in Burkina Faso\(^3\)). The result is a number of *mixed approaches*, which try to capture the best of both. Unfortunately, little has been done to fully document findings on how mixed approaches work best, their successes, and the challenges such approaches face in achieving long-term sustainability\(^4\).

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\(^3\) SaniFaso is a 4 years implementation programme led by NGO Eau Vive. More details on [http://www.eau-vive.org/](http://www.eau-vive.org/)

\(^4\) At least, little has been found by the authors.
What do these approaches achieve?
Many variables (such as finances, human resources and planning etc.) influence results, outcomes and the desired impact of a sanitation intervention, regardless of the approach used.

On one hand, CLTS requires a great deal of coordination and human resources to organise ongoing hygiene promotion activities. Its emphasis is on creating local response mechanisms and know-how for the construction and maintenance of facilities, hence limiting the financial pressure on community members. In a context where local governments have very limited budgets, CLTS and CLTS-like approaches are highly significant in achieving ODF.

On the other hand, subsidising latrines, characteristic of traditional approaches, deliver “up to standard” latrines\(^5\). The presence of such latrines has significant impacts on advancing healthy living conditions and protecting the environment. The availability of subsidies is also an equity/pro-poor measure that provides appropriate services to those who cannot afford.

Where are the gaps?
All approaches share one crucial limitation: they are programme-bound. The approach stops being implemented when the programme is completed, generally over a 3-5 year period.

While indeed contributing to increased coverage or triggering behavioural change (as in the case of CLTS), they fall short in tackling the following: (1) use over time, (2) maintenance and maintenance costs, (3) environmental impact, and/ or d) the delivery of higher levels of service.

Moreover, questions related to supply chains, service delivery arrangements (public, provider and user/households), partnerships (roles and responsibilities, planning, etc.), and financial mechanisms are not addressed.

Asking these questions is a first step in recognising sanitation as an on-going service.
It is not just about coverage... IT IS ABOUT DELIVERING A SERVICE.

According to Potter et al (2011) components of sanitation services are fragmented across a chain of service delivery activities or functions, each with their own associated costs and institutions or actors. Therefore, a full sanitation service implies both that these functions are fulfilled, and that the linkages in the chain are well articulated.

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\(^5\) At the minimum, this would take the form of latrines with concrete slabs.
A substantial shift away from an MDG-driven focus on latrines or facilities for the containment of excreta, to a service delivery approach that takes the entire delivery chain into account is illustrated below:

Various approaches have succeeded in facilitating people’s access to some sort of sanitation facility or what IRC’s sanitation service delivery ladder (2011) refers to as “climbing on to the ladder”⁶. However neither the sustained delivery of sanitation services (“staying on the ladder”) or the “moving up the ladder” is guaranteed when accessing improved sanitation facilities. Unfortunately in areas where both approaches were applied, in isolation or in hybridity, slippage⁷ occurred (UN-Water/WHO, 2012). In the absence of a policy and regulatory environment that enables maintenance, pit emptying, replacement or upgrading of facilities, or one supportive of sustaining behavioural change over time—households are likely to go back to their former habits. And as basic infrastructure is provided at larger scale, coverage risks stagnate between 60-80%, if necessary financial, institutional and logistical arrangements are not set in place (Lockwood & Smits, 2011).

If behavioural change is key:
Why have CLTS interventions failed to sustain this change over time?

If being supplied with a latrine is essential to increase coverage:
Why is coverage stagnating? Why are facilities abandoned?

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⁶ The authors wish to remind the reader the concept of a service ladder is not own by IRC.
⁷ Slippage refers to the failure to sustain new facilities and behavioural change achieved by (sanitation) interventions.
From project-based approaches to the delivery of sanitation services

Sanitation is a public good and crucial for public/ environmental health and socio-economic development. National and local governments are responsible for ensuring that sanitation services last for all.

Inspired by similar IRC-led conceptual efforts on water supply\(^8\), inspired by similar efforts (ie Wateraid, 2011) and enriched by contributions from partners, IRC developed its own understanding of the contours of a continuous sanitation service. To Verhagen and Carrasco (2013), a significant part of the challenge in sustaining and building on behavioural changes to sanitation lays in the strength of the enabling environment.

The following are features of an environment with no (or lacking the) capacity to carry out or further advance improvements:

1. Households are left with the responsibility to maintain, empty, replace, upgrade their facilities, with zero support from government and others stakeholders.
2. Local authorities lack the resources and know-how to support in regular maintenance.
3. Implementing agencies, government offices, NGOs and the private sector, are unevenly scattered, do not coordinate with one another, and compete over the same resources.

Sanitation as a service

To signify this gradual change process, the metaphor of the ladder is used. It is not new, and several sanitation ladders have been developed; although most are limited to a technical focus. Potter, et al. (2011) developed—as part of IRC’s WASHCost programme—a sanitation service ladder to specify the levels of a sanitation service from containment to end-disposal or processing and use. The four key parameters are:

1. **Access** to sanitary latrines.
2. **Use** to ensure continuous and hygienic use by all, throughout the year, for people in and around the household.
3. **Reliability** to ensure that latrines are maintained, replaced, and emptied when full.
4. **Environmental protection** to facilitate the safe disposal and/ or productive use of faecal sludge, ensuring that there are no negative environmental impacts.

On the basis of the parameters above, a sanitation service level is determined: no service, limited service, basic service and improved service. When open defecation occurs in an area, a sanitation service is considered to be non-existent (i.e., no service). A basic service is achieved when sanitation

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\(^8\) These concepts are now being tested in three countries; Ghana, Uganda and Burkina Faso. Visit [www.waterservicesthatlast.org](http://www.waterservicesthatlast.org) for more information

conditions meet national norms and standards, on a continuous basis (i.e., a facility is designed for and used by a maximum of \( n \) persons). In most countries, however, reliability and environmental protection regulation are often weak or not properly enforced. A limited service is rendered when some sort of facility is installed, usually homemade, but fails to meet national norms. Ultimately, the aim is to achieved improved sanitation services, and stay on that level.

**TABLE 2: SANITATION SERVICE LEVELS**

<table>
<thead>
<tr>
<th>Service level</th>
<th>Accessibility</th>
<th>Use</th>
<th>Reliability (operation and maintenance)</th>
<th>Environmental protection (pollution and density)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved service</td>
<td>Each family dwelling has one or more latrines in the compound</td>
<td>Facilities used by all members of household</td>
<td>Regular or routine O&amp;M (incl. pit emptying) requiring minimal user effort</td>
<td>Non problematic environmental impact disposal and re-use of safe by-products (use of liquid or composted human waste)</td>
</tr>
<tr>
<td>Basic service</td>
<td>Latrine with impermeable slab (household or shared) at national norm distance from household</td>
<td>Facilities used by some members of household</td>
<td>Unreliable O&amp;M (incl. pit emptying) and requiring high user effort</td>
<td>Non problematic environmental impact and safe disposal</td>
</tr>
<tr>
<td>Limited service</td>
<td>Platform without (impermeable) slab separated faeces from users</td>
<td>No or insufficient use</td>
<td>No O&amp;M (pit emptying) taking place and any extremely dirty latrine</td>
<td>Significant environmental pollution, increasing with increased population density</td>
</tr>
<tr>
<td>No service</td>
<td>No separation between user and faeces, e.g. open defecation</td>
<td>No O&amp;M (pit emptying)</td>
<td>Non problematic environmental impact</td>
<td></td>
</tr>
</tbody>
</table>

Source: Potter et al, 2011, p.19

According to Verhagen and Carrasco (2013, p. 4), four factors ‘help to ensure the continuous use of a sanitation service by all members of a community’:

1. The creation of demand to use the facility and continuous advocacy to change sanitation-related behaviours of community members;
2. The strengthening of an enabling environment to support the delivery of sanitation services to all;
3. The strengthening of the supply chain; and
4. Well-aligned financial arrangements and well-directed incentives that support efficient service delivery and promote the use of latrines by all.

The above factors are beyond the scope of what households can feasibly address. These factors are not only important to “jump on to the ladder”, even at a sub-standard level, but are also key to “moving up the ladder” over time.
In the context of West Africa, sanitation coverage is very low, even when only access to—an improved latrine is taken into account. In many places the focus needs to be on providing access to a hygienic latrine and the promotion of safe hygienic behaviour before anything else. This is where programmatic interventions can create high impact.

Once established, operation and maintenance, and the promotion of safe disposal or productive uses of faecal sludge can then be addressed. In this stage, the transition from providing facilities to providing a service occurs, with mechanisms to upgrade service levels.

A sanitation service delivery approach therefore does not replace programmatic interventions (either CLTS or subsidy-based). It aims to keep the overall focus of sustaining sanitation service delivery, and incorporates projects and programmes in the wider context of planning, regulation and provision.

**Roles and responsibilities**

Service provision goes beyond the household level. As a result of the decentralisation processes held in West African countries since the year 2000, there has been a shift in the arrangement of governance—from the national to the local authorities. Local authorities now play a central role in service provision.

The table below summarises the involvement, roles and responsibilities typically carried out by various stakeholders in relation to the four factors that ensure the continued delivery of a sanitation service.

**Table 3: Roles and responsibilities in sanitation services**

<table>
<thead>
<tr>
<th>Factor 1: Demand creation</th>
<th>Local authority</th>
<th>National authority</th>
<th>Private sector</th>
<th>Household</th>
<th>NGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 2: Enabling environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3: Supply chain development</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Factor 4: Financial arrangements and well-directed incentives</td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

**The road ahead in implementing a sanitation service**

The road ahead is different in each country. Indeed, sanitation services are country-specific since they are guided by national policies and legal frameworks, which set out detailed descriptions of standards, rights and responsibilities, and cut across different institutional levels.

At national level, national policy and framework implementation greatly relies on foreign aid, which is bound to fail when funding is insufficient. Sustainable financing mechanisms are needed to ensure steady flows between national and local levels. Often, financing mechanisms are derived from taxes or
tariffs, but also via transfer mechanisms (i.e., royalties) especially between water and sanitation initiatives, or between rural and urban settings.\(^9\)

In addition to weak financing mechanisms, regional and (especially) local authorities struggle to perform their designated roles and responsibilities. Local authorities lack human and financial capacities to appropriately and adequately plan, perform follow-ups and quality control, report and coordinate; often, they are left with very little time to oversee programme implementation. Service delivery is a complex task and cannot only be done at local level alone. For example, national government and external support is needed to build the capacities of local managers and technicians through curriculum development and capacity building provided by NGOs, regional authorities, etc (PSeau 2010).

In the absence of a strong local authority, implementation is taken over by NGOs. NGOs in turn, while having capacities, do have time and resources constraints, as well as their own agendas and approaches for implementation. As Eau Vive (2010) points out in its report on lessons learnt in Burkina Faso, Senegal and Niger, there are too many implementers, too many approaches, an absence of focus on maintenance and an uneven geographic focus that contribute to failure in implementing national sanitation policies.

Next to NGOs, households play a major role in rural sanitation. Actual responsibility (including financing) for sanitation falls under households, usually following a first “push” by implementing agencies (Dubé & Bassono, 2012). Households participate in the construction of their own sanitation and hygiene facilities, via their own means, as promoted in CLTS, or via partial or total subsidies for hardware. But households do not have access to mechanisms that maintain, rehabilitate and scale up facilities and sustain behavioural change over time. Not only do local authorities find it difficult to perform all their responsibilities, so do implementers fail to devise post-construction mechanisms (or “post-triggering” as in the case of CLTS). Although households understand the health benefits of using a sanitary facility, without pressure from others and the means to sustain their end of the “sanitation service bargain”, slippage is not surprising.

The general picture is grim, but not discouraging.

Transforming rural sanitation into a performing service may appear overwhelming, but it is not impossible.

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\(^9\) For more on financing mechanisms, refer to PSeau publication on Financing Sanitation in Sub-Saharan Africa and the discussion paper on Financing water and sanitation for the poor: six key solutions by WUSP and IRC.
Ideas for improvement – how to get there?

The answers to that question is complex and require a genuine willingness from sanitation stakeholders—especially authorities—to consider sanitation a priority. To trigger this shift, a number of short- and long-term improvements can be made. An non-exhaustive list, covering both local and national scales, is presented below for debate and dialogue in two exchange workshops scheduled for the years 2013-2014.

At local level:

- Reinforce the capacity of the responsible authority to lead and play its coordination role in:
  - Providing a legal framework as a basis to work from—that is understandable and realistic in its planning, monitoring and reporting tools;
  - Supporting sound financing and transfer mechanisms—that enables authorities to appropriately manage their expenditure;
  - Identifying where capacities need to be reinforced, but also supporting in the transfer of skills;
  - Ensuring quality control of both the hardware (facility set-up, etc.) and software (awareness campaigns, etc.);
  - Supporting households in maintaining and upgrading their sanitation facilities, in kind and/ or in money.

- Reflect on and set-up mechanisms for the integration and follow-up of social/ behavioural aspects, as part of a long-term strategy, either via local authorities or through the involvement of (environmental) health officers/ local health officers.

- Reinforce links with the local private sector for scaling up (instrumental in achieving sanitary conditions that meet national norms and standards) and maintaining (desludging, repairing, and replacing) sanitation and handwashing facilities.

- Since households are key in sanitation, local authorities and/ or private sector could manage accessible financing mechanisms themselves (subsidies or loans) to support regular maintenance of facilities and behaviours. In the context of developing countries in Africa, providing sustainable sanitation services could be linked with interventions that support improvement/ enlargement of household incomes.
At national level:

- Get central government actors and institutions on board and sort out cross-sectorial issues to enable synergies and transfers at local and other decentralised levels. This includes linking up with the health and environmental sectors at national level.

- Develop by-laws and regulations, and put systems and structures in place to enforce them (e.g., model contracts for public/private providers).

- Pursue development of monitoring and planning tools, with a focus on institutionalising them within local authorities.

- Stabilise financial flows through a combination of taxes, tariffs and transfers (either international or national/local) to support developing governments in moving away from extreme dependency on external aid (international transfers). Said differently, get aid effectiveness in place.

- Including sustainability clauses to ensure post-implementation measures.

- Ensure that technical training institutes have the capacity to address the needs of the public sector, both in terms of specific knowledge (adult training or training at distance) and in overall curriculum development (i.e., sanitation or wash technicians).

Taken as a whole, the setup of institutional regulatory and enabling mechanisms that support local and national levels to deliver sustainable sanitation services is key. The task is enormous and the combination of short- and long-term actions makes it difficult to identify one entry point, beyond prescriptive perspectives.

The “Toward sustainable total sanitation” workshop is not only a place to share experiences on sustainability of implementation and on innovative intervention supporting a service, but also a time to work together to identify concrete actions to start the shift towards a full fledge service. By doing so, implementers will come close to supporting greater sustainability in rural settings.
Bibliography

All references have been accessed on November 6, 2013. The authors decline responsibility for any changes occurring after that date.


PSeau, (2010), How to create a regional dynamic to improve local water supply and sanitation services in small towns in Africa, Guide no 2,Concerted Municipal Strategies (CMS), a program coordinated by the Municipal Development Partnership (MDP) and programme Solidarité Eau (pS-Eau), available at:http://www.pseau.org/outils/ouvrages/pdm_ps_eau_cms_guide_n_2_how_to_create_a_regional_dynamic_to_improve_local_water_supply_and_sanitation_services_in_small_towns_in_africa_2010.pdf


