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# ENSURING AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

# Rolling out Zimbabwean approach to demand-led sanitation in most vulnerable communities

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Rural WASH Project (2012-2016) is being implemented in 33 of 60 rural districts in five provinces of Zimbabwe aiming at improving WASH services. One of the major components under this project is the implementation of demand led sanitation and hygiene promotion which focuses on elimination of open defaecation through promotion of household sanitation technologies confirming to national standards. The approach is a hybrid of traditional CLTS, and PHHE and Zimbabwe technology specific sanitation approach. The results from the implementation for the last 23 months suggest a major breakthrough including construction of 57,542 household latrine and 525 ODF communities. It also demonstrated a strong potential of achieving sanitation SDG before 2030 if replicated nationwide with maintaining the current level of efforts. This paper describes the evolution of sanitation approaches in Zimbabwe and share unique experiences from the implementation of the demand led sanitation.

## National context & background

For many years, Zimbabwe had a two-pillar strategy to improve sanitation services: the use of standardized technologies, essentially full waterborne systems in urban areas and the ventilated improved pit (VIPs) latrines in rural areas; and subsidies to cover the capital costs of these services. Despite a vigorous rural sanitation program based on this two-pronged sanitation strategy, rural sanitation coverage does not show an encouraging trajectory since the 1990s. Given the drying up of capital subsidies, the supply-driven approach failed to increase sustainable access, as rural households failed to replace filled or collapsed latrines and few new facilities have been built. Many rural families have reverted to unimproved facilities, and sanitation coverage in the resettlement areas is next to zero. JMP estimates a decline in access to improved sanitation from 35% in 1990 to 32% in 2012 and an increase in use of other unimproved facilities in rural areas. MICS (2014) estimates access to improved sanitation in rural areas at 30% with 43.5% open defaecation which also confirms the declining trend for rural sanitation.

The collapse of services affected all parts of the country and all aspects of WASH. This has had a significant impact on the quality & reliability of services with manifestation of the 2008-2009 cholera outbreaks which resulted in 98,592 cases & 4,282 deaths (UNOCHA, 2009). In response to the cholera outbreak, the donor community invested in the sector for rehabilitation & provision of WASH services while the government with support from the development partners undertook major initiatives which also included moving away from supply driven approach to demand led sanitation. This major shift led to development, piloting, and rolling up of a Zimbabwe specific demand-led sanitation programme which could be branded as technology specific community led total sanitation (TS-CLTS) known as Sanitation Focused Participatory Health & Hygiene Education (SaFPHHE). This paper shares experiences, & lessons learned from the implementation of a large scaled demand led sanitation approach in 33 of 60 rural districts under the Rural WASH Project. The Rural WASH Project has a total funding of USD 62 million provided by the UK Government (about USD 52 million WASH for 30 districts), Swiss Agency for Development Cooperation (about USD 6 million for 3 districts), and UNICEF (USD 4 million) (Ahmad *et al*, 2016a).

## Paradigm shift in the national sanitation approach

The government, acknowledging the unsustainability of approaches that depend on donor aid and government subsidies and promote technologies and service levels that the country does not have the manpower or finance to sustain, initiated a systematic process of moving away from subsidized approach to non-subsidized demand led approach (GoZ, 2011a). This was done through development & enforcement of National Sanitation & Hygiene Strategy, the National Water Policy, piloting of the new approach (*community approaches to total sanitation*), and large scale implementation of demand led approach under Rural WASH Project. These are described in below sub-sections.

#### Development of the national sanitation and hygiene strategy

Recognizing the failure of heavily subsidized approach [a 5 cement bag model of a Blair Ventilated Improved Pit (BVIP) latrine], the government revised the existing and developed a new National Sanitation and Hygiene Strategy in 2011. The objective of the National Sanitation and Hygiene Strategy is to provide a framework for improving and sustaining sanitation and hygiene service delivery for all Zimbabweans, including elimination of open defaecation and making significant progress towards the attainment of the sanitation MDG. Specific objectives of the strategy are (i) eliminate open defaecation (OD) (reducing under 10% by 2015) (ii) increase total sanitation coverage to 60% by 2015; (iii) and implement and sustain positive hygiene behaviours in all communities where activities are undertaken to eliminate OD. One of major strategic actions proposed was to move away from supply to demand-driven approaches with no subsidy except targeting subsidy to the most vulnerable and the destitute (GoZ, 2011a).

## ZIMCATS piloting

Further to the development of National Sanitation & Hygiene Strategy, the Government of Zimbabwe piloted demand-led approach to sanitation known as Zimbabwe Community Approaches to Total Sanitation (ZIMCATS) in two districts of Binga and Hwange with funding from Project funded by AusAID. The pilot project was implemented by a consortium of partners that included Mvuramanzi Trust (MMT), Institute of Water and Sanitation Development (IWSD), UNICEF and the National Action Committee for Water, Sanitation and Hygiene (NAC-WASH) of the Government of Zimbabwe (GoZ) from October 2011 to March 2013. The project was evaluated in August 2013 and based on its success and relevance to the National Sanitation & Hygiene Strategy, National Water Policy, Community Based Management System, and Participatory Health and Hygiene Education (PHHE), the government formally approved adoption of the demand led approach with no subsidy except for the most vulnerable families.

## National water policy formulation

In 2012, Zimbabwe developed a new National Water Policy which also included sanitation and hygiene component as part of the policy. The new policy advocated for non-subsidized approach except to a maximum of 5% most vulnerable households to the tune of 15% of the costs of an upgradable BVIP. It also recommended to use Participatory Health and Hygiene Education (PHHE) for hygiene promotion not only to facilitate behavioural change but also to create demand for WASH Services. The policy clearly states that the households will be responsible for all aspects of their WASH requirements (GoZ, 2012).

## Zimbabwean approach to demand led sanitation approach

Based on learning from various community based approaches to total sanitation in the neighbouring countries (through exchange visits) and from the ZIMCATS piloting in the country, Zimbabwe came up with its own unique approach for rural sanitation which is strongly rooted in its Participatory Health and Hygiene Education, widely used sanitation technology, and incorporating certain aspects of traditional community led sanitation (CLTS). The recommended approach which is a technology specific community led total sanitation (TS-CLTS) is known as "Sanitation Focussed Participatory Health and Hygiene Education (SaFPHHE). The salient features of the SaFPHHE are summarized below:

1. The focus of the approach is on elimination of open defaecation at community level and hence it incorporates certain aspects of traditional Community Led Total Sanitation (CLTS) such as triggering processes and tools. In the initial phase (during triggering & post triggering) the major thrust is on elimination of open defaecation through the construction of improved household sanitation facilities and promotion of handwashing practices but at a later stage hygiene promotion covers different domains of hygiene behaviours, i.e., household, food and environmental hygiene to achieve total sanitation and

hygiene under PHHE. The hygiene promotion is an integral part of SaFPHHE as it is not considered a separate component but it is integrated into SaFPHHE from the very beginning. This is a holistic approach which does not end with achievement of Open Defaecation Free (ODF) Status.

- 2. Like CLTS, the approach (especially for the software component) is strongly community led rather than household led, the community through its established structures such as Sanitation Action Groups (SAGs) and Community Health Clubs (CHCs) is responsible for development, implementation and monitoring of sanitation and hygiene action plan.
- 3. Unlike CLTS, the choice of household sanitation technology is not left open and free for the communities to choose but limited to only two options which conforms to the minimum national standards i.e., upgradable Blair Ventilated Pit (uBVIP) Latrines (with lined sub-structures, vent pipe, and upgradable superstructure) and full version of BVIP latrines (with superstructure made of bricks and cement). Both of the recommended options qualify for improved sanitation facilities as per JMP definition. The uBVIP is for those households who currently can't afford the full version of BVIP due to relatively high cost but they could upgrade to BVIP if the household budget allows in future. The difference between uBVIP and BVIP is in the superstructure (see sub section below for detail). Minimum standards are enforced to ensure longer term sustainability against collapse due to rains/flood or any other reasons. The high quality of household latrines being enforced intends to arrest the possibility of moving back to open defaecation due to smell or other issues related to latrine usage as happened in other countries with low standard household latrine technologies. Once users goes back to open defaecation, it will be too difficult to convince them again for improved sanitation.
- 4. Zero-subsidy is strictly followed except for the most vulnerable households (up to 5% of the total targeted households) which are selected by the communities themselves based on the national criteria. The criteria for selection of most vulnerable (poor and labour-constrained) households for subsidized sanitation included categories of (i) child headed households, (ii) households with HIV infected/terminally ill heads, (iii) households with physically challenged members and (iv) households with very limited sources of income and productive assets. The last category was to be considered only if the first three categorized households are not present or exhausted in a given village. Vulnerable households are supported with a bag of cement & skilled labour. Household latrines constructed with subsidy also serve as demonstration models and training of latrine builders.
- 5. Communities self-declare themselves as Open Defaecation Free (ODF) while district is mandated to certify all self-declared communities. The provincial team is expected to randomly cross-check the certified communities with a sample of size 5 to 10% for quality assurance.
- 6. Implementation is done through government structures with extension workers of the Ministry of Health (i.e., Environmental Health Technicians-EHTs) being responsible for overall implementation at the ward & community levels with support from DWSSSCs & CSOs at district level.
- 7. Sanitation Action Groups (SAGs) are established and strengthened at community level and mandated for development, implementation, and monitoring of community action plans for sanitation. Progress is reported on a monthly basis through Environmental Health Workers (EHTs) to the district and provinces and subsequently fed into the national database.
- 8. Community Health Clubs (CHCs) are longer term structures at community level with a mandate of sanitation and hygiene promotion beyond ODF. In Zimbabwe CHCs existed in some communities before implementation of demand led sanitation approach. In communities where it existed, SAG is considered as a sub-structure of CHCs with specific mandate of sanitation while in those communities where CHCs didn't exist, SAGs is expected to graduate to CHCs. CHCs are trained on PHHE by the Ministry responsible for Health and gets support from the EHTs.

## Technology

As described in WSP (2002), Blair Ventilated Improved Pit (BVIP) latrine was invented in Zimbabwe at the Ministry of Health's Blair Research Laboratory in 1973 (named after Dr. Dyson Blair, the Secretary of Health), and subsequently adopted as the standard sanitation technology promoted by the Ministry of Health. BVIP latrine was promoted in Zimbabwe at a large scale under government's national rural water and sanitation programme until the decline of national economy. BVIP is not only popular in Zimbabwe but also revolutionized sanitation in many African countries. It is used all over the world and known as VIP latrine. In 2010 the Government of Zimbabwe relaxed its technical policy guideline for family toilets to include an additional design called an Upgradeable BVIP (uBVIP). In this version the basic requirement is for a brick lined pit and a covering concrete slab with vent pipe, which allows the owner to upgrade in a sequence of steps to attain the final brick built Blair VIP. The starting point is a brick lined pit of suitable capacity capped by a slab which has both squat and vent holes. The government specifies that the range of

vent pipe options should include those made from bricks as well as pipes. Typical diameter of the pit varies from 1.2 m to 1.3 m while the depth varies from 2m to 3m. The filling time varies between 10 and 20 years depending on pit capacity, the number of users and the amount of garbage which is thrown down the pit. Local materials including grasses can be used for the superstructure (GoZ, 2011b).

#### National ODF protocols

In 2015, Zimbabwe developed and enforced National ODF Protocols (GoZ, 2015). The key objective of ODF verification is to ascertain that a community has stopped open defaecation practice and that everyone disposes of their faeces safely in an improved latrine. The three indicators to be met are: (i) universal access by every household and institutions in the community to an improved latrine (i.e., uBVIP or BVIP) including shared latrines, (ii) evidence that the latrines are indeed being used, and (iii) absence of faecal matter (including infants & children's faeces) around the homesteads, public places/institutions and previous open defaecation (OD) sites identified during the triggering process. The ODF verification process is done in three stages. In the first stage the communities through their SAGs and local leadership assess their status in terms of ODF status and declare themselves ODF on achieving 100% elimination of open defaecation based on the indicators and notify the District for verification. In the 2nd stage, a district team (comprised of District Water Supply and Sanitation Sub-Committees-DWSSSCs) will carry out verification exercise together with the community representatives and if the indicators are fully met the village is declared ODF and a report is sent to the provinces. In the third stage the provincial team which may include occasionally members of national team carry out quality assurance on the ODF declared villages using a random sample of 5 to 10%. The sole purpose of the third stage is to ensure quality and harmonise processes across all the districts and to create a sense of accountability through check and balance.

## Roll out of demand-led sanitation under rural WASH project

#### Capacity development of critical mass

Further to the capacity building of national team on demand led sanitation, formal approval of the SaFPHHE approach by the government, and development of training manual & guidelines, massive capacity development of critical mass at provincial, district and sub-district levels was carried out on demand led sanitation. During the process, 1,674 facilitators (mostly government extension workers) including 207 master trainers at district level were capacitated. In the next stage over 5,300 villages were triggered for elimination of open defaecation, and community based structures were established and strengthened. These included capacity development of 5,316 Sanitation Action Group (SAGs), 3,474 Community Health Clubs (CHCs), 6,531 latrine builders, 1,683 School Development Committees (SDCs), 1,794 School Health Clubs, 3,193 school health teachers and 10,025 Water Point Management Committees. All of these structures mandated with certain specific roles and responsibilities for sanitation and hygiene promotion at various level. In addition, logistic and monitoring capacity of government was enhanced through provision of motor bikes for extension workers, and vehicles for government at national, provincial and district levels. Minimal allowances (@10 USD/day for a maximum 10 days during a month) linked to performance in some cases and fuel were provided to extension workers as an incentives to facilitate field monitoring and support visits.

#### Institutional arrangements

The main body responsible for coordination, planning and management of the WASH Sector at the national level is the National Action Committee (NAC), an inter-ministerial committee under the leadership of the Minister responsible for water. NAC has a secretariat called the National Coordination Unit (NCU) whose primary purpose is to provide day- to-day administration of the water, sanitation and hygiene sector on behalf of the NAC. The Rural WASH Project is managed through two project committees (i) the Project Advisory Committee (PAC) mainly responsible for policy and strategic guidance; and (ii) the Project Management Team (PMT) responsible for technical support for the implementation of the Rural WASH Project. At the provincial, district and ward (sub-district) levels there are sub-committees (interministerial/departmental) known as Provincial Water Supply and Sanitation Sub-Committees (PWSSSCs), District Water Supply and Sanitation Sub-Committees (DWSSSCs) and Ward Water Supply and Sanitation Sub-Committees (WWSSSCs) is to coordinate and assist in the management of rural water supply, sanitation and hygiene activities in the provinces, districts and ward level respectively. The key government

implementing agency at the district level is the Rural District Council (RDC) which is technically supported by DWSSSC. Environmental Health Technicians (EHTs) of the Ministry of Health at district level and other extension workers are responsible for implementation of sanitation & hygiene promotion activities at village level with technical support and back up from DWSSCs. CSOs engaged under the Rural WASH Project are providing technical and coordination support to the government at provincial and district levels.

## Monitoring and feedback mechanism

Under the Rural WASH Project, a robust but simple monitoring and feedback mechanism has been operationalized under which the progress is tracked on monthly basis on various indicators including number of communities triggered, number of various community based structures capacitated, ODF villages, number of latrines constructed, number of people reached with hygiene promotion activities amongst others. The monitoring and feedback mechanism is well explained in Ahmad et al (2016b).

## **Major achievements**

Unlike other components of the Rural Project which started from June 2012, sanitation and hygiene component experienced a delay of almost 18 months as implementation on this component was linked to completion of piloting and formal endorsement of the approach and guidelines by the government and hence construction of latrines at community level started from April 2014 in those communities triggered for elimination of open defaecation. Triggering process was completed in 97% of targeted villages (about 5300) in December 2014. By end of February 2016 (i.e., in 23 months), 57,542 household latrines were constructed by the communities mostly without any subsidy which included 35,853 latrines constructed in 2015 alone when full-fledged implementation was started. As a result, 378,743 people ( over 64% of the logframe target) were reached with improved sanitation facilities and 1.95 million people including school children reached with hygiene promotion activities and 540 villages (45% of logframe target) achieved ODF status.

# Significance of achievements in perspective to achieving SDGs

As reported in Sanitation and Hygiene Strategy (GoZ, 2011a) and Morgan (2010), the average annual output for latrine construction in the Rural Areas under the well-resourced subsidized approach remained between 18,000 to 20,000 since 1980. However, with the current Rural WASH Project, 35,853 household latrines were constructed in 2015. The Rural WASH Project covers only 24.75% of the total rural areas and hence if it is implemented in all over rural areas it has the potential to produce construction of 144, 861 household latrine per year if the same rate of achievement is assumed. Based on this assumption, and considering the annual growth rate of 2.2% in the population, the projection of access to sanitation is presented in Figure 1 which shows Zimbabwe is most likely to achieve SDG for Rural Sanitation before 2030 if it replicates the current Rural WASH Project all over the rural areas.

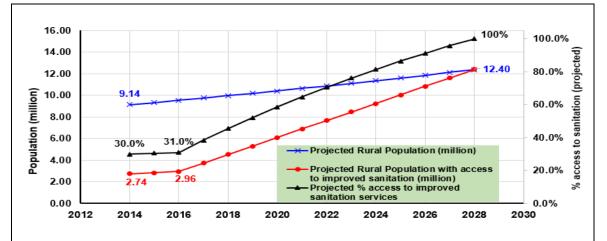


Figure 1. Projection of access to improved sanitation services in reaching SDG with intervention at par with Rural WASH Project (i.e., with annual output of 144,861 household latrines)

## Lessons learned

The project should have planned for at least one year inception phase for putting in place processes, guidelines, and mechanism to avoid delays rather than direct implementation from the first day. Another concrete lesson that was learned is the resourcefulness of communities despite poor economic environment in terms of investment for household facilities. It is estimated that communities contributed over USD 3.0 million at the rate of minimum USD50 per unit of latrines constructed. Another important lesson learned was that there is no single or one size fit all strategy for successful motivation of communities: each community is different and hence different innovative strategies to be resorted to. Performance based incentives to the extension workers for field monitoring and support visit, engagement of local chiefs, door to door visits, support by community health workers, engagement of private sector for supply outlets, and active engagement of local and district leadership proved to be some of the key effective strategies to push uptake of sanitation. Finally, without buy-in from the key Ministry of Health and Child Care at national and provincial level, it is simply not possible to implement demand-led sanitation at community level as extension staff would not be comfortable to advocate for an approach that is not supported by their national managers even if they themselves are convinced of its effectiveness.

## Challenges

The major challenges faced during the implementation included delayed initiation of sanitation component by 18 months, use of subsidized approach under different projects, resistance to adoption of demand led sanitation by some partners, inadequate post triggering support due to engagement of extension workers with other priority projects, low priority for sanitation in drought affected districts due to limited resources available for survival, rocky and collapsible geological conditions, tough technological standards, and lack of clear definition/demarcation of villages amongst others.

## **Conclusion & way forward**

Demand led sanitation linked with specific sanitation technologies resulted in construction of over 57,542 household latrine and 540 ODF villages in a period of 23 months. The output is estimated to be 7 times more what was reported to be achieved in Zimbabwe during the peak subsidized period. This approach if implemented nationwide has a potential to achieve universal access to sanitation before 2030.

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#### References

- AHMAD, T et al (2016a) *Improving WASH services in Zimbabwe: Experiences from Rural WASH Project*, Paper Submitted for 39<sup>th</sup> WEDC Conference, Kumasi, Ghana, 2016
- AHMAD, T et al (2016b) *Rural WASH Project in Zimbabwe: Monitoring and feedback mechanism for accelerating progress*, Paper Submitted for 39<sup>th</sup> WEDC Conference, Kumasi, Ghana, 2016
- Government of Zimbabwe (2011a) National Sanitation and Hygiene Strategy: Accelerating Access to Sanitation and Hygiene, July 2011 June 2015. Government of Zimbabwe.
- Government of Zimbabwe (2011b) *The Blair VIP Latrine: A builder's manual for the upgradeable BVIP model and a hand washing device.* The National Action Committee, Government of Zimbabwe.
- Government of Zimbabwe (2012) National Water Policy. Ministry of Water Resources Development and Management, Government of Zimbabwe.

Morgan, P. (2010) Zimbabwe's Rural Sanitation Programme: An overview of the main events, Zimbabwe UNOCHA (2009) Zimbabwe Cholera Update, Situation Report 15 July 2009.

WSP (2002) VIP Latrines in Zimbabwe: From Local Innovation to Global Sanitation Solution, Field Notes, Water and Sanitation Programme-World Bank, Africa Region

#### Note/s

Disclaimer: The views expressed in this paper are those of the authors and do not necessarily reflect the views of the government/organizations they work for.

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