



# Sanitation in Small Towns: Experience from Mozambique

## INTRODUCTION

WASH services in small towns are frequently neglected by all branches of government due to lack of capacity, unclear mandates, low budgets and lack of feasible options to provide services. Typical high-tech infrastructure solutions are neither feasible nor affordable for these contexts.

Progress towards MDG- and sanitation-specific targets in sub-Saharan Africa is much higher in urban areas. However such achievements often mask a disparity between the rich and poor in urban contexts and between major urban cities and small towns or rural centres. This is reflected in the relatively higher indicators of deprivations in small towns compared to urban centres.

Mozambique initiated a small towns WASH programme in Nampula Province in 2012 targeting 5 small towns. The baseline figures for sanitation coverage in the target towns were high (average 90% with access to a basic latrine). The level of open defecation in the selected towns was found to be relatively low, traditional (unimproved) latrine coverage high, reflecting a latent demand for improved sanitation facilities in the more densely populated environment typical of small towns.

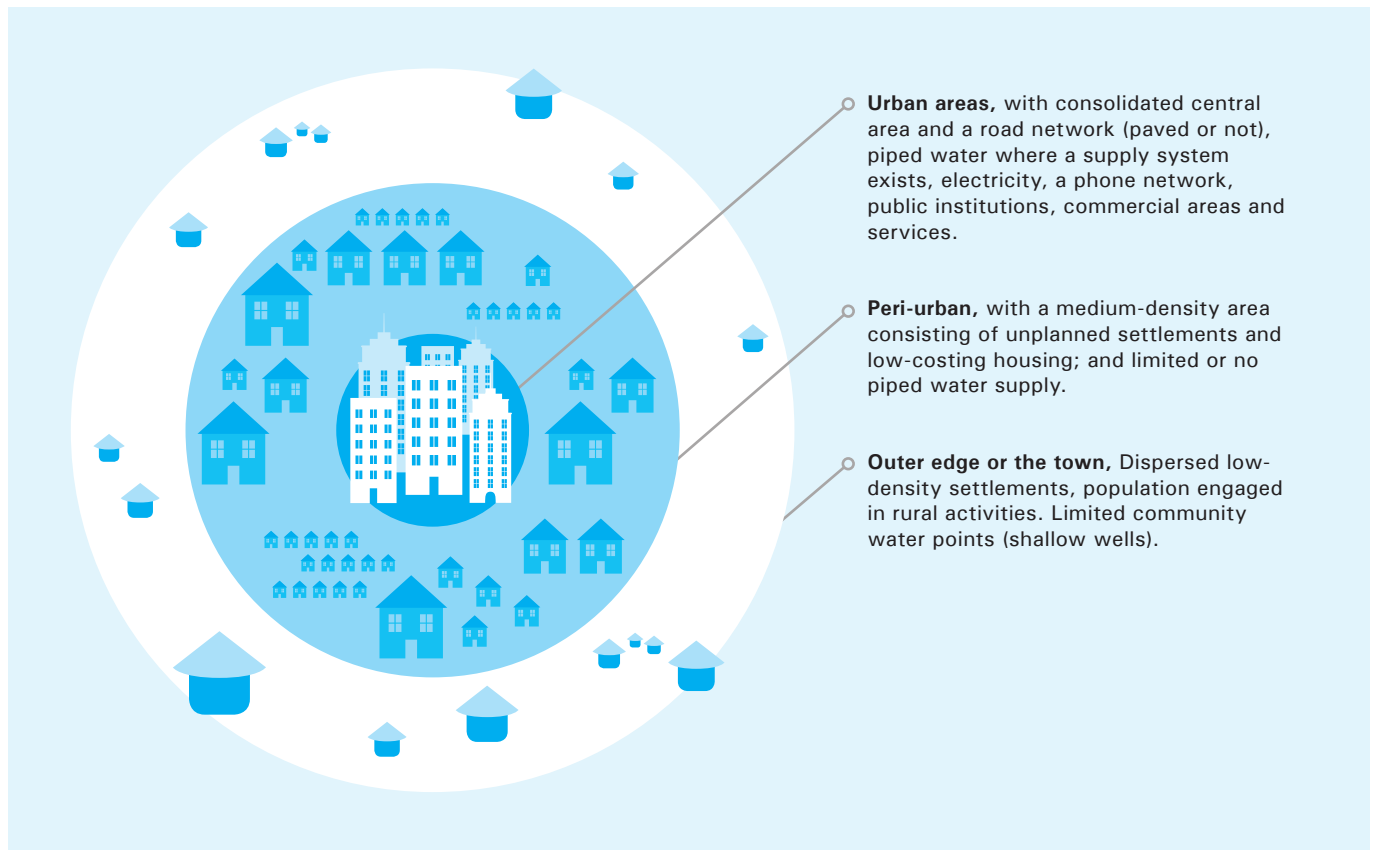
However on closer investigation it can be seen that the outer edges of the town tend toward higher open defecation rates; the peri-urban areas had improved latrine coverage; and the most densely populated centre had very high coverage of latrines (see Figure 1). Regardless, the number of improved latrines overall was very small and evidence of handwashing low.

## KEY POINTS

- *Small towns in Mozambique are best characterized as small district hubs that have potential to become economic drivers of activity and services to rural areas.*
- *In Mozambique, existing supply-led approaches focus on higher density towns (>30,000) with less attention to rural district capitals that have both rural and urban features.*
- *Determining appropriate sanitation strategies in small towns is a dynamic process involving several factors, including: settlement patterns; the availability of piped water supply; existing behaviours and practice; household income and affordability; sanitation supply chains and capacity; existing urban plans; and projections of growth.*
- *Master plans in Mozambique's small towns are flexible, principles-based guidance reflecting an assessment of current conditions, budgeting realities and capacity.*
- *Developing capacity of sanitation entrepreneurs and sanitation models in small towns should be linked to sanitation programming in rural areas.*



Figure 1 – Typical pattern of settlement for small towns



This note presents the experience of developing a small town sanitation programme in Mozambique. It makes specific reference to the strategies chosen for:

- 1 Institutional capacity building;
- 2 Demand creation;
- 3 Supply side strengthening; and
- 4 Equity.

## DESCRIPTION OF INTERVENTION

The intervention towns were selected based on their high economic and population growth potential. The aim was to implement a comprehensive programme that involved water supply, sanitation and hygiene, and capacity building at local level, so that the towns would be equipped to meet the challenge of accelerated growth. Sanitation Master Plans were developed in all five towns with sanitation programme implementation in Rapale and Ribaue towns (with population of 19,000 and 26,000 respectively). These towns are rural district centres that, while displaying urban characteristics, are still very

much rural 'hubs'- based in a rural district and surrounded by rural districts.

Baseline surveys showed that 90% of the families in Ribaue and Rapale had traditional latrines made of local materials such as bamboo or grass. Access to improved sanitation in institutions, marketplaces and schools was low prior to the start of the programme. In these towns, UNICEF supported the implementation of public sanitation facilities in markets, hospitals, boarding schools and a household sanitation component designed to support 10,000 people to upgrade to improved

latrines. The programme also comprised the upgrading of solid waste collection equipment and technical assistance to improve solid waste management.

The programme highlighted four essential themes in small towns sanitation: *institutional capacity building, demand stimulation, service supply development, and equity.*

## 1 Institutional capacity building

Sanitation Master Plans were developed for 5 towns in Nampula Province by a multi-sectoral sanitation working group. These plans reviewed the current sanitation problem in each town and provided guidelines and recommendations on:

- the organization of town sanitation services within local government;
- promotion and regulation of household and institutional sanitation;
- the sanitation chain; and
- solid waste management.

Additional capacity building took place through mentoring and coaching of local government staff during the implementation of the activities in the short-term action plan.

## 2 Demand Creation

While income and costs were found to be key barriers in a household's decision to purchase a latrine, they were not the only ones. The sanitation market in small towns in Nampula is characterized by a general lack of demand for sanitation products and services with a resulting lack of product diversity and low-cost options. Consumers lacked awareness about the available sanitation products and suppliers.

Artisans reported a number of challenges in developing their businesses such as lack of capital, inadequate training on improved sanitation practices, lack of access to materials and appropriate tools. Artisans seemed to rely on a passive sales approach, with little to no resources put into the identification and development of potential customers. The table below presents the demand and supply assessment carried out in Ribáuè and Rapale, including proposed actions.

### Sanitation Master Plans

Sanitation Master Plans are different from typical urban Master Plans, which focus on engineering design, drawings and bills of quantity for phased construction of infrastructure. Sanitation Master Plans, on the other hand, are guidance documents for local authorities to help them prioritize and organize the delivery of sanitation services. The plans have a 10-year horizon and propose short, medium and long-term sanitation activities. The plans comprise:

- i. household sanitation, institutional and public sanitation, solid waste management
- ii. capacity development of local governments/private sector
- iii. funding requirements and
- iv. short term action plans.

The Master Plan means the town is better able to develop funding proposals both at the municipal and national level.



Household latrine made of traditional material, including a handwashing device and a separate area for bathing.

**Table 1: Barriers to consumers' investment in improved sanitation**

Barriers	Proposed actions
Low prioritization of improved sanitation	Stimulate demand for durable, hygienic sanitation facilities through interpersonal communication and mixed media techniques (Community Education and Participation – CEP).
Lack of awareness about available products, suppliers and consumer preferences	Train artisans to introduce, advertise and sell products, including basic business management campaign to advertise the products produced by artisans.
Low income	Initial support provided by the Water Supply, Sanitation and Hygiene in Nampula Province Programme (NAMWASH) through a sanitation competition that relies on local government, local organisations and active household contribution and participation.

Source: UNICEF, 2013



Rafael Chale (community leader) with his family standing in front of their latrine, built with cement blocks, Ribaue town.

The lack of homogeneity, disbursement of population, difficulties in congregating the community, difference in behaviours (open defecation vs upgrading), made it necessary to supplement traditional community mobilization techniques with a broader communications and demand generation campaign. Four demand generation strategies were used to reinforce community mobilization techniques and ensure saturation of messaging and momentum to the households. These approaches were used in 'waves' and most communities of the town received at least two of the three strategies:

- Traditional community mobilization techniques (CLTS and PHAST). CLTS was applied in the outlying, mostly rural areas of the towns, which still practiced open defecation, while

PHAST was applied in the more urban areas to promote upgrading of sanitation facilities. CLTS and PHAST exercises provided a baseline level of awareness creation that the other communications channels were able to build upon. The interpersonal communication provided during the CLTS process helped maintain momentum for households to move up the sanitation ladder.

- Use of 'mixed-media' communication techniques such as radios and mobile units. The mobile units were used to hold sessions with the communities to record and broadcast video. The community radio sessions included children and local leaders and provided a platform for debate on sanitation and hygiene. Overall the mixed-media communication enhanced the

visibility and credibility of the WASH programme and helped to provide broader access to information for communities.

- A sanitation competition between ‘barrios’ (neighbourhoods) challenged block leaders to mobilize their blocks to have the highest levels of improved latrines. Participating households dug their own pits, provided materials for superstructure and expressed formal interest to the local government.
- Advocacy with key political/decision-makers: A sanitation ‘champion’ is elected within the municipal sanitation working group and tasked primarily with advocating for funding and prioritization of the sanitation Master Plan and also with oversight of the plan.

### 3 Service supply development

The supply-side was supported by:

- Technical training of artisans to on-site installation of concrete slabs to households.
- Training entrepreneurs in basic business development and marketing skills.
- Leveraging the influence and leadership of provincial and district government to promote the sanitation competition through monitoring activities, certification and recruitment of local artisans.
- A plan to support small-scale independent faecal sludge cleaners equipped with manual evacuation unit was abandoned due to



Sanitation entrepreneurs in Rapale.

perceptions that the market opportunity would be too small in both Ribaué and Rapale towns, due to the use of dry pit latrines, and the size of the plots which allow the households to build another latrine once the previous one has been filled up.

- Public sanitation facilities were constructed or rehabilitated at market places, schools and health centres.



Sanitation for all. Inclusive sanitation technologies, such as raised latrines and grab rail, were tested to develop latrines for people with disabilities.

### 4 Equity

The Mozambique programme, through the master planning process, made equity considerations for vulnerable populations a key consideration in development of designs. In consultation with the local government, a participatory design workshop was held to develop a typology of appropriate designs for children with special needs. These designs were then constructed on site for all registered families with special needs children in the towns. As well as developing a roster of inclusive designs this process also had the effect of building the capacity and awareness of the local government to support such adaptations in the future.

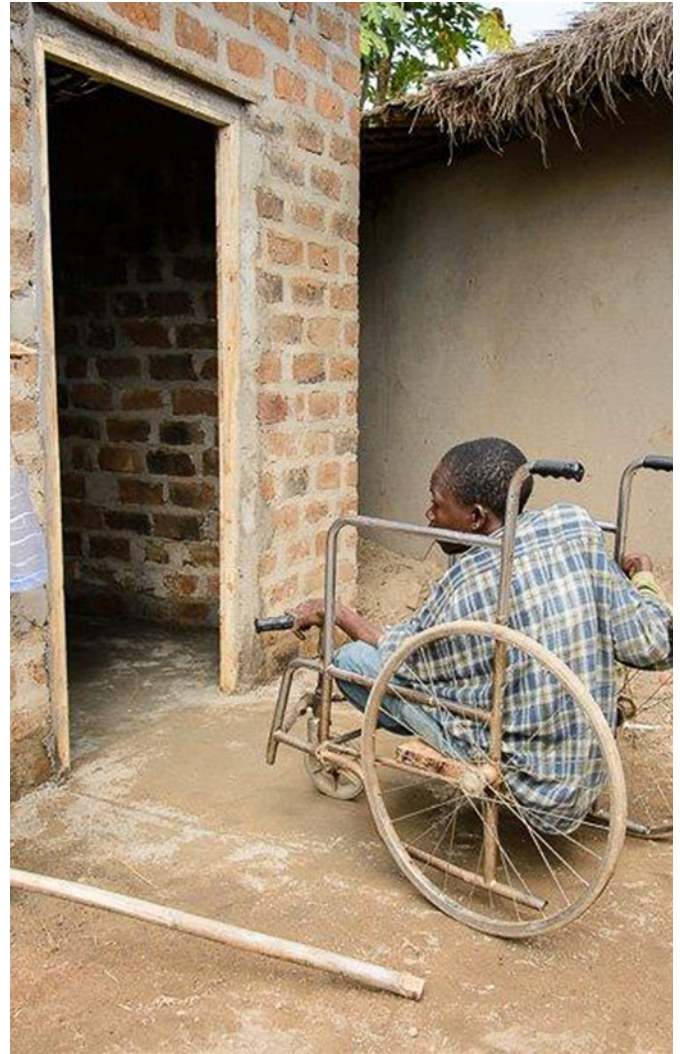
People with disabilities were also taken into consideration when improving public sanitation facilities. In general, every sanitary block was built with a separate accessible cubicle, equipped with support bars, a wide door, sufficient interior space for a wheelchair, and an elevated toilet seat. In Ribaué, the design was provided by Water and Sanitation for the Urban Poor (WSUP). In total, the programme built inclusive sanitation facilities with the capacity to provide improved access to 575 users with disabilities.

# OUTCOME

The programme in Mozambique has had impressive results. By the end of 2014, over 14,000 households had onsite sanitation, 16,050 people had new handwashing facilities, the public sanitation facilities have a capacity for 1,730 people, including 575 people with disabilities and solid waste collection and disposal services have been strengthened in Ribaué and Rapale. In addition, the five Sanitation Master Plans developed provided guidance and support in outlining options for small towns development and increased capacity of local supply sector and government to support sanitation in these districts, both rural and urban.

The programme underscored the need to increase capacity to meet the demand for sanitation upgrading and behaviour change in small towns and developed a dynamic approach to planning and 'master planning' that can be replicated.

Sanitation business development was supported in both towns although the business was more successful in Rapale. Artisans were able to organize into a legal association making them eligible for district small business grants; the artisans included home construction as part of their business and conducted some basic marketing at public events and via word of mouth. This sanitation group maintained a slow but steady business in latrine slab construction, of which approximately 25% came from rural customers outside the town.



*Inclusive latrine block design in Rabue, Mozambique.*

## LESSONS LEARNED

**The design of sanitation programmes in small towns has to be flexible and context specific.** The programme started with an initial set of proposed actions or a 'basic package' which evolved based on: the specific characteristics of small towns, baseline results, Sanitation Master Plans, willingness to pay surveys, and barriers to improved sanitation analysis.

**Small towns' sanitation programmes should include an institutional sanitation component,** as interventions in health centres, schools, and marketplaces will have a significant impact on health and sanitation conditions in both the towns and the whole district including rural areas.

**Developing sanitation markets in small towns is an opportunity to tap into rural markets that rely**

**on small towns (i.e. district centres) for markets and other consumer goods.** This experience demonstrated that rural communities would use and benefit from sanitation services available in rural small towns.

**Not all entrepreneurs are good sanitation service providers and the sanitation business does not generate enough revenue to make a stand-alone business.** There are masons and artisans in small towns who are willing to become sanitation entrepreneurs but there are clear 'success factors' for promoting sanitation services.

For Mozambique these included;

- Selecting people who already have experience as masons;

- Selecting those already engaged in the home construction industry;
- Selecting local masons with good local contacts.

**Rural sanitation mobilization tools are applicable in the small town context** but may need to be supplemented with other demand-generation approaches, as was the case in Mozambique. This would help to ensure saturation of messages and

the ability to differentially target populations in a community with varying baseline behaviours.

**Better evidence would contribute significantly to UNICEF’s ability to advocate for WASH provision to small towns.** Accurate data on water and sanitation coverage in small towns is lacking in most countries. Harmonized categories of population centres would facilitate measurement of water and sanitation coverage and identification of neglected settlements and vulnerable populations.

## NEXT STEPS

Mozambique’s approach to sanitation in small towns is still evolving:

- Formative research is underway to better understand behaviour change drivers and social norms to help improve the sanitation promotion strategy.
- The programme will strengthen the sanitation marketing approach by developing an alternative funding mechanism for households and sanitation artisans/entrepreneurs in partnership with COWATER, WASTE and WSP.
- AIAS (GoM), World Bank Water and Sanitation Program (WSP), EU, Government of Netherlands, and other partners are sharing lessons for the development of a ‘sanitation approach’ to be implemented in other towns.
- Lessons learnt are being replicated in five other towns through a partnership of AIAS (GoM) and UNICEF.
- The introduction of piped water supply in small towns can be an opportunity for sanitation business development and reconsideration of existing technologies and upgrades.



*A couple outside their latrine in Rapale.*

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This Field Note is part of the UNICEF Eastern and Southern Africa Sanitation and Hygiene Learning Series, designed to improve knowledge of best practice and lessons learnt in sanitation and hygiene programming across the Region. The series has been funded by the Bill & Melinda Gates Foundation in support of improved knowledge management in the sanitation sector.

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