



## POLICY BRIEF

### Water and Sanitation Action Research in the City of Kitwe:

Community mapping towards inclusive  
development



Kitwe Federation meeting to discuss sanitation challenges.

#### Acknowledgments

This research was conducted collaboratively by Shack/Slum Dwellers International's (SDI) Zambian affiliates

the People's Process on Housing and Poverty in Zambia (PPHPZ) and the

Zambia Homeless and Poor People's Federation.

## Who we are: Shack/Slum Dwellers International and its affiliates in Kitwe

SDI is a network of community-based organizations representing the urban poor across 33 countries in Africa, Asia, and Latin America. SDI promotes inclusionary, community-led processes with the poor as agents and not just beneficiaries of development. The network links poor urban communities that have successfully mobilised to develop advocacy and problem solving strategies.

SDI uses savings and self-enumeration schemes, community profiling and mapping to generate information that challenges widely held developmental assumptions. Communities use this information, as well as the support and solidarity of their community-based organisation to leverage resources and assistance and to engage with the state *on their own terms*. SDI believes that the only way to manage urban growth and create inclusive cities is for the urban poor to be at the centre of strategies for urban development.

The Federation is a grassroots, community savings-based social movement, generating economic and social support for over 48 000 poor households living in Zambian cities. It is organised into 384 active savings schemes on issues including land, housing, water and sanitation. There are over 1200 Federation members living across 20 slums in Kitwe.

PPHPZ is a Zambian non-governmental organisation that works in close alliance with the Federation to support the urban poor through a combination of technical support, lobbying for financial resources for the Federation and building the capacity of communities to enhance their engagement with policy makers.

The scale of sanitation needs in sub-Saharan Africa is widely recognised. Most of the continent is not on track to meet the Millennium Development Goal (MDG) target for sanitation and in urban areas in the region fewer than half of households have access to safe sanitation. In the absence of adequate state responses, affiliates of SDI, along with the International Institute for Environment and Development (IIED) have been working to develop a bottom-up approach in which the residents of informal settlements engage with their local authority to identify new ways forward. In developing this approach, we seek to address four challenges faced by community-led approaches to sanitary improvement: 1) getting local residents to coordinate and combine their demands for sanitary improvement; 2) finding and implementing improvements that are affordable and acceptable to both the local authorities and the residents; 3) getting local authorities to work with residents and their organisations to co-produce the needed improvements; 4) and ensuring that other poverty-related problems, such as insecure tenure, do not undermine improvement efforts.

This booklet reports on the first year, focused on data collection, of a three-year project. The second year is for the development of precedents to exemplify new and effective sanitation solutions. These precedents have been identified because of their relevance to addressing needs in the city and their potential to scaling up sanitation provision. The third and final year is dedicated to planning to expand provision to those in the city without adequate sanitation. It is anticipated that this final year will develop a city-wide strategy for inclusive sanitation and include agreements with local government that can help provide the foundations for such a strategy.

## The sanitation situation in the communities of Kitwe

The City of Kitwe has a population of over half a million. 60-70% of the population live across 48 informal settlements, 34 of which are still considered illegal. Over 40% of residents in the informal settlements live on less than US \$40 per month. The settlements are characterised by the lack of piped water and the prevalent use of shallow wells and traditional pit latrines.

The limited coverage and relatively high prices of water from kiosks has pushed many households in informal settlements to get water from unimproved, less sanitary sources. In Kamatipa (one such informal settlement), just eight water kiosks serve a population of over 19 000 people, so that a number of people have to walk long distances to reach these services. 46% of people use shallow wells, which are liable to dry out in hot weather and become contaminated with uncollected waste and overflow from pit latrines in the rainy season. Each well is typically shared by six households. In Kamatipa, 79% of shallow wells were found to be in poor condition.

77% of households in informal settlements use traditional pit latrines with a limited or temporary superstructure. The high cost of installing sanitation facilities hinders investment, particularly amongst tenants and those with insecure tenure, who make up a large proportion of the population. Poor quality sanitation facilities and poor drainage contribute significantly to health problems amongst the urban poor.

These conclusions are drawn from substantive and detailed community profiling, household enumerations and community mapping. The mapping exercise shows the spatial distribution of both water and sanitation facilities. The mapping team also collected information on the condition of the facilities and the number of households the facility served.

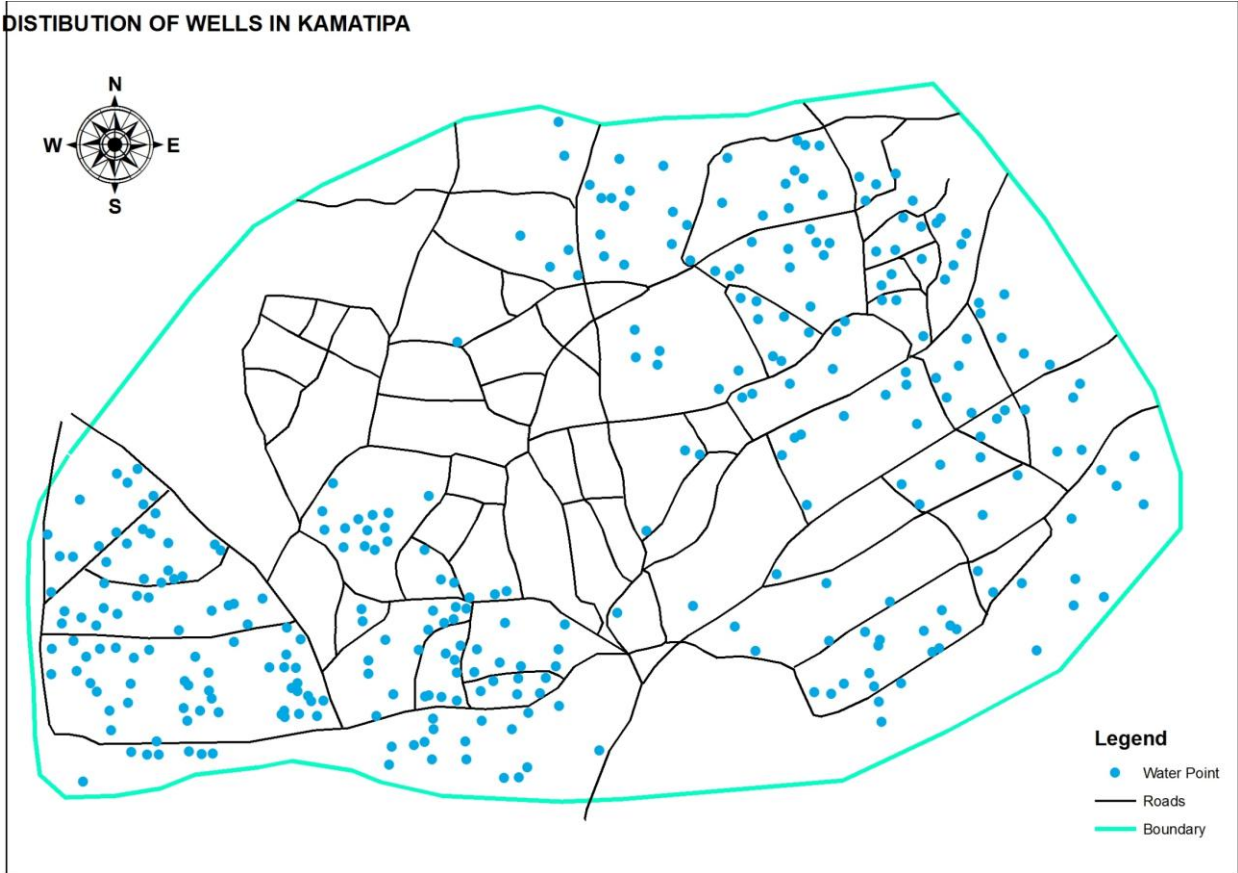
The map below shows the distribution of wells throughout the Kamatipa settlement. There are 520 shallow wells serving over 3175 households. The location of shallow wells closely follows the distribution of unimproved pit latrines, increasing the potential for contamination, particularly during the wet season when the pits overflow. These maps give both the local authorities and the communities themselves a good understanding of the water and sanitation situation in Kitwe's informal settlements, which are not serviced by the council-owned commercial utility companies.



The need for sanitation improvements.



Figure 1: Distribution of wells in Kamatipa



## Assessing the sanitation situation: our methodology

The organised urban poor in Kitwe carried out this research. The Federation built upon a previous study it had conducted, which identified 48 informal settlements in the city. Profiling meetings and household enumerations were held in the Kamatipa settlement. During the meetings, community members talked about the water and sanitation situation in their settlement and the challenges they face as well as providing basic socio-economic information. This information was combined with a detailed household survey.

A team consisting of community members drawn from each settlement carried out the mapping exercise. The team used printouts of satellite images of the City and GPS equipment, to locate all communal water and sanitation facilities within each of the settlements.

The data collected was then geo-referenced using basic GIS software and combined with detailed information about the status of each of the facilities identified. For instance, for a water point, the team recorded the source, the condition of the facility and the number of households that it serviced.

This combination of methods provided a good picture of the water and sanitation situation in Kamatipa. Moreover, the active engagement of local residents in data collection, analysis and presentation has resulted them opening negotiations with the city authorities. Both the Mayor and Deputy Mayor have attended Federation meetings and have understood more about the scale and nature of under-provision in informal settlements.



Sanitation improvements are a priority for local residents

## Four city study on community-led sanitation improvement

Kitwe is one of four cities participating in a SHARE-funded project into community-led improvement of urban water and sanitation facilities. The purpose of the research project is to secure a model for the development and realisation of pro-poor citywide sanitation through four scalable examples in the cities of Blantyre (Malawi), Dar es Salaam (Tanzania), Kitwe (Zambia), and Chinhoyi (Zimbabwe).

The community mapping and profiling is the first step towards developing inclusive, sustainable sanitation strategies. The project has the following two specific aims:

**I. Develop a better understanding of the principal obstacles to city-wide sanitary improvement, and how they can be overcome**

**II. Develop and test an approach to pro-poor city-wide sanitation strategies that can be adopted and driven by federations of community organizations, and supported by public authorities and private providers**

The project is using action research to explore various strategies that can be adopted by federations and other networks of the urban poor to scale up sanitation. In addition to exploring sanitation strategies at the household level, the research is also investigating aspects of sanitation related to both gender and spatial marginalisation.

In its second year this action research project will demonstrate new sanitation precedents. These precedents will exemplify models of sanitation provision that are affordable to low-income households and which have the potential to address the scale of need through replication across the city. The collaboration with local government is intended to maximise the likelihood of leveraging financial resources and the political commitment required for policy and regulatory reform. A partnership between government and organized communities of the urban poor is central in this strategy and the co-production of affordable sanitation solutions is likely to be the most effective way to secure city-wide improvements.



## Helping form alliances that can drive improvements

The community mapping and self-enumeration exercises have already produced significant results. This research has opened up significant opportunities for Federation members to engage with the local council and build upon their 2010 Memorandum of Understanding (MOU). As local residents have become better informed about the sanitation situation in their settlements, they have more actively pressed their political representatives to address these issues.

The Federation is now discussing an MOU with the Nkana Water and Sewerage Company in order to work together to address the water and sanitation challenges in informal settlements beyond this SHARE project.

This research has also enabled Federation members to engage with city officials, by strengthening communication channels and building the capacity of the informal settlement dwellers to identify and communicate the water and sanitation challenges that they face.

The City has also agreed to establish a multi-stakeholder sub-committee on the upgrading of informal settlements. The committee will include members of SDI alongside councillors and utility providers.



Working in partnership with Nkana Water.



## Partners

### **KITWE CITY COUNCIL**

Kitwe City Council is a local planning authority responsible for all spheres of city planning, development and service delivery within the city of Kitwe. The Council is mandated to discharge 63 municipal functions prescribed under the Town and Country Planning Act CAP 283 of the laws of Zambia which include refuse collection, promotion of public health, and maintenance of roads.

### **NKANA WATER AND SEWERAGE COMPANY**

Nkana Water and Sewerage Company (NWSC) is a commercial utility company responsible for providing water and sanitation services to Kitwe, Chambishi and Kalulushi. NWSC provides water and sanitation services to about 65 % of the total urban population within the respective city and towns.

### **IIED**

IIED is an international development and environment policy research organisation. It carries out research, advice and advocacy work – generating robust evidence and know-how informed by a practical perspective acquired through hands-on research with grassroots partners.

### **SHARE**

The Sanitation and Hygiene Applied Research for Equity (SHARE) Consortium is a five year initiative (2010-2015) funded by the UK Department for International Development. The Consortium seeks to contribute to accelerated progress on the MDG sanitation target by generating critical knowledge to inform policy and practice in areas of sanitation and hygiene.

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