



POLICY BRIEF

Water and Sanitation Action Research in the City of Chinhoyi:

Community mapping towards inclusive development



Community discussing water and sanitation situation in Gadzema.

Acknowledgments

This research was conducted collaboratively between

the Municipality of Chinhoyi,

Shack/Slum Dwellers International's (SDI) Zimbabwean affiliate, the Zimbabwe Homeless People's Federation (ZHPF), and the

Dialogue on Shelter Trust.

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

Shack/Slum Dwellers International (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.

ZHPF is a community savings-based social movement, generating economic and social support for over 52,000 households, organised into almost 700 savings schemes, on issues including land, housing, water and sanitation.

Dialogue on Shelter Trust is a non-governmental organisation that has worked in alliance with ZHPF since 1998 supporting urban poor communities as they implement their own solutions to the challenges of insecure land tenure, inadequate housing and service provision.

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 Chinhoyi

The inability of the City of Chinhoyi to extend and upgrade its water and sanitation systems and keep pace with the city's growth has led to several complex challenges. The city's ageing sewer network is poorly maintained, overstretched and needs expansion. The water treatment facilities and pipe network also need upgrading and repair but the local authority has limited financial resources. The challenges are compounded by the growing demand for housing in and around Chinhoyi.

Households in the high-density, low-income areas are without water for an average of four days per week. In the profiled settlements, approximately 70% of people rely on improvised sources, such as shallow wells and other unhygienic sources. Multiple toilet systems are in use, including flush toilets connected to the city's sewer grid, pit latrines and ecological sanitation toilets. Many people still practice open defecation. There is considerable variation between the settlements profiled, ranging from well-maintained, community-managed toilets to poor, neglected and unhygienic systems. In many places there is poor or erratic water supply, which leads to open defecation and failure to wash hands.

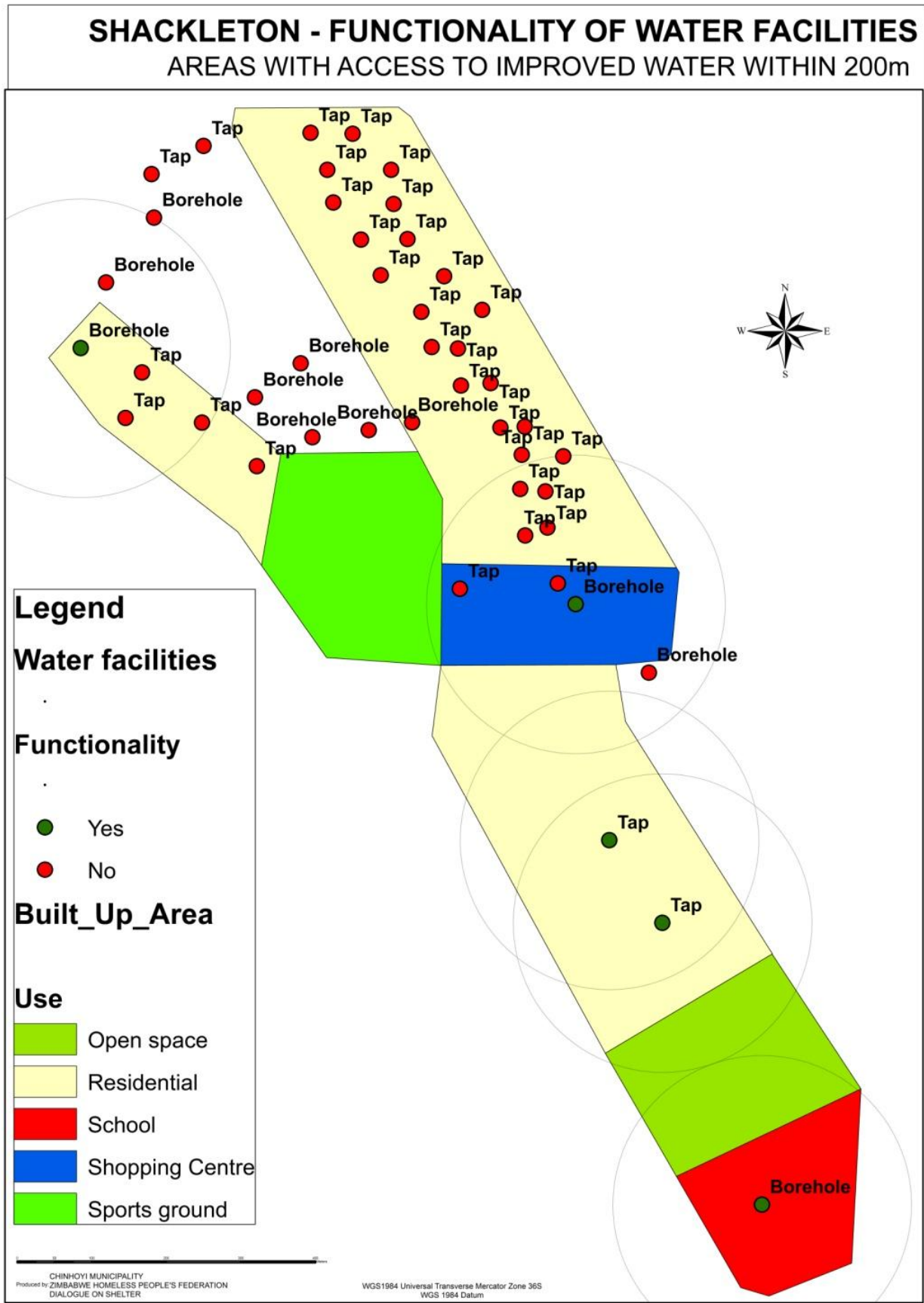
In the researched settlements 82% of dwellings do not have a regular rubbish collection. The result is illegal and unsanitary dumping of solid waste, causing further problems including drain blockages and contamination of water sources.

All the issues relating to water and sanitation are exacerbated by the breakdown of communication between the municipality and local communities. In many instances communities have stopped reporting leaks and burst pipes, as they have no confidence that the council will act. In some instances citizens have stopped paying utility bills and charges in protest. The research also found that residents who rent their accommodation from the Municipality are often reluctant to invest in improving sanitation facilities, as they perceive this to be the responsibility of the Municipality.

Community profiling and mapping exercises in 11 of the 16 high-density, low-income settlements provided information about the sanitation situation. Despite significant variation between settlements, there are key common challenges relating to provision of clean water, sanitation and solid waste disposal. The conclusions outlined above draw on substantive and detailed data collected. In Shackleton, a household survey was conducted to provide even more detailed information. Figure 1 shows that many people in the town have to travel over 200 metres to the nearest water source. In August 2012, 95% of people got their water from the three (out of ten) functioning boreholes in the settlement. The settlement's piped water system has stopped working and all of the household and communal taps that were installed have been vandalised. The three working boreholes are all oversubscribed, supplying over 4000 people, and frequently breakdown.

The mapping exercise combines information from community profiles with spatial data and, in the case of Shackleton, household enumeration data. The maps produced allow the community and local authorities to see how communal facilities are distributed, highlighting the challenges facing communities. The map enables the city and community to identify areas with critical challenges. The Federation has seen how involvement in this research has motivated community members to be involved in security improvements.

Figure 1: Illustration of working water points and 200m radius



Assessing the sanitation situation: our methodology

This research was carried out as a collaborative process between the Municipality of Chinhoyi and the organised urban poor in Chinhoyi. The ZHPF Chinhoyi groups led a process of community identification and sensitisation in the selected communities. The plan was to cover and profile all low-income high-density areas in which the challenges of water and sanitation are most acute. Profiling meetings were held in 11 high-density, low-income settlements. ZHPF proved an important entry-point to the communities and the focus groups overlapped largely with their membership.

During the meetings, community members talked about the history of their settlements and their water and sanitation situation. They also provided basic socio-economic information and commented on their relationship with the local authorities. 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, sanitation and hygiene 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 date of construction, who constructed it, the number of households that it serviced, whether the facility was legal (i.e. whether it was planned and permitted by the city) and whether the quality of the water was safe for human consumption.

A household enumeration survey was carried out in Shackleton with 977 respondents from a total household number of 1290 and population of 4635. The survey collected detailed socio-economic data on the households as well as the water and sanitation situation. Information collected included data on cost of water and sanitation, willingness to pay for services, land tenure arrangements and opinions on how the community was willing to participate towards upgrading and managing improved water and sanitation facilities.

The processes of profiling, mapping and enumeration included constant feedback meetings with the communities, where the data gathered was shared and community participants were encouraged to respond to the findings and propose solutions to identified problems.



Federation members locating water and sanitation facilities in Hunyani.

Four city study on community-led sanitation improvement

Chinhoyi 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.



Federation members at one of the profile meetings in Shackleton.

Helping form alliances that can drive improvements

This SHARE project has opened new opportunities for the alliance between Dialogue on Shelter and ZHPF, and the community mapping processes are already producing significant results. Past relationships between Dialogue on Shelter and the Federation with the City of Chinhoyi have been anchored through the Department of Housing and Community Services. This project has made it possible for the Dialogue-ZHPF alliance to develop relations with the Department of Health and Engineering, enabling greater interaction and collaboration. This has increased the influence of Dialogue on Shelter and ZHPF, giving the urban poor a greater voice in decision-making processes.

Community profiling and mapping have led to a number of significant agreements between the Dialogue-ZHPF alliance and the Chinhoyi City authorities. In 2007 the city allocated virgin land for 244 plots, which can accommodate 252 households to ZHPF for housing development. ZHPF was responsible for the title surveys, layout development, opening of roads, and water and sanitation infrastructure provision. The City authorities provided facilitation and supervision.

In 2009 ZHPF made a request to the City to allow its members to occupy their allocated land in temporary structures whilst they incrementally constructed permanent housing. The City agreed to let families move onto their plots on the condition that there was sanitation. After joint exchanges with City officials to Harare the City agreed to allow the Federation to build ecological sanitation (eco-san) on these plots. This move was very significant as it marked the acceptance by a City authority of an alternative form of urban sanitation, as opposed to the conventional water-borne type that requires a substantial initial capital outlay.

In October 2012, the Chinhoyi city authorities signed a Memorandum of Understanding (MOU) with ZHPF and Dialogue on Shelter to collectively address the water and sanitation challenges in the City. All parties to the MOU agreed to develop and build city-wide sanitation strategies from the bottom up, working in partnership to identify and pilot solutions that are appropriate and affordable to the majority of Chinhoyi's urban poor.

The communities of Mupata and Shackelton have now begun to explore strategies in collaboration with the city authorities. Communities are organising into sanitation networks to manage collective sanitation initiatives such as the construction of communal eco-san toilets. The ZHPF's revolving loan fund has also extended loans for the construction of individual family facilities. Loans are given for the organisation of networks, which in turn give out loans to individual family members and support them through the repayment process. These repayments are revolved and made available for other families to upgrade their own facilities. These initial processes will hopefully provide the basis through which the City can develop and extend a community-led sanitation programme.



Partners

Municipality of Chinhoyi

The Municipality of Chinhoyi is the local authority for Chinhoyi, a medium-size Zimbabwean City with a population of over 70 000. Chinhoyi is also the provincial Capital of the Mashonaland West Province. The City is responsible for 16 administrative wards and the former mining settlements of Alaska and Shackleton. In recent years it has collaborated successfully with ZHPF to actively address the needs of the urban poor.

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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