

# **LINKING URBAN SANITATION AGENCIES WITH POOR COMMUNITY NEEDS: A STUDY OF ZAMBIA, ZIMBABWE AND SOUTH AFRICA**

by

**Gift Manase (Zimbabwe), Martin Mulenga (Zambia),  
and Ben Fawcett (United Kingdom)**

## **INTRODUCTION**

Despite huge investments in sanitation during the United Nations International Drinking Water Supply and Sanitation Decade (1981-90), over 2.4 billion people still lack access to adequate sanitation services and an estimated 3 million children die each year of dehydration related to diarrhoea (WHO, 2000). Although investment programs brought sanitation to 70 million city dwellers between 1990 and 1994, urban populations increased by 200 million during the same period. Whilst sanitation coverage is far lower in rural areas than in towns and cities, those living in poor urban areas face a greater risk to health due to the much higher population densities (Black, 1994). According to the UN Habitat, an estimated 77% of the people in developing countries are expected to live in urban areas by the year 2025, and half of them in informal settlements; thus the provision of sanitation services in poor urban areas is a major challenge for the 21<sup>st</sup> century.

Although recent approaches, including the Demand Responsive Approach (DRA) and the Strategic Sanitation Approach (SSA) (Wright, 1997), recommend demand assessment and involvement of beneficiaries in projects, in many cases governments still ignore poor urban communities and consider their settlements to be illegal or temporary. Even in those cases where governments attempt to assist the urban poor, their activities are hampered by lack of capital, poor statistics, and, most importantly, inadequate understanding of the needs, perceptions, and coping strategies of these communities. This has been exacerbated by the lack of meaningful links between the poor residents and the sanitation agencies, and has resulted in services provided not meeting the needs of the urban poor.

This study, which was undertaken in three Southern African countries, namely Zambia, Zimbabwe and South Africa, aims to make a contribution towards the improvement of environmental sanitation conditions in poor urban areas through bridging the gap that exists between sanitation agencies and the urban poor, by developing effective linkages. In order to achieve this, an assessment of existing levels and the quality of sanitation services, and of the knowledge, attitudes and practices of both sanitation agencies and the urban poor, was carried out in selected poor urban areas in the three study countries. Institutional policies, approaches, strategies and cost recovery mechanisms of the relevant agencies, and the links between poor communities and these agencies, were also analysed. The study was implemented in 12 informal settlements: Harare, Epworth, and Gutu and Gokwe growth points in Zimbabwe, two each in Ndola and Lusaka in Zambia, and two each in Pretoria and Durban in South Africa. A total of 3,323 households were surveyed, and representatives of 53 sanitation agencies, including government officials, were also interviewed.

This brief paper is a summary of a book which will be published later in 2001.

## **RESULTS OF THE HOUSEHOLD SURVEYS**

The surveys show that the urban poor use different sources of water for different purposes; demand assessment studies should note this. In most cases, tap water is used for drinking and cooking while well and river water, because of its greater accessibility, is often used for washing. 11% of the respondents in Zimbabwe, 6.7% in Zambia and less than 1% in South Africa, use water from unsafe sources. Overall, improved water supply is the residents' highest priority.

With a few exceptions in Zimbabwe and South Africa, residents in all informal settlements principally use unimproved pit latrines as their means of human waste disposal. While the majority (80% or more) of the households have some form of latrine, 70% of those in Farmagrida (Gutu), Zimbabwe are without latrines of any kind. Reasons given for not having latrines include issues of affordability and uncertain or illegal tenure. Most of the latrines are in a bad condition and respondents complain of bad smells and overfull pits. Pit emptying facilities are non-existent, requiring new construction in very crowded conditions. Although in some areas "access" to flush toilets is 100% this masks problems of gross overcrowding at communal facilities. For example toilets in Mbare, in central Harare, are overcrowded and most of them do not flush. Up to 1,300 people share one communal toilet with only six squatting holes. Although sanitation is inadequate, the communities do not generally identify it as a very high priority.

In addition to poor latrines, the urban poor also face solid waste and drainage problems. There is virtually no household refuse collection in any of the study areas in Zambia, Gokwe and Epworth in Zimbabwe and Phase 1 (Mamelodi) and Jeffsville in Pretoria, South Africa. Residents in these areas use refuse pits or dump waste indiscriminately. Although most of the residents not served by the authorities use refuse pits, these cause problems of mosquito and fly breeding, and foul smells. Worse still, some children defecate in refuse pits. Even in those areas such as Gutu and Mbare in Zimbabwe, where local authorities provide solid waste management services, at times refuse is not collected for two weeks or more. Domestic, industrial and, in some cases, hospital waste is dumped carelessly on the fringes of informal settlements, endangering children and animals. Some successful solid waste management partnerships have been formed between local authorities and communities; one in the Bester area of Durban is particularly notable.

Storm and wastewater drains are non-existent in almost all the study areas. Where they exist they are neglected and blocked and, in some areas such as Nkwazi, they have become much wider and deeper than normal due to unchecked erosion. Flooding results and the cholera outbreak in Kanyama, Lusaka at the beginning of 2001 has been attributed to the absence of stormwater facilities.

One of the major consequences of poor sanitation amongst urban poor communities is the threat of disease outbreaks. Diarrhoea is the commonest disease suffered in all three countries, followed by malaria in Zambia and Zimbabwe. Hookworms are common in children in all three countries, and in Kanyama, Zambia the infection rate is as high as 29%. 767 cases of diarrhoea and 2,938 cases of malaria were recorded at Gokwe growth point in 1999. Annually, diarrhoea causes approximately 43,000 deaths and 3 million illnesses in South Africa, and costs the country half a billion dollars in lost productivity (Department of Health, 1999). The absence of health-care facilities in most informal areas makes disease control difficult. Little or no health or hygiene promotion is carried out in informal settlements, except during outbreaks of infectious diseases.

## **CAUSES OF POOR SANITATION**

The major cause of poor sanitation in informal settlements in the three countries is the lack of strong, transparent and effective linkages between sanitation agencies and the urban poor. The institutional and financial arrangements and the approaches adopted do not suit the socio-cultural context, nor the needs and priorities of the urban poor. As a result, services do not meet the expectations of the urban poor or are not provided at all.

Urban poor communities in the three countries are characterised by a high proportion of illiterate female-household-heads. Due to extended families, sub-divisions, backyard activities, and renting-out, there are more people per stand than the official standard. In their endeavour to promote sanitation, agencies use scientific evidence to explain the link between sanitation and health, but to communities, sanitation is a part of their way of life, which is influenced more by cultural beliefs and their attitude towards risk. Sanitation agencies should understand all of these factors and plan accordingly.

Institutional and legislative arrangements affect the nature of the relationship between sanitation agencies and poor communities, which in turn affects the provision of sanitation services. In Zimbabwe, unlike Zambia and South Africa, all informal settlements are illegal and there is no sanitation policy for informal settlements. This affects investment in sanitation by both households and NGOs. The structure, reporting systems and chains of commands for local authorities are vertical and allow limited community participation. Whereas communities want local authorities to be accountable to them, the institutional structure makes local authority workers accountable to higher officers. The lack of clear institutional responsibilities, between a wide range of ministries and departments who all have some involvement in sanitation, lack of clear policies and conflicting legislation, all contribute to failure to deliver services.

There is also a gap in terms of services, between those which the urban poor want, and what local authorities think are of an appropriate standard. In Zimbabwe, for example, the Urban Councils Act of 1996 compels local authorities to provide water-borne sewerage systems, while the use of Blair latrines in urban areas is limited, and simple pit latrines of any description are not allowed in urban areas. In South Africa many local authorities are still bent on providing flush toilets and water-borne sewers, even though their resources are inadequate, and regardless of the inability of residents to pay for this advanced service. Whereas sanitation agencies are more worried about the effectiveness of a sanitation technology in blocking disease transmission routes

(health) and safety, the urban poor are concerned about privacy, convenience, status, aesthetics and affordability.

The gap between local authorities and the urban poor is further widened by the absence of efficient communication structures that can help to link the two parties effectively. There is no effective representation of the urban poor in the three countries. Councillors and Members of Parliament tend to serve the needs of influential people while Community Based Organisations (CBOs) are weak, lack legal recognition, or do not exist.

As is the case with institutional arrangements, sanitation agencies and the urban poor have different views about financial issues. Whereas sanitation agencies are worried about cost recovery and economic efficiency the urban poor are more worried about affordability and poverty. Government subsidies are poorly targeted, resulting in benefits to the well-off and those already connected to sewers. Subsidies also introduce market distortions, which discourage private investment and encourage waste.

Tariffs are set through a political process; as a result they neither cover the cost nor reflect the willingness to pay of the urban poor. For example, in Zimbabwe people pay monthly rates of US\$2.14, which are supposed to cover road maintenance, sewer repairs, rent, and refuse removal. Yet willingness to pay surveys show that on average people are willing to pay US\$4.01 for improved household sanitation. Nevertheless, willingness to pay is greatly affected by the extent of current sanitation problems and the benefits that are perceived from improvements, and by tenure, levels of trust in local authorities and household income. The surveys show that there is demand for improved sanitation, but there are no institutional means through which this demand can be expressed. Much better cost-recovery mechanisms need to be developed in liaison between the authorities and the local communities.

Local authorities in the three countries still mainly use a supply-led approach. However, experience worldwide has shown that this approach does not achieve success in informal settlements. Although NGOs use demand-responsive approaches, they also take a project approach, where activities are aimed at achieving project targets. For example, one organisation may be focusing on increasing sanitation coverage while others focus on health, education etc. Yet communities face all these problems at once. There is a need to coordinate developmental projects in poor urban areas, since they are all trying to improve the welfare of the same households, but institutional structures do not exist to facilitate this.

## **GUIDELINES**

Based on the results of the project, the guidelines presented below give suggestions on ways of ensuring cost-effective and sustainable improvements in sanitation in informal urban areas, particularly through development of better links between the agencies concerned and poor communities.

### **The Social Context**

The success of sanitation projects is to a great extent affected by socio-cultural and political factors in poor urban areas. Sanitation agencies should use diagnostic studies to understand the needs, perceptions and practices of the urban poor.

Although most agencies now accept the importance of health and hygiene promotion, the approaches which have been applied have not been effective in changing behaviour. There is a need to link health and hygiene messages with the cultural beliefs and practices of the urban poor. Messages should be designed based on the community's definitions and understanding of health, dirt and hygiene. Use of local animators, health clubs and the PHAST approach (WHO, 1998) help to encourage good hygiene practices.

### **The Institutional Context**

Pivotal to the success of sanitation programmes in poor urban areas is the presence of a comprehensive sanitation policy clearly targeted at poor urban areas. The policy should clearly specify the ultimate goal, and the roles and responsibilities of all agencies, including the poor urban communities themselves. This should also clarify the legal status of informal settlements. NGOs should find ways to ensure de-facto security of tenure where legal recognition cannot easily be obtained

NGOs should try to influence the relationship between the urban poor and local authorities. The relationships among local authorities, NGOs and CBOs should be formalized and legally binding, to ensure transparency

and accountability. NGOs should also promote civic education about sanitation policies and about the roles and responsibilities of different players. Civic education is key in ensuring sustainable improvements in sanitation services through effective community participation and accountability. Civic education is also vital in ensuring effective linkages between sanitation agencies and the urban poor.

### **The Financial Context**

Financing of sanitation services and cost recovery are among the key issues that affect project sustainability. Tariffs should be based on the cost of providing services and the willingness of communities to pay for those services. WTP surveys and full cost accounting should be used to set tariffs which are affordable to the communities and that cover at least operations and maintenance. Given the level of poverty in poor urban areas, some subsidies are inevitable. However, subsidies should be well targeted and should not introduce market distortions. Subsidies are more effective if they are in the form of subsidized credit.

### **The Technical and Environmental Context**

Sanitation technologies and services should meet community needs and complement current practices. Communities should choose technologies and service levels which they understand, want and can afford. Technologies should be environment-friendly and simple, so that communities can manage them. Where possible, communal facilities should be avoided; where this cannot be avoided the responsibility for operation and maintenance should be clear. A communal latrine should be used by a clearly defined number of households who have the right to control use of that facility. Pit latrines should be separated from bathrooms. This study shows that where toilets were provided without bathrooms they were also used as a bathroom, resulting in smell, insects and inconvenience.

Sanitation projects should build on any activities that are already being undertaken by the community or other actors, such as sweeping streets and drains near shacks. In informal settlements formal service providers do not exist but the informal sector thrives. However, informal activities in solid waste management tend to be concentrated on removing waste from the household, and dumping it on the edge of the settlement, thus polluting the neighbouring environment. Sanitation agencies should collaborate with any such informal activities, for instance by improving disposal of solid waste collected from households.

### **Approaches**

The approach that is adopted in the provision of sanitation services in poor urban areas should ensure that the services meet community needs, socio-cultural characteristics and practices. Use of historical mapping, DRA and PRA ensure that community organisation and the people's needs are understood and considered in projects.

Sanitation agencies should aim to solve sanitation problems in the whole context of poverty alleviation, by treating it not just as a health issue but as a first step in poverty alleviation, and as a condition for economic and social development. Sanitation projects are more attractive to communities if they create employment or provide training opportunities for local residents, and should be linked with health, education, and income-generating projects, since all these problems are faced by one household.

All sanitation agencies working in poor urban areas should share the same overall goal and use compatible approaches to solve problems faced by the urban poor, including cost recovery mechanisms.

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