WATER AND SANITATION SERVICE DELIVERY IN THE HIGH DENSITY AREAS OF KITWE

 \mathbf{BY}

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THE UNIVERSITY OF ZAMBIA

LUSAKA

2013

I, Samuel Nko	owani, declare that this dissertation:		
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APPROVAL

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ABSTRACT

This dissertation investigated the nature and extent of the inadequacy of water and sanitation service delivery and access in the high density areas of Kitwe, in particular Wusakile, Buchi, Chimwemwe, Kapoto, Mulenga and Chipata.

The nature of water supply and access examined service coverage and the type of water services (in-house water connections, water kiosks, yard and communal taps). Other services related to the provision of piped water supply were also examined and followed by an assessment on the levels of customer satisfaction with availability, affordability, quality and quantity. The capacity of the Nkana Water and Sewerage Company, the service provider was also investigated.

The study revealed that piped water supply was accessed by 180 (60%) households through in-house water connections, water kiosks, yard and communal taps. Satisfaction revealed that in terms of availability, quality and quantity, the services were far from satisfactory and various reasons were provided. A total of 120 (40%) households, all coming from informal settlements were found using unsafe sources and, therefore, portable water had not reached them. The use of hand dug wells was discovered to be prominent.

The nature and extent of the inadequacy in solid waste removal were investigated together with the capacity of the Kitwe City Council and the Private Waste Collectors. The extent of satisfaction with door-to-door waste collection, collection of waste on communal waste points and market dumpsites were examined. Similarly, the nature of and access to sewerage services and the capacity of the Nkana Water and Sewerage Company was also investigated.

It was found that only 103 (34%) households access sewerage services (flash in, flash out and communal toilets). The majority 197 (66%) households were discovered to be using unsanitary pit latrines as the alternative methods of human waste disposal. Access to solid waste removal services was found equally low with only 90 (30%) households accessing the services. The inadequacy in solid waste removal was further evidenced by the use of open spaces, streets/road alleys and hand dug pits as alternative methods of solid waste disposal.

Keywords: Kitwe, Water Supply, Sewerage Services and Solid Waste Disposal, Nkana Water and Sewerage Company, Kitwe City Council

DEDICATION

This dissertation is dedicated to my wife, Mrs. Gwen Malama Nkowani and my daughter, Kanekwa Nkowani.

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ACRONYMS AND ABBREVIATIONS

MSWM - Municipal Solid Waste Management

ECZ - Environmental Council of Zambia

NGOs - Non - Governmental Organizations

UN - United Nations

UNDP - United Nations Development Programme

USAID - United States Agency for International Development

DTF - Devolution Trust Fund

ADB - Africa Development Bank

AHC - MMS - Asset Holdings Company - Mining Municipal Services

ZCCM - Zambia Consolidated Copper Mines

NWASCO - National Water Supply and Sanitation Council

KCC - Kitwe City Council

NWSC - Nkana Water and Sewerage Company

CBOs - Community Based Organizations

RDCs - Resident Development Committees

MDGs - Millennium Development Goals

GTZ - Germany Technical Cooperation

UNZA - University of Zambia

MLGH - Ministry of Local Government and Housing

JICA- Japanese International Cooperation Agency

ICTs - Information Communication Technologies

CSO - Central Statistical Office

KCM - Konkola Copper Mine

MCM - Mopani Copper Mine

UNICEF - United Nations Children's Emergency Fund

GRZ - Government of the Republic of Zambia