

Living with the Marginalised: Addressing the socio-economic and cultural aspects in Implementing Oka-Dry Toilets in Madimba; case of Lusaka

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Keywords: Oka-dry toilet model, Marginalised, Non-homogenous

Theme: Social, Cultural, Economic and Gender related aspects of dry sanitation

ABSTRACT

The aims of the work is to find out if the concept of living with the marginalised has any influence on the ecological, socio-economic, gender and cultural related aspects in implementing dry sanitation in non-homogenous Madimba community, where a three dimensional sanitation improvement project are being implemented. The Overhang Urine Diversion Dehydrated Dry Toilet (Oka-Dry) is a new sanitation facility implemented after addressing the ecological, socio-economic, cultural and gender aspects based on the concept of living with the marginalised.

Living among the marginalised helps to understand better the multiple cultural diversity, proto peri urban conditions, livelihoods, living conditions as well as the indigenous knowledge on the coping strategies hence, to brand a more focused action oriented behaviour change. It also helps to understand the ecological, local socio-economical activities, gender roles and needs as well as the cultural related aspects which may influence the implementation of dry sanitation in non-homogenous Madimba community. Further, results show that living with the marginalised is one of the strategies of solving problems in a society, whether of a technological or non-technological nature and it does not only influence the ecological and the economic environment, but also the social environment. It is understood that if the potential aspects are ignored, successful implementation of the project would have been at risk due to a lack of general public acceptance and sustainability aspects of dry toilets in Madimba.

INTRODUCTION

The challenges of unplanned settlements in Zambia has resulted into a number of adverse effects that affects urban human ecology, natural ecosystems, human health and social life for both young and old. "The rate of urbanization in Lusaka has resulted into numerous unplanned informal settlements commonly known as peri-urban communities. The peri-urban population is estimated to range from about 40% in small towns to 80% in cities. Lusaka City has 33 Peri-Urban Areas, although local authorities regard these settlements as "illegal" or "squatter" compounds they continue to grow without any planning control." (GRZ-

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MLGH, 2001: 1-5) Urbanization is greatly contributed to increased number of peri urban communities which in most case are not provided with basic social services, posing a major challenge to peri-urban environmental and to the residents, resulting in a number of health risks, environmental degradation, crime, high poverty levels fit to be considered marginalised communities. Madimba is one of the 33 peri urban communities considered to be marginalised. The marginalised peri urban communities in this paper are considered to be characterised among other things, high poverty levels, low income base, land tenure insecurity, lack of dignity, high population densities and lack of social amenities such as basic services to provide water and sanitation, (Kawanga 2005: 8-10).

Lusaka was inaugurated as capital of Zambia (then Northern Rhodesia) on 31 May 1935. At independence in 1964 the city had a population of only 195,700. Currently, the city is a fast growing town with estimated Population of about 2 million.” (CSO Census, 2000: 23-25). Eighty percent (80%) of the population live in un-serviced areas (compounds) or peri-urban communities usually located in flood-prone areas covered with rock out crop. “The common excremental sanitary disposal systems in these areas are on-site Overhang pit-latrines, Overhang latrine and traditional pit-latrines which are characterised among other things by short life span, no standard design, odours, permeability, breeding ground for vermin and pathogenic (bacteria and parasites) making these types of latrines sources of pollution (air and ground water) as well as source of infectious diseases and environmental hazard.” (Lusaka City Council and GRZ, 1997: 10-25)



Fig.1: Overhang Pit-latrine in Madimba



Fig.2: Overhang Latrine in rock out crop

The “pit-latrines cover about 45% and are widely used in high-density residential areas of the city, known as peri urban communities. When they are filled they are emptied into side holes of the pit and back fill or back fill the pit and construct a new one.” (Wamukwamba and Share, 2001: 212)



Fig.3: Traditional Pit-latrine in Madimba

One way to replace the commonly used latrines in these un-serviced peri-urban settlements in Lusaka is by living in these communities and introduce ecological economical sustainable sanitation which are appropriate option to high water table, rock out crop (lime stone areas) and limited residential spaces (Kawanga, 2006 5-6).

Lusaka area forms part of the great mild-tertiary peneplain of Central Africa that stands at 1,260m (4200ft) above sea level.” The flat terrain, high water table and soil porous especially around the areas of limestone, has contributed to high ground water pollution because of the percolation of feecal coliform from traditional pit-latrines into groundwater sources, including shallow wells, making these sanitary receptacles environmentally and ecologically unfriendly in Madimba community (Lusaka City Council and GRZ, 1997: 10-25).

Madimba is a vernacular name meaning farms or Gardens in a waterlogged area. This peri-urban settlement was initially a farm, which later sold to individual farmers who further decided to sell and develop as a settlement during the 1990s. Since then, Madimba community continued to grow without spatial planning controls and in 2004 the population was estimated at 6,000 of which 47% of the population is male and 53% are female. In Madimba the population occupies an area of about 1.2 Square Kilometres (km²) or one hundred hectors (100hactors), representing 0.33% of an estimated 360 Square Kilometres (km²), of Lusaka district. The number of households is approximately 750 occupying more than 500 housing units. The community has three distinct ecological patterns namely, an area with High water table; Rock out crop and Normal flat land. The whole residential land area is presently not serviced with water reticulation and sewer system (Kawanga, 2004, 5-10).