

The soul is willing but...: Exploring community sanitation preferences for environmental sustainability

Extended abstract

Introduction

The Joint Monitoring Programme (JMP) of the World Health Organization (WHO) and the United Nation's Children's Fund (UNICEF) reported in 2004 that the number of people lacking basic sanitation services rose from 2.1 billion in 2001 to 2.6 billion in 2004. Nevertheless, progress in improving sanitation for the world's population remains slow: diarrhoea from unsafe water, sanitation and lack of hygiene causes 1.8 million deaths per year, 90% of which are children under 5 years of age (SIWI, 2005). According to Morgan (2007), a good toilet, together with a safe reliable water supply and the practice of good personal hygiene, can do much to improve personal and family health and wellbeing. However, most of the rural and urban population of Africa do not have access to safe and reliable toilets. In Ghana, for example, the proportion of the population with safe and reliable sanitation in 2004 stood at 35%; 31% coverage for rural population and 40% for urban (CWSA Strategic Investment Plan, 2005).

Meanwhile, the sanitary means of excreta disposal include any one or a combination of the following sanitary models: flush and discharge, flush and forget, drop and store, and sanitise and reuse (Winblad, 1997; Drangert, 1998, Esrey et al, 2001, GTZ, 2003). Although adopting these sanitation models has saved millions of lives, with the exception of sanitised and reuse, the rest of the models have serious health, economic and environmental consequences (Winblad and Simpson-Herbert, 2004). An alternative model, sanitised and reuse, also known as the ecological sanitation model (though not a new concept), is emerging in some parts of the developed and the developing worlds. In this system, urine and faeces are separated, pathogens killed through treatment and nutrients are recycled through composting. It is based on an ecosystem approach designed to reduce health risk, prevent pollution of surface and groundwater and optimise management of nutrients and water resources (Langergraber and Muellegger, 2005).

The use of organic fertilizer from human excreta could only be achieved through the adoption and use of ecologically sustainable sanitation options. But sanitation facilities are only sustainable when people make their own choices and own contribution towards obtaining and maintaining them. In order for it to be successful, people have to experience

the toilet as an improvement in their daily life. Therefore, the main objective of the paper is to investigate the sanitation preferences of residents of Efutu, a peri-urban settlement in the Central Region of Ghana. In any public intervention, having an understanding of what the public desires is very important. Therefore, an understanding of the sanitation preferences of the people is a necessary condition for the successful introduction of ECOSAN in the community.

Study area and methodology

The study was conducted in a peri-urban farming community of Efutu in the Cape Coast Metropolitan Area in Ghana. The 2000 Population and Housing Census indicated that Efutu had a total population of 2,214 inhabitants, 1,052 males and 1,162 females. There were 349 houses and 427 households with an average household size of 5.2 persons (GSS, 2000). The community has a Senior High School but the predominant economic activity is farming.

Data for the study were gathered in December 2008, using a survey questionnaire, focus group discussions (FGD) and observations. From a household list prepared, two hundred (200) households were randomly selected. In each selected household, the head or any adult member who gave consent was interviewed. In all, a total of 154 respondents were interviewed, while 46 were either absent during the period of that study or did not complete the interview process.

The questionnaire comprised three sections. The first dealt with the community sanitation profile (source of drinking water and type of toilet facility), the second dealt with residents' sanitation preferences (the preferred toilet facility and the location of such a facility) while the final section elicited basic background data on age, sex, education level, income, household size and religious affiliation of respondents.

Additionally, two focus group discussion (FGD) sessions (comprising a male and a female group) were conducted to complement the findings from the interviews. The convenience sampling method was adopted to choose the discussants for the FGDs. Consent was sought to tape-record the session and later transcribed to enrich the qualitative analysis. All the instruments were administered by the researcher in the local language -“Fante”. Observation of the existing toilet facilities was done to examine the possibility of converting them into ECOSAN toilets.

Results

The study found that, even though 58% of the respondents presently use public VIP toilets and household VIPs, about two-thirds (65%) of the respondents mentioned the household water closet (WC) as their most preferred toilet facility. Several reasons were advanced for choosing the WC: all the respondents (100%) indicated that it has no bad smell, 80% said it is cleaner while 39% cited security. This reflects some of the positive features of the WC, which include the fact that it is easy to clean, is odourless, is indoors, and has lesser health risk. This result is also consistent with Holden *et al.* (2003) findings that lack of smell together with least handling of excreta, security of an indoor toilet, privacy and comfort are the factors, which influence people's choice of sanitation technology.

When asked where they wanted their toilet facility to be located, 78% of the respondents wanted their toilet facility to be sited in the house while 22% wanted it outside the house. Out of those who wanted it inside the house, 55% cited convenience/comfort, security/privacy (20%) and easy access (15%) as the main reasons for their preference. However, almost all those who wanted their facility outside the house (97%) indicated that they wanted to avoid the bad smell emitted by the toilet facility.

Conclusions and recommendations

The study found that most of the respondents preferred the water closet to other sanitation facilities available to them. However, the majority of the respondents presently use the public VIP toilet because they cannot afford the cost of water closet toilet facilities. Judging from their existing toilet facilities, a successful introduction and implementation of ECOSAN can be achieved since little alteration of the existing facility is required. There is the need for the government through the District Assemblies and NGOs to support individual members of the community to own the ECOSAN type of toilet facilities that are much more suitable for local conditions, and saves water while reducing pollution in the environment, thereby contributing the achievement of the UN Millennium Development Goal on Environmental Sustainability.