



Household demand for improved sanitation

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ACCRA, THE CAPITAL of Ghana, contains about 25 per cent of all people living in towns or urban areas of the country. The Greater Accra Region which is one of the ten regions of Ghana has 84 per cent of its population living in urban centres. This situation has been aggravated by the increased rural - urban and urban - urban migrations in which people from the rural areas and other urban centres of the country flock into Accra in search of better opportunities. One of the undesirable consequences of this rapid urbanisation is the poor and inadequate sanitation in the Metropolis. Over-crowding and congestion have led to the development of slums which in turn have further worsened the sanitation and health problems in the city. The provision of water and sanitation facilities have consequently fallen behind population growth and community expansion.

For the majority of the inhabitants of these urban centres, open defecation is a common practice. People use all kinds of means, including the wrapping of human excreta in polythene bags, commonly referred to as "precious package" for disposal, sometimes over roof tops. People also defecate along beaches or water courses, gutters, etc., because of the absence of usable toilets in the home or even conveniently located near the home.

Identifying the causes of this deteriorating situation takes us to the doorsteps of past Government policies. Past centralised and bureaucratised Government policies resulted in the lack of Participatory approaches in the management of the economy and the provision of social services, which compelled Government to take sole responsibility for providing water and sanitation services to people living in both urban and rural areas.

Present level of sanitation in Accra

Of the three community water-borne sewage systems in the country, two are in the Tema and Accra districts.

In the Accra district there is a central sewage system which is run by the Metropolitan Authority and was laid in 1973 with a "temporary" sea outfall. This is located on the east side of the Korle Lagoon. Co-existing with this are several other individual sewage schemes with treatment works serving military establishments, housing estates, hospitals, etc.

These systems together serve only a privileged few in the high to medium class residential areas.

The majority of the people in low-income, high density areas rely on public toilets (KVIP) and bucket or Pan Latrines in private homes.

In recent times a few households have acquired the Kumasi Ventilated Improved Pit Latrines (KVIP), which was undertaken as part of the World Bank priority work programme in the early 1990s, in low income urban communities.

This programme was implemented in Mamobi, a Suburb of Accra.

It is not the only one of its kind. The joint Ghana/German Governments' household KVIP Latrines Programme implemented by the Accra Metropolitan Authority (AMA) in some Suburbs of Accra helped to propagate the technology in the Greater Accra Region.

The more common facilities, such as public pit latrines and the pan or bucket latrines, are fly ridden and malodorous and quite hazardous and dehumanising as a method of night soil disposal. Besides that pan latrines pose another danger as thieves are known to enter houses through the bucket hatches.

Distribution of households in Accra by type of toilet

TYPE OF TOILET	PERCENTAGE OF HOUSEHOLD
1. Flush Toilet	16
2. Pit Latrine	27
3. Pan/Bucket Latrines	20
4. Others*	37

(Sample size: 352)

** Includes anyone who said he does not have a toilet facility or had one different from those listed above.

Source: Ghana Living Standards Survey, 1989 P.79

Suburbs covered under the survey

The survey covered the following suburbs of Accra; Nima, Chorkor, Mamobi, Osu, La and Madina. They can aptly be described as the low income high density population areas of Accra. A total sample size of 200 households were surveyed, with the sample size proportional to each suburb's total population.

Techniques employed include the administration of questionnaires on randomly selected households. Questionnaires were administered by school leavers who had undergone two (2) weeks of orientation in ProNet's office. Verification surveys were conducted by the author who is ProNet's Officer in charge of Health and Sanitation.

Households were interviewed on:

- Sanitary facilities used i.e., public or in-house.
- Acceptance/suitability of the facilities.
- Expenditures involved or payment of user fees.
- Operation and maintenance.
- Knowledge of improved sanitation.
- Technology options and demand for more and improved facilities.
- Willingness to contribute and participate in the installation of facilities.

Sanitary facilities used

64 per cent of households surveyed patronise the services of Public KVIP toilets. Among the 64 per cent of households, could be those who defecate in gutters or indulge in “precious packaging” of human excreta. The remaining 36 per cent have in-house facilities spanning; Pan latrines, water closets, Ventilated Improved Pit Latrines, etc.

Acceptance/suitability of facilities

In the case of those who use Public KVIP toilets, they find them unsatisfactory in respect of cleanliness, convenience and privacy.

Households using Pan latrines consider them inappropriate, since the technology is more labour intensive and dehumanising as a method of excreta disposal. Thieves are also known to enter houses through the bucket hatches.

Expenditure/payment of user fees

Those patronising the public places of convenience pay approximately one dollar per head for a month. For a household comprising ten people it becomes 10 dollars per month. (Exchange rate C1,940 to a dollar - date 1/5/97). Those with Pan latrines in house pay about 4 dollars monthly to a private individual for emptying. Those with Ventilated Improved Pit Latrines had not yet emptied the pits, and therefore no expenditures were incurred at the time of the survey.

Operation and maintenance

With regard to in-house facilities, all household members are responsible for the cost of operation and maintenance. For public facilities, those who patronise those services felt the Accra Metropolitan Authority is responsible for their operation and maintenance.

Knowledge of improved sanitation

Majority of the respondents had poor knowledge of sanitation. They were unable to make a link between poor sanitation and the presence of diseases such as diarrhoea, hookworm, malaria etc. It came out clearly during the survey that a higher premium has been placed on convenience and privacy by users.

Technology options and demand for more and improved facilities

Technology options identified in questionnaire include; communal KVIP, Household VIP, communal water closet, household water closet and pour flush.

58 per cent of respondents advocated for in-house facilities, with 44 per cent expressing preference for KVIPs, while 14 per cent wanted water closets. The rest opted for Public KVIPs and water closets. Their reason being that human excreta should at all times be kept away from the home.

Willingness to contribute and participate in the installation of facilities

31 per cent of households said they are willing to pay in cash ranging from 5 – 25 dollars. Some wanted to confer with their fellow tenants before taking a decision. 51 per cent said they are prepared to pay in-kind by providing materials such as cement, stones, sand, water and labour during construction.

Constraints to sanitation provision in low income high density urban areas

- Financial
- Attitude of landlords, policy makers and users
- Culture
- Appropriate Technology
- Perception of communities and Public Health Awareness

Existing strengths

- Public awareness of the existence of urban sanitation problems.
- Willingness of users to participate and contribute towards the solution of urban sanitation problems
- Some level of technology is available
- Existence of Local Government Structures which could be used positively
- Existence of Organisations such as ProNet to implement Urban Sanitation Projects in partnership with other stakeholders

Overcoming the constraints to urban sanitation implementation projects

Government and other support agencies should attract substantial investment into urban sanitation projects. Investments in urban sanitation should be sustainable and should target the majority who live in deprived urban areas but who nonetheless should benefit from public health concerns.

Promotional, educational and social activities should be embarked upon to overcome the ignorance and apathetic attitude of landlords, tenants and even policy makers of the need for basic sanitation as a moral right. Sanitation is not merely the construction of physical

infrastructure, but involves improvements in knowledge, beliefs, behaviour and practices which must be preceded by promotional activities and hygiene education.

Surmounting the barriers to effective sanitation promotion requires commitment from policy makers, external support agencies, individual households and communities in the design, planning and implementation of sanitation projects. Stakeholders should adopt community – oriented strategies in which community members play an active role in the planning and organisation so as to incorporate local social values to ensure that outcomes are relevant, appropriate, acceptable, accessible and affordable. The multi-religious and cultural nature of the urban communities surveyed make this all the more compelling.

Evidence from the survey points to the fact that prevailing sanitary facilities in most of the neighbourhoods surveyed, are unsuitable to the needs of households. This explains the request for more in-house facilities based on an appropriate technology.

Technology choice

A criteria for choosing or recommending technology should include; housing, water use, geological conditions, operation and maintenance requirements, user

preference, population density, cost and affordability. Under housing, the number of persons per building and the type of building (single or multi storey). Geological conditions will consider the presence of water or rocks underground. Operation and maintenance issues will examine cost involved and the ability of users to bear the cost. User preference, this involves planning and deciding on technology with the user. Population density will cater for the issue of accessibility and space and therefore suitable technology type. Cost and affordability will address the issue of who is willing to pay what amount. Subsidies may reduce initial capital cost but operation and maintenance need to be considered since this may not enjoy subsidies.

The installation and on-going operation of sanitation facilities must be sustainable economically and environmentally. Environmentally, they should create, wherever possible, positive environmental impacts, preventing or at least minimising pollution of natural resources. It was recently reported in the national daily newspapers in Ghana, that a survey conducted by the Water Resources Research Institute of the Council for Scientific and Industrial Research (CSIR), that over fifty percent of bagged ice water in the city of Accra contained fecal coliform. This is a clear evidence of the poor sanitation system.



Figure 1. Main residential areas in Accra showing the study areas

Urban sanitation problems require the support, commitment and co-operation of all community members. However, one fundamental issue that needs to be addressed is community perception of sanitation. Community perception needs to be oriented towards public health concerns and the need to protect the environment. Evidence from the survey suggests that community perception is tilted towards the need for convenience and privacy, and if these can be obtained by defecating along the beach or derelict areas then the objective is achieved. But that has adverse implications for health and the environment.

Problems of sanitation implementation in low income high density areas arise from a wide range of causes. Poverty, poor access to information at almost every level from policy makers to household members, budgetary crises, attitude of stakeholders, perception, technology, cultural constraints, open access problems, and tenure problems.

Recommendations

- One major obstacle to the realisation of the goal of providing adequate sanitation to poor urban folk has been the inflexibility and non - participation of users in the design, planning and implementation of sanitation projects. There is the need for the development of a flexible partnership between users, the private sector and government agencies. They need to be consulted in technology selection and their financial means and willingness - to - pay should be considered. Government should provide clear policy guidelines that will place urban sanitation on a higher profile. Government should involve the private sector and take on the important role of promoter, planner and co-ordinator.
- *Financing:* External support agencies should be enticed to make large scale investments in capital expenditures. External Support Agencies (ESAs) should be seriously involved in the drawing of the plan, after which they should be encouraged to consider on-site sanitation projects as viable for financing.
- External Support Agencies (ESAs) should have a limited role in providing the seed capital assisting to break new grounds in urban sanitation. The onus should finally rest on the private sector to play an effective role in conjunction with users.
The private sector and users should consider appropriate and affordable technology options and financing mechanisms for provision of sanitation services.
- *Replicability:* As the programme develops there will be the need to consider the issue of replicability. This can be achieved, if the level of services offered are closely related to what beneficiaries can afford. Cost recovery works best by direct payment from the beneficiaries to those who provide the service.

- The choice of an appropriate and acceptable technology for communities and neighbourhoods is crucial for success. The KVIP which is a viable technology, has been proven to work effectively for some households. Such households have innovatively introduced the use of Calcium Oxide (Cao) to empty filled pits without any adverse consequences. Such a technology is strongly recommended for communities with no access problems.
- Joint financing between the user and Government should be seriously considered as a way of redressing the unfair sanitation situation currently prevailing in the urban communities surveyed.
- With regard to the absence of open access for the installation of sanitary facilities in some communities, communal latrines should be installed and managed by the private sector.
- Massive Media Campaigns on the relationship between sanitation and health should be embarked upon by the Government.
- Government should make land available for the construction of communal latrines by the private sector, especially under circumstances where in-house facilities are unworkable.

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