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Exploring Sanitation Issues in Underserved Communities in Sri Lanka

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Abstract

The paper explores the sanitary experiences of people living in three low-income communities in Sri Lanka: Nawagampura, Salamulla, and Mahaiyawa. Qualitative data gathered from 30 households through in-depth interviews were analysed thematically to develop an understanding of the nature and magnitude of the sanitation problems encountered by residents. Salamulla is a high-rise building where residents have relocated from various shanty communities in Colombo. These complete houses have been given for free. In Nawagampura, similar shanty dwellers have been given two perches of land for free. Mahaiyawa is a shanty community occupied mainly by municipal council workers in Kandy. Most of the residents in all three sites do not have any legal documents to claim ownership of the house or land. Overcrowding throughout several decades of occupation has resulted in various sanitation issues such as clogged canals and drainages, overflowing sewages, unclean public toilets, flooding, urinating in public, open defecation, and ad hoc garbage disposal. Formal mechanisms to control these have failed due to unmanageability caused by the magnitude of the offenses and laissez-faire attitudes among authorities or residents.

Keywords: Sanitation, slums and shanties, Colombo, unhygienic life conditions

Introduction

Sanitation, cleanliness, and hygiene-related issues are commonly found in underserved communities worldwide. Low income and education go hand-in-hand in sustaining the social and cultural background necessary for this situation. High mortality rates, infant mortality rates, and morbidity are some direct consequences of the scenario. Malnutrition, disease, low educational performance, and high school dropout rates can be identified as indirect consequences of living in an environment with inadequate sanitation facilities.

This paper looks at toilet, drainage, and sewage facilities available in underserved communities to understand the situation of sanitation in these communities. Discussions of this nature often combine water, sanitation, and hygiene under the theme of WASH. Here attention is placed mainly, on sanitation with some significance given to hygiene.

Distinct concerns related to sanitation could be identified in each of the three communities selected for study mainly in the areas of toilet facilities, drainage, and garbage disposal. The issues related to toilet facilities were inevitably connected to water accessibility because a functioning toilet needs water. This paper attempts to present an in-depth understanding of the nature of the sanitation issues faced by the residents of these communities along with an exploration of residents' perceptions of the same problems.

The discussion opens with a literature review that discusses the impact of sanitation on the lives of low-income communities followed by a description of the methods adopted in the study. The paper then proceeds into the data analysis and discussion followed by the conclusion.

Literature Review

The Millennium Development Goal of Ensuring Environmental Sustainability, later replaced by Sustainable Development Goals, identifies access to basic sanitation facilities as an essential human right and it was officially declared in 2015 by the United Nations (UN) General Assembly (Carrera & Flowers, 2018; Zerbo *et al*, 2021; United Nations Development Programme, 2023). Sanitation involves the use of technology, environmental measures, and social practices to eliminate human waste and ensure basic living conditions for individuals and societies. International sanitation standards prioritize the provision of "improved" water sources and systems for disposing of human excrement. The first include pipe-borne water to homes, public water taps, boreholes, protected dug wells, protected springs, and rainwater collection while the latter include flush toilets connected to sewer or septic systems, pit latrines, and composting toilets (WHO, 2012 as cited in Carrera, 2014). Contaminated and untreated sewage water is a known factor

that causes various kinds of diseases (Gibson *et al.* 1998 as cited in Carrera, 2014; Karn & Harada, 2002; Nelson & Murray, 2008).

Lack of sanitation facilities available to underserved communities in the United States (US) has been theorized as a “racial project of the state” by Carrera (2014) taking a Marxist approach. It is argued that this project “serves to promote a particular health of the population while simultaneously suppressing the wellness of particularly marginalized groups within the population” (Carrera, 2014: 4). However, it is difficult to conceptualize the issues of sanitation in the developing countries as a “racial project”. If one were to use a Marxist approach to the situation in Sri Lanka with regard to sanitation, it is an issue of unequal income distribution that pushes the poor to the outskirts of urban areas forcing them to squat illegally on government land without appropriate sanitation facilities. These groups are certainly marginalized and discriminated against when it comes to many aspects of WASH facilities, access to utilities, and land/ house ownership.

A literature review conducted by Anthonj *et al.* (2020) about WASH facilities available for the Roma community in Europe reveals such a pattern. “Major barriers to WASH access and affordability among the Roma include discrimination, social exclusion, lack of formal education, poverty, geography, legal and social aspects, and cultural perceptions of health risks, political top-down approaches, lack of political will, and lack of involvement of the Roma community in planning.” (Anthonj *et al.*, 2020). Similarly, a study done with a fishing community in Malawi concludes that the community has constrained access to WASH facilities as a result of them being ‘undeserved and marginalised’ (Kalumbi *et al.*, 2020).

In the developing country context, research on the subject focus on the health consequences of being exposed to sewage and contaminated water and open defecation (Boisson *et al.*, 2016; Coffey *et al.*, 2018; Freeman *et al.*, 2017; Kumar & Harada, 2002; Pokhrel, & Viraraghavan, 2004; Qamar *et al.*, 2022; Zerbo *et al.*, 2021). Writing about the Nepalese case, Pokhrel and Viraraghavan (2004) claim that several other factors such as the literacy rate, socio-economic status, and social, religious or personal perception of the cause of disease could exacerbate the health problems caused by lack of sanitation facilities. Ill health and disease lead to issues of children’s education, physical and mental development, and malnutrition which then becomes a hindrance on the economic development of the country in the long-term. It is also recorded that between 1 and 2 million children die each year from diseases directly related to water and sanitation (Bartlett, 2003).

Rapid urbanization experienced by developing countries is a direct cause of the sanitation-related problems encountered by the urban poor. Growth of urbanization is mainly occurring in Asia and Sub-Saharan Africa and it is estimated that 68% of the world’s population will live in urban areas

by 2050 (UNICEF, 2020 as cited by Zerbo *et al*, 2021). Urbanization is usually expected to offer better living conditions to citizens. However, the rapid demographic growth coupled with the scarcity of land creates issues in the provision of water, sanitation, and hygiene (WASH) facilities, particularly among the urban poor. It is claimed that 38% of children aged 0-5 years are stunted. In addition to poor nutrition during pregnancy and in early childhood, poor sanitation has been identified as a cause for this situation (Aguayo, & Menon, 2016). Studies in Pakistan (Mansuri *et al*, 2018), Bangladesh, Nepal, and India (Spears, 2013; Vyas & Spears, 2018) show that open defecation has serious consequences on child health and human capital development as a result of infectious diseases that are transmitted. Aguayo and Menon (2016) show that the effects of stunting cannot be fully reversed through nutritional diets if children are made to live in environments where sanitation facilities are weak or inadequate. The study by Vyas and Spears (2018) further shows that open defecation has an impact on the economic productivity of adults.

Another issue that is brought up in discussions related to sanitation is menstrual hygiene. Mahon and Fernandes (2010) argue that menstrual hygiene management is not given adequate attention in WASH initiatives in the South Asian region. Sahoo *et al*. (2015) connect women's daily sanitation practices in an Indian context with a range of psychosocial stressors that include environmental, social, and sexual stressors. They claim that the intensity of these stressors differed according to the woman's life stage, living environment, and access to sanitation facilities. Through this study, the authors have found out that, in the particular contexts that they studied, sanitation encompassed carrying water, washing, bathing, menstrual management, and changing clothes.

The current study is an attempt to analyse 'sanitation narratives' from three low-income communities in urban Sri Lanka in the backdrop of the above literature. In South Asia, as revealed by literature, sanitation issues are most commonly found in slums or shanty communities. It is anticipated that the situation would improve when such slum communities are relocated into more permanent housing arrangements such as flats. Here, attention is focused on whether such relocation processes have been effective in providing adequate WASH facilities to former slum or shanty dwellers.

Methods of Data Collection

The paper is based on 30 in-depth interviews carried out with residents from three low-income communities, namely Nawagampura, Mahaiyawa, and Salamulla. Nawagampura and Salamulla are relocated shanty communities in Colombo. Of the two, Salamulla is a high-rise building while Mahaiyawa is a shanty community in Kandy.

Nawagampura is made up of 13 clusters of houses with each cluster having different numbers of houses in them. Each house is built on a two perch land with each cluster having six latrines, taps, and showers for bathing, located at the end of the central row of houses, irrespective of cluster size (Alikhan, 2022a). According to the 2012 Census of Population and Housing, the settlement constitutes, in total, 1442 housing units, with 1253 permanent housing units, 182 semi-permanent housing units, one improvised housing unit, and six unclassified housing units (Department of Census and Statistics Sri Lanka, 2012).

Mahaiyawa, located in the Kandy Municipal Council, consists of unstable shanty houses that have been constructed vertically without a solid foundation. These unstable housing units built on mostly illegal land have been built without the use of sound technical know-how and face the threat of falling apart very easily (Alikhan, 2022b). Mahaiyawa is divided into two sections called MC and MT. MC has historically been occupied by municipal council employees who were called “barrel boys” because their main task was emptying bucket-style toilets in the city. Continuing the tradition, even today MC is occupied by municipal council workers who are responsible for keeping the city clean. MT is occupied by other professional groups and their families (Alikhan, 2022b). MT stands for ‘model tenement’. These were houses built by the municipal council and sold to people in other professions; some are employees at the municipality but in non-cleaning jobs such as supervisors. Therefore, MC residents occupy an inferior social position compared to MT residents. A key difference between the residents of the two areas is the level of education; MC residents are low in education attainment (Alikhan, 2022b). In both areas, sanitation facilities seem to be a pressing problem with many houses using public toilets while the few houses with in-house toilets have no access to a proper sewage system for their toilets. Therefore, some of them directly connect to the open sewerage canal (Alikhan, 2022b).

“Laksanda Sevana” or Salamulla as it is referred to in this paper, is a high-rise building located in Colombo comprising three blocks with each block having 12 floors. There are 994 dwelling units with 971 units occupied by relocatees. Displaced families from various parts of Colombo have been relocated to Salamulla. However, the largest number of families (326) are victims of the Meethotamulla garbage dump collapse (Alikhan, 2022c). These families have been given these houses free of charge in exchange for the plot of land acquired by the Government in Meethotamulla.

The qualitative data used for this paper is extracted from a much larger research project¹ that focused on five grids, namely water, sanitation, energy,

¹ Inclusive Urban Infrastructure is a project funded by UK Research and Innovation through the Global Challenges Research Fund under the title ‘Towards Trajectories of Inclusion:

transport, and communication. The present paper deals with 30 in-depth interviews that were judgmentally selected from the above three locations. Ten interviews from each location were selected after careful screening.

The baseline survey was conducted in 2021. In each location, the households were systematically sampled to be included in the survey. The survey focused on gathering information related to housing, water, sanitation, energy, transport, and communication. Accordingly, 488 households from Nawagampura, 151 from Salamulla, and 400 from Mahiyawa were included in the survey.

Ethical clearance for the project was granted by an independent panel of academics appointed for the purpose. The interview data was then analysed thematically to understand the nature of issues faced by the community with regard to sanitation.

The fuel crisis and the economic crisis that prevailed at the time of data collection introduced clear limitations to the data collection process. Residents continued to talk about the issues pertaining to the above crises. For example, when inquired about the availability of sanitation facilities, people in Nawagampura and Salamulla automatically talked about the temporary unavailability of water due to prevailing power cuts. This was a hindrance to identifying the community's 'normal' sanitation-related problems. However, continuous probing and a strong rapport helped overcome this limitation.

Data Analysis and Discussion

Data obtained through in-depth interviews have been discussed here under three main themes: 1) Impact of sanitation on health and social life; 2) 'Sanitation politics'; 3) Gender and sanitation. The first theme looks at the most commonly highlighted issue of the impact of sanitation on the residents' health and its consequences. 'Sanitation politics' focuses on the community level and national level politics that contribute towards the worsening of sanitation-related concerns. The theme 'gender and sanitation' looks at whether and how sanitation issues might be more problematic towards one gender compared to the other.

Impact of sanitation on health and social life

All three communities, except Salamulla, had public toilets and attached toilets inside some houses. Some households could not build toilets inside their houses either because they could not afford it or due to lack of space. In Salamulla, everyone had a toilet inside their houses as it was a condominium. The main concern with public toilets was their cleanliness

Making Infrastructure Work for the Most Marginalized' (grant reference number ES/T008067/1).

which was directly related to health concerns. Parents with young children were the most concerned in this sense. These findings were identical to the findings made by other researchers in the South Asian region.

Some parents in Mahaiyawa did not let their children use the public toilets even when the rest of the family used it. The cleanliness of the public toilet is a concern here and as a result parents are trying to avoid disease by not letting their children use the public toilets. According to one female resident in Mahaiyawa, cleaning the toilet is the community's responsibility. However, getting people together to clean the toilet seems difficult as everyone is at work most of the time during the week. In Nawagampura too, a proper community-level plan for the cleaning of toilets could not be found. The municipal council comes and empties the sewage pit when requested. However, there was no community-level plan to manage the cleaning of toilets regularly.

Everyone here goes to work, so they invite everyone to get together on a Sunday to clean the public toilet. We all discuss it together and decide on a time to do the cleaning work. At that particular time, we will bring all the necessary items for cleaning... Not everyone here is at home at the same time. Everyone here goes to work. So, cleaning work on the common toilet can only be done once in a while. I don't go much since I have kids. ~ Rani², Female, Mahaiyawa ~

People seem to clearly connect toilet facilities with good health.

We used the public toilet because we didn't have our own one.
We feel healthy as we have our own toilet in the house. ~
Rajini, Female, Mahaiyawa ~

A project initiated by JICA³ has been conducted in Mahaiyawa to help families to build toilets inside their houses by facilitating the construction of a sewage system. The above respondent, Rajini, successfully construct a toilet inside her house through the project. The awareness of the relationship between health and sanitation facilities suggests that a significant portion of these residents would be dedicated to maintaining cleanliness in public toilets and the environment.

However, many issues pertaining to cleanliness occurs due to reasons beyond the control of individual families. The congested nature of the communities seems to contribute to the problem. Blockages in drainage pipes are one such problem not necessarily created by residents. In Mahaiyawa, for

² All person names used in this paper are pseudo names.

³ Japan International Cooperation Agency (JICA)

example, the residents spoke of a drainage pipe that gets clogged due to eroded soil that comes with rainwater. If the soil is not cleaned on time, the drainage overflows and creates hygiene issues for the neighbourhood. Furthermore, in many houses, particularly the ones without a toilet inside the house, bath water and drain water from the kitchen are discharged into an open drainage system which contributes to overflowing. People releasing toilet waste into the open gutter system was also mentioned as causing hygiene issues in Nawagampura.

Improper garbage disposal was also a reason that led to blocked drainages. In addition to the unbearable smell and the unpleasant sight, overflowing drainages presented several threats to the residents' health and hygiene.

This is the 19th lane in front of the temple. This drain also overflows. People throw the household garbage to this place too...

This is the Mudukkuwa road. The sewage pit is along this road. When we walk along this road, water that overflows from the pit is everywhere and even our clothes get soaked in that dirty water. Everything gets on our body and clothes when we walk along this road. It is very dirty here. Whether it rains or not, every day the sewage pit overflows. ~ Photovoice workshop in Nawagampura ~

In Nawagampura, some residents who have toilets inside their homes continue to use the public toilet as a means to reduce their water bill. In addition, families depended on public toilets during funerals, weddings, and other gatherings that brought large crowds to the household. However, irresponsible use of the public toilet seems to clog the toilets resulting in the overflowing of sewage. The issue of keeping the public toilet clean is raised again.

Even though we have a toilet in our house, we use the public toilet as well in order to reduce the water bill. However, people do not use the public toilet properly. They clean the toilets thoroughly before using them. But they do not clean them well after usage and throw various things into them. So, the public toilets are in very bad condition. When we cleaned the drainage, there were various things that I cannot tell publicly. ~ Photovoice workshop in Nawagampura ~

Water getting stagnated as a result of these blockages is also a problem that may be hazardous to health. This concern was raised in both Salamulla

and Nawagampura as creating breeding grounds for mosquitoes. In both these locations, the residents raised a high prevalence of dengue.

Yesterday I cleaned gutters with my friend to prevent mosquitoes from breeding. We use TCL to clean. (What is TCL?) It's a strong chemical used for sterilization. It is similar to bleaching power. I bring it from the hospital. ~ Lalith, Male, Nawagampura ~

In addition to cleaning, the communities seem less responsible for maintaining public toilet facilities. In Mahaiyawa, members of the community were found removing the fittings in the toilets and solar bulbs that were fixed by the JICA project. In Salamulla, toilet fittings in some unoccupied houses have been removed allegedly by drug addicts looking for quick cash. These houses have been broken into and left in a state unusable for anyone.

Even though they (JICA) provided a better toilet, those kinds of people don't know how to use it. They go backward. It's useless to try to bring them to good condition. The JICA spent a lot of money. They gave 16000 rupees for a family ~ Lakshmi, Female, Mahaiyawa ~

Even the residents who were pleased with the facilities available to them in the community were not happy with the deviant activities engaged in by drug addicts.

Most of the houses in this area have toilets built up inside... If any outsiders came to this place, we would have kept this public toilet open at that time. Otherwise, we keep it closed because drug users here use this place for their purposes. Someone broke the lock of that common toilet yesterday. None of us who use it would do it. We have the key... Apart from these, the water facilities, electricity facilities, and toilet facilities are all good in this place. ~ Kumar, Male, Mahaiyawa ~

Salamulla residents encountered a unique sanitation-related problem, i.e., the quality of water. Even though all the houses had uninterrupted running water facilities, according to some respondents the water tasted like 'iron' because of the quality of the storage tanks. Even though people are concerned about its impact on their health, they are still left without a solution for the problem. In Nawagampura, a similar situation is reported with regard to the public well that has been dug to provide water for the community. The well is now completely abandoned because the drainage pipes that carry water from

the latrines leak into this well and the water is contaminated. As a result, the residents depend on pipe-borne water inside their houses or the public tap. A reliable water source has completely gone to waste due to heavy congestion and unrecommended construction of houses in extremely close proximity to each other.

Floods during the rainy season were a problem in all three sites. In Salamulla where people were living in flats, floods came in the form of rainwater accumulating on the balcony which later flows into the house. This was clearly a problem in the construction and structure of the building. A similar case was reported from Nawagampura where the road was upgraded by laying bricks. The improved road rose to the same height as the houses bringing polluted water into the houses during the rainy season. Poor construction of the drainage system also brought water into the community during rain. According to the residents, these floods cause several diseases including diarrhea and skin diseases.

In addition to health concerns, the sanitation arrangements in the communities had an impact on the residents' social life. Irrespective of whether people used the public toilets or attached toilets the congested nature of the community or the household made toilet facilities an issue that made time management difficult for individuals. In the mornings when everyone in all the families, has to go out either to work or to school, the time spent in the toilet was a crucial factor that determined their punctuality. One Mahaiyawa resident mentioned that about 20 families use the public toilet along with them and therefore to avoid long queues in the morning, she and her family goes to the public toilet around 4.30 or 5.00 in the morning. In Salamulla, the situation was somewhat different as each household had its own toilet. However, families with a large number of members encountered similar difficulties in time management. Individuals from such families, particularly children, urinated in public spaces and engaged in open defecation. The research team observed the dirty stairways, where people had urinated and spitted, during their field visits to Salamulla as well (See Pic. 1).



Pic. 1. The state of the staircase in Salamulla (Source: field data)

This was a problem for the entire community's social life as well as healthy existence.

When there are three to four kids any mother would find it difficult to manage with one bathroom. When someone is using the bathroom, the others can't use the toilet. Because of this reason children and adults urinate everywhere, around the stairs. ~ Kusum, Female, Salamulla ~

A further issue connected to the use of public toilets was the difficulties of accessibility encountered by residents who were unwell or disabled. Rajini's (Mahaiyawa) husband who was paralyzed had to be kept in her mother's house until they built a toilet of their own inside the house because the public toilet was too far from their house. In Nawagampura, it was reported that residents with mobility difficulties, for whom the public toilet is too far, are using the drainage system as their toilet. This is clearly a threat to the hygiene of the community.

In addition to toilet facilities, improper garbage disposal is also a serious problem that threatened the sanitation of the communities, particularly in Salamulla. This has made the environment dirty and not conducive to 'healthy living'. When you enter the site, the first thing anyone notices are bags of garbage disposed everywhere. Garbage is being dumped in the nearby

canal as well. According to the residents, the canal overflows during the rainy season because of the clogged garbage. These improper garbage disposal practices have developed in spite of the garbage collectors from the municipal council coming to the community frequently. The residents living in the top floors of the condominium are lazy to climb down the stairs when the garbage truck arrives. Therefore, they seem to conveniently drop their garbage bags to the ground from a window. The situation is aggravated by the fact that the lift in the building is broken. Likewise, Nawagampura residents also seem to have developed a habit of dumping garbage into the canal that flows on one side of the neighbourhood.

I argued that I don't want this house even if we don't have any other place, because the stink is unbearable, and garbage is filled up to here. They have been dumped by everyone around there. ~ Thilaka, Female, Nawagampura ~



Pic. 2.The canal in Nawagampura (Source: field data)

According to the above resident, people seem to dump garbage into the canal disregarding the fact that the garbage collectors come to the neighbourhood every day (See Pic. 2). Furthermore, the garbage collected by the official garbage collectors is also dumped on one side of the canal.

Those are the garbage collected around this area and dumped over there. Not only from this area but also the garbage collected from everywhere and dumped to fill that place. We

are very much uncomfortable because of it. The dust is there, it stinks everywhere. Among all these, we also had to take medicine. ~ Thilaka, Female, Nawagampura ~

A further social concern is the fact that in Nawagampura, public toilets cost money for every visit. It costs Rs. 20 per person and for a family of three, it costs about Rs. 100 daily. Some of these families have pipe borne water inside their houses which they use for bathing. Their problem is that they do not have space for constructing a toilet inside the house. Residents mentioned this cost also as a burden on their already restricted social life. In Mahaiyawa too, residents using the public toilet would get higher water bills after the completion of the JICA project. This was a reason for concern for many residents as the amount they would have to pay is still not known.

In all three communities, toilet and drainage facilities were highlighted as the main concern regarding sanitation. People seem to believe that improving these facilities would not only improve their sanitation but also their social stature. In Mahaiyawa, the said JICA project which is supposed to have finished several years ago is still incomplete. People seem to believe that all their toilet-related problems would be over once the project is complete.

(When the JICA project is complete) We are very happy. Because if visitors come, we are shy to send them to public toilets. Therefore, people from outside don't visit us. Even we feel uncomfortable to go there (public toilets) then, how do others go? That's why Mahaiyawa is like this. Only the toilet facility is the problem in Mahaiyawa, other than that all the facilities are available ~ Lakshmi, Female, Mahaiyawa ~

In the three communities studied, sanitation issues were mainly connected to either toilet facilities including overflowing sewage pits and their cleanliness or garbage disposal. The two problems were connected to each other in the form of a vicious cycle. Cleanliness issues were created by bad garbage disposal habits that resulted in clogged and overflowing drainage systems. This situation can be seen as the result of several intrinsic and extrinsic factors. The intrinsic factors are related to the personal characteristics of the individuals such as attitudes. As expressed by Kusum in Salamulla, the houses in the condominium are much better compared to the shanties they lived in previously. Although many faults can be found in the construction and structure of the flats, they now have a permanent resident without the fear of being involuntarily evicted and a roof that keeps them dry during rain. Kusum believes that people should be grateful for what they have received and make a conscious attempt to keep the place clean and neat. The floor on which Kusum lives is kept noticeably clean and has been decorated with artificial

flowers because it is difficult to grow plants due to the lack of sunlight coming in. Kusum and many other residents in the study locations pointed out the lack of attention paid by fellow residents towards maintaining a clean environment. In the case of Salamulla, a considerable number of residents have previously lived near a garbage dump. This familiarity with an unclean environment could also be making these residents more tolerant of garbage.

The main extrinsic factor is the growing population in Nawagampura and Mahaiyawa. As the number of individuals grows within households, the pressure put on limited facilities becomes almost unbearable resulting in blocked and overflowing sewage.

‘Sanitation Politics’

Community-level as well as national-level political influence was also playing a part in the sanitation stories heard in the three sites under study. The majority of the respondents were not happy about the role played by politicians for ensuring the wellbeing of the communities. In fact, many respondents did not see the politicians as being reliable and trustworthy.

Though sanitation could not be identified as an area of racial discrimination, as explained by Carrera (2014), it was certainly an aspect through which the poor were being further marginalized. When looking at the social makeup of the two communities living in the same physical location in Mahaiyawa, namely MC and MT, it becomes obvious that the socio-politically well-placed MT residents were also well-placed in terms of sanitation. In Nawagampura, people who had secured jobs in the government or private sector had managed to construct, purchase, or at least rent houses with attached toilets connected to the sewage system. It was the extremely poor that were facing the gravest issues of sanitation such as overflowing sewage pits in front of their houses. Therefore, sanitation is clearly an aspect through which the already marginalized got further marginalized. Additionally, government policies and decisions about payments for utilities are also another political decision that affects the poor more. The frequent fluctuations to the utility bills brought in by fuel and economic crises facing the country is certainly a factor that has made living in these communities more difficult for the low-income families that depend on daily wages.

In Mahaiyawa, the JICA project has been very instrumental in developing a proper sewage and drainage system. Under the project, the municipal council closed the previous pits with soil and dug new pits for this purpose. After the completion of the project, everyone in the community is likely to have access to improved sanitation conditions. However, even prior to the project, some people ‘believed to be’ more politically influential seem to have constructed attached toilets and drainage facilities without any issue

while others were not allowed to do this. The sanitation circumstances seem to change depending on the amount of political influence one has.

During interviews with residents in all three locations, politicians were accused of appreciating the community only as a vote base. As a result, the community never receives the due attention required for solving their problems of which sanitation was a key concern. The communities, particularly in Mahaiyawa and Nawagampura, seem to have very little trust on their local and national representatives. In the case of Salamulla, the residents have little or no trust in the government authorities who are supposed to be overlooking their wellbeing. Some officers who are supposed to be stationed in the location are never around to be found. In Mahiyawa, politicians have just ignored the much-needed repairs in the neighbourhood.

We have been continuously asking him (local politician) to solve this drainage issue. But there is nothing happening... He refused to do that. We just vote since we have to use our right to vote. ~ Rani, Female, Mahaiyawa ~

There is no one for those issues. They will come and check these only during the election and after that they will not even come to this side. ~ Rajini, Female, Nawagampura ~

Because if they breakdown the houses here and send us outside, the number of votes for them will decrease. They won by individual votes. No additional votes are required. No bonus is required. That's why they do not want us to leave. ~ Kumar, Male, Mahaiyawa ~

As one respondent explained, in Nawagamapura political intervention has played a role in increasing the number of houses in their neighbourhood which has later become the reason for most of their sanitation-related problems.

There are about one thousand eight hundred, two thousand houses apart from those in Nawagampura. Earlier, only people of the flats were there. But later houses were illegally constructed in the area surrounding those flats. This happened due to various political agendas. The number of houses increased rapidly in that manner. Then, when the number of housing units increased, the drains started to overflow and this well became very dirty... The reason for all these things is due to politics. When the governments change, various politicians have allowed unauthorized constructions in this area. ~ Photovoice workshop in Nawagampura ~

Residents alleged politicians of being more concerned about their personal wellbeing rather than that of the citizens they are supposed to serve. As a result, residents had no confidence in their local political leaders.

Although we try to find solutions for these problems, these issues cannot be solved. The drains also do not get cleaned. The member of the urban council comes and he takes one lakh from the allocations. He does a work which is only worth twenty-five thousand and that remaining seventy-five thousand goes into his pocket. This is the truth. The drain does not get properly constructed. Water does not flow properly through the drain. ~ Photovoice workshop Nawagampura ~

There is no use of those ministers. We send the ministers for our needs, but they fulfill their needs. They don't help us. ~ Lakshmi, Female, Mahaiyawa ~

As I can see the politics, they do in our country is disgusting. Whatever it is, either municipality, urban council, or provincial council, politics happening right now is disgusting. I have a lot of examples of that from my experiences. Politicians do not address people's needs but only their own needs. ~ Ravi, Male, Mahaiyawa ~

In Mahaiyawa, the JICA project has given money for families to build toilets inside their houses and built common toilets for the families that cannot build it inside the house. This project is seen as putting in place the infrastructure necessary for improved sanitation. However, the project has also put in place an electricity bill and a water bill for the individual families using the common toilets. Furthermore, the rising utility prices mean that they will not be able to manage by paying the fixed amount of Rs. 100 that they have been paying hitherto. These decisions are all affected by policy initiatives at the ministry level; a situation where national politics interferes with the peoples' way of life.

In Salamulla too, the residents complain that their water bills have gone up after moving into 'flat life' from a shanty setting where people have lived in separate housing units. In the shanty setting, less water has been needed for flushing the toilets whereas now more water is necessary for flushing the sealed type commodes after each family member uses it. Furthermore, in the shanties, people have also used water from the common taps. In Salamulla, having an attached toilet has become convenient but more expensive for the residents.

The economic crisis and the fuel crisis facing the country seem to add certain difficulties to the sanitation conditions in the communities. Residents'

concerns and anxieties about rising water and electricity bills are a result of these crises. In Salamulla, the frequent power cuts are also interrupting the flow of water into the residents' houses as water does not get pumped into the main tanks during power cuts.

Government officers who are supposed to overlook the wellbeing of the community were also criticized for 'not being around' when their services were in need. In Salamulla, it is claimed that authorities from the Urban Development Authority (UDA) gave up visiting the community and paying attention to maintaining hygiene in and around the flats.

When the people started to litter this place, the UDA gave up on us and stopped visiting here. There are many people who use drugs here and rob things. Recently someone has removed the windows here. There was a brass band fixed to a table on top here and someone has stolen it. I heard that it costs around 3 lakhs. ~ Kusum, Female, Salamulla ~

As people, every day we get cheated. Every officer of the National Housing Development Authority, Land Reclamation Board and even the Grama Niladhari is responsible for this. People are very helpless. ~ Photovoice workshop Nawagampura ~

When responsible authorities fail to convince residents about hygienic practices residents seem to take things into their hands and develop community-level control mechanisms. However, the problems persist and some individuals who try to control the situation too have given up because the said community-level mechanisms have led to more problems such as arguments and fights in the community.

We went from house to house and informed them, posted notices, we did everything to control this situation but people continue to do this. Whenever I see someone throwing garbage everywhere I would blame them. Still they have no shame and continue to do that. They don't think of others and very reluctant to go and dump the garbage into the tractor. Those houses have an unpleasant smell because of this issue. ~ Kusum, Female, Salamulla ~

Residents in all three communities seem to suffer from the same issue of being neglected by politicians and government officers. People have been given land, money, and even houses solely with the purpose of 'winning the next election'. Sustainability of the people's living conditions has not been a concern for politicians as well as appointed government officers. Even though

residents realize their true plight, they too seem to just ‘play along’ for the sake of securing some assets that they would not have access to otherwise. It is later that the residents begin to complain when the politicians begin to overcrowd the community with too many of their supporters. Once settled in the community one’s political stance and influence would play a significant role, among other things, in determining the sanitation rights he/ she enjoys within the community.

Gender and sanitation

The community in Mahaiyawa had a very particular concern that was connected to gender and the use of public toilets. The toilet being ‘public’ meant that all kinds of people had access to the space and under such circumstances, there was a higher possibility of more vulnerable groups such as children and females facing certain difficulties. Public toilets were used by residents in Nawagampura as well. Certain aspects of social life that were particularly difficult for the females were discriminatory treatment towards females in other arenas of social life was observable in Nawagampura. However, a gender aspect of sanitation stories could not be heard in Nawagampura. The same was true of Salamulla too as individual households had attached toilets.

In all three communities, inappropriate behaviour by drug addicts was a concern that probably affected girls more than boys. Frequent fights that were initiated by such individuals, the use of obscene language in public and urinating in public spaces were all situations that made girls feel more uneasy compared to their male counterparts. But it was a concern connected to sanitation only in Mahaiyawa. Residents of Mahaiyawa complained of individuals using the public toilets for smoking drugs and for consuming alcohol. Parents with young girls found this to be a serious concern as sending young girls into the same space occupied by drug addicts posed some obvious threats to the girls’ life.

I have granddaughters and if they visit us, I cannot send them to the public toilets... (at the public toilet) We might have to wait for a long time. There are people who use alcohol and there might be arguments. ~ Mohamed, Male, Mahaiyawa ~
It’s not comfortable but, we use that as we don’t have a separate toilet. when we go there (Public toilet) many boys stay around. Therefore, we feel uncomfortable. Some people drink and smoke around there and when we go to the toilet it creates an uneasy situation for us. What to do? We don’t have options. ~
Meenu, Female, Mahaiyawa ~

As explained earlier, all three sites under study had social environments that could be seen as more threatening to girls than boys. However, the only community where this seemed to be connected to sanitation was Mahaiyawa. The concern was raised by residents in the MC area of Mahaiyawa. Low levels of education prevalent among the residents could be one reason leading to this situation. Creating awareness about the appropriate use of public space seems difficult in a community with such low levels of education. Furthermore, as explained by some respondents' community involvement in keeping the public toilet clean was relatively less in the case of Mahaiyawa due to residents' busy work schedules. This probably made the public space more public for various kinds of activities as there was no one to sort of informally overlook what goes on there. Where there is community involvement in keeping the place clean, there is usually a community concern about what goes on there, though this is not always a successful attempt.

Conclusion

The paper analysed qualitative data regarding sanitation facilities in three underserved communities in Colombo. The issues discussed were related to the quality and availability of water, toilet facilities, and the general cleanliness of the physical environment, and the data was analysed under the themes of impact on health and social life, 'sanitation politics', and sanitation and gender.

The residents identified clear threats to their health caused by inadequate sanitation facilities. Dengue and skin diseases were among the identified threats. These were both caused by clogged drainages and overflowing sewage. The sanitation facilities also presented some limitations to people's social life. The overflowing sewages discouraged residents from inviting outsiders to their homes which was clearly a hindrance to their social life. Adding to this, the various utility payments brought in by new sanitation projects and increased utility bills were also imposing restrictions on their social life. The theme of sanitation politics brought out the fact that a majority of residents had lost confidence in their local and national politicians. Sanitation was yet another aspect of life in which people with political influence could do well in. Inadequate sanitation facilities created particular issues for females in Mahaiyawa. This was not the case in the other two communities. Low levels of education coupled with low-income levels put females of Mahiyawa in a more vulnerable position compared to their male counterparts.

The sanitation stories analyzed throughout this paper drew very clear links to the already known cultural attributes of these low-income communities. The residents' rights are always exploited merely as a 'vote base' during elections by politicians because of their large numbers. They are

kept happy by offering all kinds of promises which are sometimes kept. The houses in or the land on which they live are the result of such promises that have been kept. However, promises that ensure peaceful and hygienic living conditions have not always been met. Additionally, politicians and government officers have paid a blind eye to more and more people moving into the neighbourhood formally or informally also for the same reasons of political gains. People who have been relocated are forced to live under 'whatever conditions' available in the neighbourhood by not offering them formal ownership of the houses/land that they have been given. Residents too, though unhappy about their plight, continue in the neighbourhood in anticipation of formal ownership. They do not want to upset the politicians or the government officers because they do not have formal ownership of the property. The arrangement is beneficial for them because the sites are located in very close proximity to all kinds of services necessary for comfortable living. This is again used to their advantage by the politicians.

Their position regarding sanitation marginalizes them further as they are exposed to certain situations that are not conducive to comfortable or healthy living. However, the negative impacts of these outweigh the positive impacts enjoyed by the community in terms of location. Even though people clearly see that their sanitation is threatened, their protests are kept minimal or soft as they have not been given formal ownership of the property. As explained by Kusum, a resident of Salamulla, people's frustration is expressed by way of disposing of garbage everywhere, breaking public amenities, urinating in public places, and in general keeping the environment unclean. This again contributes to unhygienic living conditions in the neighbourhood. As such the communities seem caught up in several difficult-to-break vicious cycles.

In a situation where structural changes to the political make-up seem bleak or difficult, breaking these vicious cycles can probably be done by way of large-scale attitude change in the residents. Continued awareness programmes followed by serious monitoring undertaken by government officers might be able to bring about the required behavioural changes in the community which might open up ways for more permanent structural changes to the system.

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