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'Pee-Poo' Provisions in Dhaka City Slums: Viewpoint from Political Economy and Political Ecology

Md Mizanur Rahman[1]

Abstract:

Dhaka is one of the fastest-growing megacities, where most of the rural-to-urban migrants are settling into slums dotted throughout the cityscape. The government and some NGOs are undertaking different development projects to establish better sanitation facilities in these slums. However, this can lead to the emergence of conflicts of interest, as the government and NGOs end up involving their own political agenda. This paper explores the existing political dimensions, i.e. political ecology, political economy and existing *'pee'* (urination)- *'poo'* (defecation) provisions, associated with slum-sanitation projects. Four slums of Dhaka have been selected for this study. Both quantitative and qualitative methods have been adopted to collect primary and secondary data which has mostly been analyzed qualitatively with thick description, applying the grounded theory approach. This study suggests that the future direction of water and sanitation programs should be based on an integrated political economy approach involving education, hygiene and health, simultaneously with water and sanitation infrastructure.

Keywords: *'Pee-Poo'*, Political Economy, Political Ecology, Sanitation, Slum.

1.0 Introduction

Dhaka is experiencing exponential growth and becoming the fastest growing megacities with a growth rate of 3.26 percent in 2023 compared to the situation in 2022 (Macrotrends, 2023). Over the past two decades, Dhaka's population has nearly tripled, increasing from 8.5 million in 2001 to approximately 14.74 million in 2011 (BBS, 2012), and reaching 23.21 million in 2023. Since the independence of Bangladesh in 1971 Dhaka is experiencing a huge urban population growth (Islam, 2007). A World Bank study demonstrated that more than half of the population of Dhaka is currently living in slums and other informal settlements (World Bank, 2020) and it will continue to rise in the coming years. The reality is that urban informal settlements are largely unauthorized, lacking security of tenure, and residents face some of the most challenging living conditions globally. Deplorable living conditions, illness, and preventable infant/child deaths are daily hardships for a growing population (Razzaque, 2023) without adequate access to safe water and sanitation (Landon and Fairclough, 1998). These impoverished migrants play roles in diverse urban (in)formal sectors, and their concentrated presence not only exacerbates inequality and social distinctions but also imposes additional responsibilities on city authorities tasked with maintaining cleanliness. The result is booming growth of urban slums without having adequate and/or safe sanitation provisions. In most cases, the provisions for the *'pee'* (urination) and *'poo'* (defecation) are dreadful in urban slums as they had to use community based shared options while

[1] Professor, Department of Geography and Environment, Faculty of Social Sciences, Jahangirnagar University, Savar, Dhaka-1342, Bangladesh. Email: m.m.rahman@juniv.edu

operation and maintenance are the key challenge of those infrastructures. This research employs the 'social-technological-governance' dimensions as a conceptual framework to investigate the underlying 'causes' of inadequate sanitation provisions in the urban slums of Dhaka. The assumption is that both the 'social-technological-governance' framework and the 'input-throughput-output' mechanism, within the urban metabolism concept, will not only aid in understanding the factors influencing sanitation projects and provisions but also assess the extent to which local contextual issues and political agendas are recognized, managed, and addressed. Notably, this concept sheds light primarily on political economy as 'social-technological-governance' dimensions have directly linked with financial matters that further shape the relationship between stakeholders. Following paragraphs intend to provide the essence of overall social-technological-governance system of the slums which is necessary to conceptualize the slum context.

In Dhaka, impoverished slum residents lack the motivation for 'self-help' initiatives, as they tend to rely on material support from the state. This dependence has psychological implications, creating barriers to the process of social construction. Ongoing confrontation and contestation among residents regularly disrupt the surrounding social environment. Additionally, it is observable that slum dwellers adhere to a 'design of living' or 'traditional practices and taboos,' providing them with a ready-made set of solutions to their problems. For instance, within the Muslim community, there is a general reluctance to share a household's private matters with outsiders, considering sanitation-related activities as private affairs. Older generations perceive an in-house latrine as bringing impure excreta closer to them, while they prefer open defecation (Nawab et al, 2006). For women, inadequate access is a source of shame, physical discomfort and insecurity (Hazare and Tholiya, 2023). Regarding people's participation it is widely visible whether the sanitation infrastructure was built for public or private use that ironically evolves the concept of political economy that further determines diversified relationships among relevant stakeholders which broadly associates the concept political ecology. Another straightforward issue of political economy is the absence of 'tenure security' (HI, 2011; Mitlin, 2003) that causes non-participation in improving sanitation provision by self as temporary occupation of land unsettles people's minds, and dedicating focus to a specific issue is perceived as a waste of time, effort, and money. Moreover, the problem of exploitation of sanitation facilities and carelessness evokes the metaphor of the 'tragedy of the commons' (Mildenberger, 2019; Hardin, 1968). It is rational to presume that the sanitation situation may not be resolved until residents have access to their own private sanitary facilities.

The aspect of 'technology' stands out as a highly debated topic in the discourse on urban sanitation, given the diverse range of technologies operational globally. In urban Bangladesh, various onsite sanitation solutions, such as pit latrines, twin-pit latrines, septic tanks, cluster latrines, sanitation blocks, etc., have been implemented. Additionally, different types of unhygienic hanging latrines are prevalent in slum areas where government and non-governmental programs have not yet reached. Within the ongoing technological discussion, conventional sewerage systems or 'flush and discharge' systems are labeled as 'anti-poor' technology (Pedro et al., 2020), as they are neither affordable nor environmentally sustainable for addressing the sanitary crisis in

slum areas (Jewitt, 2011). It is argued that a condominial sewerage system is technically feasible and economically suitable for urban slums, offering a comparable alternative to conventional systems (Palma et al., 2023). It has been successful in Latin America and in Pakistan while this technology has never been tested in Dhaka. The popular 'ecosan' technology is strongly opposed in Bangladesh, due to socio-cultural preferences and religious influences (Sarwar, Shaibur and Ahmmed, 2020). Conventional sewerage appears financially burdensome for both the government and individual slum households (Katukiza et al., 2010). Consequently, low-cost onsite technologies have gained traction, offering not only cost-effective construction (DFID, 2012; Kabange, 2017) but also requiring less water to function, making them suitable for rural and economically challenged urban areas (Mara, 2012; Nasim, El-Zein, and Thomas, 2022). Therefore, a range of on-site and mostly low-cost sanitation technologies have been adopted to extend *'pee-poo'* provisions in the slum areas.

Due to the over-crowded nature of slums of Dhaka the governance structure has not been functioning properly. According to SIWI (2016) sanitation governance encompasses the rules, roles, and relationships essential for the functioning of sanitation systems, a facet largely absent in the slums of Dhaka. The governance failure sometimes blamed on 'cultural failings' and the lack of a 'civic sense' (Singh, 2005). Analyzing the governance framework in conjunction with social and technological issues is a crucial approach to unravel the complexities of sanitation provision processes (Allison, 2002). The current research aims to delve into the dimensions of social-technological-governance systems, focusing on the 'patterns of service,' 'patterns of interaction,' and 'patterns of participation' in sanitation projects and provisions in Dhaka. It is worth mentioning here that the concepts of political ecology and political economy are both linked with each other which further illustrated with examples in the results and discussion section.

2.0 Objectives

Different organizations are working to meet the challenge that mainly derived from the inadequate *'pee-poo'* provisions in the slum areas. While prioritizing and carrying out this task through different development projects, many government (GO) and non-government organizations (NGO) get involved with this activity with their own political agenda. Some organizations are urban-centric and some are rural-centric and both of them have been maintaining their own visions, missions, networks, targets and hidden political agendas. Although different organizations are working in this sector, the direction of their works or activities may different such as 'technological perspective', 'software' and 'hardware' issues, urban-rural context, cost and durability, gender issues, 'subsidy-self help-pay and use', 'demand driven-supply driven', and so on which merely calibrated on the political and economical/financial agenda of each of the organizations. The aim of this paper is to determine the existing political dimensions i.e. political ecology and political economy in the urban sanitation sector through exploring the existing provisions and the factors that facilitate or hinder the successful implementation of urban sanitation programmes in the slum areas of Dhaka city. The specific objectives are:

- To identify political agendas and relational dynamics of different actors in selecting urban sanitation projects;

- To recommend suitable *'pee-poo'* service provisions in urban slums of Bangladesh based on existing political ecology and political economy in the sanitation sector.

The above objectives help to identify the individual and/or organizational motives in relation to funding, investment, business or overall economics in the urban sanitation sector and discover the reasons behind those motives. Here, the term 'political' provides insights into power dynamics and urban governance, while the interrelation, interaction, and sustaining environment among different actors or agencies are encompassed by the term 'ecology.' In particular, it refers to the relationships between the actors, service provider organizations and the beneficiaries those are responsible for creating overall working environment that facilitates or hinders *'pee-poo'* project interventions in the slums of Dhaka city. On the other hand, the 'political economy' of sanitation encompasses the social, political, and economic processes and factors that influence the scope and characteristics of sanitation investment and service provision (WSP, 2011; Zohir and Rahman, 2016). In this context, political economy broadens the focus beyond economics and includes the examination of social, political, and economic processes and factors that shape the extent and characteristics of sanitation investment and service provision (World Bank, 2011; Abeysuriya et al., 2019). Therefore, recognizing and addressing the interests of various actors are crucial for understanding and managing the political economy of sanitation, which constitutes the primary focus of this research.

3.0 Materials and Methods

3.1 Study Area

Having the 'purposive or theoretical sampling criteria' two government managed (Mohammadpur city colony and Gulshan city colony) and two NGO managed sanitation projects (Beguntila and Beri-bandh) in informal settlements have been selected for this study. The overall aim of the study area selection is to enable the researcher to focus not only the community experiences but more explicitly on the organizational attitudes and plans over the community and existing *'pee-poo'* provisions and programmes in those slums. A recent report disclosed that Dhaka city is home to approximately 5000 slums (Illius, 2023), covering only 5.1 percent of the city's total land and accommodating about 531,000 persons per square mile (CUS NIPORT & Measure Evaluation, 2006). Most of the slums have no legal status and people are living in those settlements with continuous fear of eviction. On the other hand, government refrains from providing infrastructural support to these slums, deeming them illegal, and the current sanitation policy doesn't include provisions for services in these informal settlements. In Dhaka, slums are predominantly constructed with bamboo, straw, low-quality wood, polythene, and tin sheets, typically featuring single-room dwellings shared by four to ten people (UNEP, 2006). Unhygienic practices, including the use of hanging latrines, are widespread among slum dwellers. Dhaka faces economic challenges, with one of the lowest average per capita annual incomes among mega-cities globally, and approximately half of its population classified as poor (Akbar et al., 2007). The majority of the urban poor reside in these slums, contributing to about 40 percent of the city's population falling within unproductive age groups of 0-14 and 60+, creating a high dependency burden on the working-age population, particularly impacting low-income groups and exacerbating challenges in *'pee-poo'* provisions (Hossain, 2008).

3.2 Data Sources

The data collection methodology primarily involves practical field observation and on-site data collection in selected slums using ethnography and other qualitative and quantitative methods. Qualitative data collection methods such as observation, in-depth interviews, and focus group discussions (FGD) are employed to gather insights. Target groups for in-depth interviews especially considered different relevant GO & NGO personnel, key sector actors and the slum dwellers. Informants from different organizations have been selected according to their involvement in different sanitation projects and activities. Respondents of in-depth interviews and focus groups have been selected through a convenient sample design, which have been finalized considering the field reality and the number of slum households. Qualitative inquiry has been employed to gather pertinent data and acquire an in-depth understanding of the political ecology and political economy concerning sanitation in urban slums. Moreover, qualitative research on this topic is especially useful to uncover and understand the hidden financial as well as governance and cooperation & coordination related tensions and political agendas.

3.3 Tools and Techniques

This study has been considered different qualitative tools and techniques to get on the ground realities. The in-depth interviews conducted with slum dwellers, government/non-governmental organization personnel, and key informants have proven valuable in uncovering a deeper understanding of hidden issues related to social stability, technological appropriateness, and various dimensions of governance affairs. In this research, in-depth interview sessions with community members were conducted in an unstructured manner, allowing interviewees to share extensive insights into their sanitation-related experiences. Relevant government and non-governmental organization personnel were interviewed in a semi-structured manner to explore their working strategies, opportunities, threats, targets, policy responses, and more. In addition to the one-to-one interview technique, focus group discussions (FGD) were conducted in each targeted slum to collect multiple individual statements, extracting a negotiation of meanings of phenomena through intra and inter-personal debates (Nyumba et al., 2018; Machaghten and Myers, 2004).

The collected qualitative and quantitative data were analyzed using a thick description approach. The grounded theory approach was also employed for data analysis, utilizing a systematic set of procedures to develop an inductively derived theory about a phenomenon (Bytheway, 2018; Khan, 2014; Strauss and Corbin, 1998). Additionally, 'discourse analysis' and 'narrative analysis' were taken into account to analyze data from different sources, merging transcripts of talks and interviews (Potter, 1997). This approach helped identify hidden political agendas of various stakeholders.

4.0 Results and Discussion

In the slums of Dhaka, several major issues are giving rise to subsequent minor problems. It is crucial to identify and address these issues responsibly to prevent the proliferation of problems. The following issues shed light on political ecology and political economy that invisibly restricts the pathway of improving *'pee-poo'* provisions in Dhaka city slum areas.

4.1 Land Tenure: The Fundamental Trouble

In Bangladesh, urban slum areas have fallen far behind in hygienic sanitation coverage (SACOSAN III, 2008) and *'pee-poo'* service provisions in those settlements generally hindered by the insecurity or the absence of legal status of land. After examining sanitation programs managed by both governmental and non-governmental organizations in selected Dhaka slums, this research reveals that hindering factors are more dominant than those facilitating change. A major obstructing factor is linked to land tenure, where residents lack legal rights in these settlements and live under the constant threat of eviction. This invisible factor creates visible barriers in sanitation projects, impacting people's mindset with fears of investment, an identity crisis, demotivation for participation, absence of self-help initiatives, and even influencing cultural aspects and living arrangements. This is a universally recognized and widespread barrier obstructing the development of *'pee-poo'* provisions in Dhaka. Although governmental and non-governmental organizations are aware of this influential obstruction, no initiatives have been taken to address this vital issue from either of these implementing agencies.

Despite the national sanitation strategy of 2005 suggesting the separation of sanitation service provision from land tenure to enable utility services in slums, there has been minimal implementation of this crucial agenda. It is observed that impoverished communities are willing to make incremental investments to enhance their living conditions, but this willingness is contingent on having *de facto* security of tenure and the ability to engage with service providers. A CBO representative from Beguntila opined that:

> *"If the government ensures that there will be no eviction within a specific timeframe, like 10 years, we would be open to supporting projects. Under such conditions, we can financially contribute without any obligation to actively participate in them. We just need permanent land, not permanent latrine."*

This statement underscores the critical need to address the land tenure issue as the foremost challenge. Despite the insecurity, certain NGOs are taking risks to promote sanitation services. However, the lack of sound technical guidance results in poorly executed investments. The land tenure agenda not only hampers government initiatives but also discourages other stakeholders from investing in substantial sanitation projects in underprivileged urban areas.

While providing slum dwellers with land tenure seems optimistic, the absence of legal title limits the potential for long-term sustainability, making only short-term solutions viable. Consequently, sanitation projects in informal settlements remain temporary, and permanent solutions are elusive. The realities and dilemmas associated with this land tenure issue are further discussed in the following sections.

4.2 Slum Eviction

Due to unplanned urbanization in Dhaka, frequent small-scale evictions have occurred over the past four decades, including some extensive evictions affecting thousands of impoverished individuals. Unfortunately, the housing needs of the poor are often overlooked (Lata, 2020). These evictions generally took place to reclaim mainly government lands that were slipped away from their possession. Several issues could be

identified that initiated this reclamation process. Apart from the usual filthy physical environment of those settlements the social environment is also an issue as those neighbourhoods are generally recognized as crime hot spots and place for unsocial or antisocial activities. Moreover, residents of slums face social stigma due to prevalent illegal activities like drugs, prostitution, hijacking, robbery, and protection rackets (Alam, Faruk, and Siddiqua, 2013; Sutiyarsi, Koestoer, and Susiloningtyas, 2019). Municipal and city authorities often exploit the unsanitary conditions and negative perception of urban poor communities as convenient justifications for neglecting them. This leads to continuous attempts to erase them from the urban landscape through evictions or, in some cases, by constructing physical barriers to hide them. This anti-slum perception is not only apparent among the service providers but also neighbouring permanent residents are creating obstructions towards the development of *'pee-poo'* provisions in slums. For instance, one CBO representative from Beguntila mentioned the moral fibre of their nearest neighbour:

> *"The surrounding local residents pose a challenge for us. They are opposed to our permanent presence in their vicinity. According to them, 'A permanent latrine is a symbol of permanent residence,' and this belief drives them to strongly resist our community development initiatives."*

He also added that:

> *"We faced numerous water-related sufferings due to their hostile actions. They would deliberately disconnect our pipelines from the main water distribution source at midnight just to create problems for us. I fear that they would oppose our community and advocate for our eviction if given the chance in the future."*

During the fieldwork, it became evident that neighboring middle-class communities express dissatisfaction with the presence of slums and the movement of slum dwellers close to their locality. They believe that the visibility of slum residents in and around their area may negatively impact their social status. Additionally, NGOs point out that larger organizations in the sanitation sector are reluctant to engage in urban sanitation projects. An NGO official highlighted the "fear of investment" in urban slum areas, which is linked to eviction threats, land tenure issues, the risk of project failure, and the complex socio-economic and political context. Addressing the challenges of slum eviction and land tenure, he emphasized that managing, implementing, and achieving positive results and targets in sanitation projects in informal settlements are much more challenging than in rural sanitation projects. Here, organizational vision is more directed to the project success while providing and developing *'pee-poo'* provisions in the slums remain contested.

4.3 Politics in Selecting Project Location

It is quite common that the organizations especially NGOs generally target different large and established slums so that the issue related to threshold population for their service could be addressed which also minimize the risk of project failure. The choice of project location is influenced by various interconnected factors, including donor stipulations, the potential for eviction, willingness to contribute financially, community involvement, socio-economic conditions, power dynamics, and existing sanitation conditions. Some organizations with a focus on urban areas have expressed a preference

for assessing the likelihood of slum eviction before finalizing a project location. They seek information from the community, government entities, and landowners as part of this process. Overall, fieldwork experiences indicate that NGOs often opportunistically select project locations where successful implementation is feasible, aligning with their own political objectives. The service providers always try to expand the list of their successful sanitation projects which reflects hidden political economy that rationally develops anti-urban political ecology. For this reason, it is observed that the well-off slums are always getting attention but the vulnerable slums remain outside the sphere of GO-NGO interventions on the development of *'pee-poo'* provisions.

4.4 Sanitation Technology: Choices, Costs and Dilemmas

The consensus widely acknowledges that sanitation technology must align with cultural and social norms, as social values and cultural diversity significantly impact the suitability of technology for a particular country, region, or community (Murphy et al., 2009; Nakao, 2022). In the planning of sanitation development programs, a crucial decision revolves around selecting the appropriate sanitation technology to be employed (Rahman, 2012). Nevertheless, this section aims to explore the challenges and quandaries associated with choosing sanitation technology specifically for urban slums.

Many studies carried out about the effectiveness of the sewerage system together with 'flush and forget' technology in the urban slum context while it is revealed that this technology is anti-poor technology. On the other hand, the existing practice of using affordable on-site systems including the septic system and open drain disposal are inappropriate in the context of urban areas. The main problem lies in household or community-based latrines in the urban slums where decision regarding the technology always a big concern of the service providers, experts and policy makers. Considering their economic condition, the low-cost pit latrine option seems a solution which is simply unsustainable in the context of densely populated slum areas (Tsinda et al., 2013; Sahiledengle Alemseged and Belachew, 2018). Because, this system usually has less service life, occupy more space in total and need to be emptied after a certain period. Community based latrines create other social problems and chaos where operation, management and maintenance activities are the key. Since governance is the major factor in managing community-based system, the lack of it may result early failure of the technology (Rahman, 2012). Other technologies also have their pros and cons and thus, none of the technologies in the urban slum areas offer sustainable solution. This kind of technological dilemma works as a hindering factor in the development of urban sanitation provisions. Apart from the technological dilemmas, the issue of sustainability, cost of the system, user satisfaction, environment-child-women friendliness, privacy, odour, water availability, convenience, durability, aesthetics, maintenance activities, etc. are other issues of concern in managing urban sanitation system (Rahman, 2006). The above mentioned important issues actually create chaotic situation that restricts the service provider organizations to enter into the domain of sanitation projects in urban slums.

On the global stage, the political and economic landscape of sanitation technology has undergone multiple shifts, yet the government of Bangladesh persists in implementing its 'some for all' and 'supply-driven' strategy to enhance sanitation, emphasizing low-cost technology as a pivotal element (GoB, 2005). Notably, field observations indicate

that in the selected slums where governmental and non-governmental interventions have taken place, a majority of individuals are currently utilizing efficient septic systems, which are considered relatively costly. Intriguingly, people are willing to pay for this service and express a desire for more convenient options, including a water tap inside the latrine, despite challenges associated with the final disposal of excreta, such as blockages or overfilling, that often go unresolved in the slums (McFarlane, 2008). However, it is evident that slum dwellers are willing to invest in high-quality sanitation options. To effectively address this, a key challenge lies in motivating and raising awareness among people about the cost-benefit dynamics, supported by local evidence illustrating the impact of improved sanitation. This approach aligns with the emerging political economy trend emphasizing 'more for some' (IDS, 2011; Nicol, Mehta, and Allouche, 2012). One important quotation came from a Beguntila resident saying that:

> *"We're not seeking free land from the government. Instead, we require assistance from government organizations, non-governmental entities, and various donor agencies. I understand they are investing significantly to enhance our quality of life. However, their ultimate goal can only be achieved if they facilitate land ownership."*

He also added that:

> *"I believe that individuals can construct their own infrastructure, including houses, latrines, water points, etc. However, acquiring land in Dhaka poses a significant challenge for us. Many of us are willing to contribute financially through monthly instalments to secure the necessary funds for the land. If assistance is provided in obtaining the costly land, I am confident that we can support them in achieving their objectives without any additional investment through projects."*

At this juncture, the implementation of this approach within slums could be heightened if the government proactively undertook the task of legalizing these clusters. However, this aspect is a complex and extensive subject, offering potential avenues for further research. Consequently, generalizing solutions for the urban sanitation agenda proves challenging due to the diverse array of socio-economic, political, and spatio-temporal issues intertwined with the matter.

4.5 Residential Status and Identity Crisis

This discussion delves into the legal aspects of residential status and the situation of its inhabitants. There is an argument that these settlements were established and endorsed by the government, either as part of eviction procedures or rehabilitation initiatives. Despite this, the government officially designates these settlements as unauthorized, creating a paradoxical situation. Consequently, residents grapple with an 'identity crisis' as they are aware of the potential for eviction without prior notice, often referred to as a "short notice." Residents in the four selected slums assert the legality of their settlements, citing government permission to reside there. However, a lingering uncertainty persists as the government placed them there on a temporary basis.

Despite the legal complexities, residents often take risks by investing money to enhance their living spaces or construct additional rooms for extra income through rentals. This trend is noticeable in settlements that navigate a delicate balance between two groups – the homeowners and the tenants. Within the community, the status of being a homeowner confers an implicit cultural dominance on this group, given their perceived

power. A distinct divide exists between these two resident categories, with homeowners striving to maintain their property's functionality, viewing themselves as permanent residents earning income. Conversely, tenants, who typically see themselves as temporary residents due to rent payments, may relocate in the face of challenges.

For example, temporary residents in Beri-bandh display reluctance to improve their neighborhood, fearing potential eviction and the loss of their investments. They are also wary that the landowner might start charging them once they create a favorable living environment. In this context, the intricate web of community power and politics shapes the overall social and neighborhood dynamics. However, the stark reality is that all of the low-income settlements are 'temporary' in nature and this 'common' residential status obstructs the *'pee-poo'* provisions and overall slum development interventions.

4.6 Poverty, Dependence and Demands

Understandably, impoverished individuals possess a keen awareness of their economic struggles, often enduring hardships such as hunger and thirst. Direct experiences in the field shed light on the intricacies of poverty and the genuine circumstances faced by people. Recognizing both the stark reality of poverty and the diverse social contexts is crucial for evaluating how individuals respond and their readiness to invest in sanitation interventions. It becomes imperative to gauge the varying degrees of poverty across different dwellings, allowing for a comprehensive assessment of the specific needs and vulnerabilities of the impoverished, guiding appropriate organizational support.

At first glance, it might appear that economically disadvantaged residents lack rationality, are helpless, and depend entirely on external assistance, suggesting they might be unable to initiate community development efforts independently. However, a contrasting perspective emerges, indicating that their apparent dependency and reluctance stem from their precarious residential status as illegal residents. A resident from Beguntila expressed eagerness to embrace self-help initiatives by actively managing and constructing their own sanitation infrastructure.

> *"We are not seeking free residence, and if the government requires us to pay for the land, we are willing to wholeheartedly embrace their proposal. We can commit to making payments through extended monthly instalments. I can assure you that, under these circumstances, all residents will actively contribute to constructing their own sanitation facilities."*

From this discourse, it becomes evident that issues of poverty and dependence are transient and could potentially be alleviated with assurances regarding land ownership. People are hesitant to invest in areas where they lack legal rights to develop infrastructure, highlighting the significance of securing their land tenure. Interestingly, a common thread emerges from field experiences, revealing a shared pattern in respondents' desires for permanent homesteads, comfort, and personal interests.

During in-depth interviews, respondents often expressed individualized demands, while in Focus Group Discussion (FGD) sessions, collective demands and preferences surfaced, yet the issue of land tenure remained a consistent theme. Across all study areas, the paramount concern and demand were consistently focused on securing permanent land for shelter. Discussions indicate a willingness among people to change their behavior if the government plays a role in altering their residential status. However, many are

hesitant to articulate these demands to the authorities, cognizant of the potential consequences and vulnerability associated with their current residential status. Consequently, their primary demand remains undisclosed, with some minor wishes being voiced instead.

4.7 Perception and Participation: Government, NGOs and the Grassroots

One of the most crucial obstructing factors that limiting *'pee-poo'* provisions in the slums is the state's perception on the slums. The government's primary apprehension lies in the fear that legitimizing and institutionalizing slum areas could potentially spur additional migration to cities, further burdening urban governance. Presently, governments, regardless of their political affiliations, consciously refrain from incorporating these settlements into their formal systems. City authorities also exhibit hesitancy in assuming responsibility for these informal clusters, given that their current capacity to provide services to legal connection holders is already strained to its maximum. On the flip side, NGOs tend to select project locations strategically, prioritizing their own survival and performance as a guiding principle. In this context, several NGOs are now working to establish the housing and other rights of the urban poor. Recently, as a result of continuous negotiation with the government agencies, the *Dustha Shasthya Kendra* (DSK) helped to introduce a 'Citizens Charter' scheme that offers the slum dwellers the right to access legal water supplies from the Dhaka Water Supply and Sewerage Authority (DWASA) without the need for a guarantor. Moreover, in 2007, the DSK approached both the DWASA and the city corporation authority, advocating for the transfer of ownership and responsibilities to the respective communities (Jinnah, 2007). This scheme is now in practice which offers some hope for better *'pee-poo'* provisions in the slums of Dhaka.

Typically, large sections of the slum population in virtually all low and middle-income nations face multiple deprivations (Hardoy et al, 2001) and Das (2003) pointed out that these deprivations psychologically affect the residents not to maintain hygiene; and in broader sense, this mind set often restricts their participation in sanitation project interventions. Furthermore, the involvement of grassroots people is frequently jeopardized by the transient nature of their dwellings, as the temporary occupation of land leaves their minds unsettled. Concentrating on a specific issue is perceived as a waste of time, effort, and money, as they consistently engage in a rational assessment of the potential benefits of investing in a permanent sanitation system on temporary land. One resident (Age 58) from Beri-Bandh mentioned that he had to suffer a lot after demolition of his house and that eviction impacted his household economy. Generally, when houses are demolished, money is usually spent rebuilding elsewhere or in the same place that necessarily results less money to feed their family. Besides, some residents from Beri-Bandh think that informal system is more reliable and hassle-free than a formal system. He added that people prefer to remain free from legal constraints, as engaging in legal processes entails certain bindings and responsibilities. Occasionally, individuals are hesitant to be included in any government or NGO database. Therefore, it is observed that different stakeholders are carrying out rational calculation while slum dwellers are not paying much attention to the hygiene practice, and organizations are thinking about the risk of undertaking formal sanitation projects in the informal ground.

4.8 Sectoral Priority, Politics and the Role of Politicians

Sectoral priority could be determined through the budget allocation in the annual development programme. Budget allocation for water sanitation and hygiene sector in Bangladesh has been raised to taka 65.09 billion in 2017-18 from taka 25.63 billion in 2007-08 (Rahman, Wazed and Islam 2018). However, the relative growth in this sector allocation over this period is only 3.3% which is disproportionately low figure compared to the substantial growth of GDP; posing a knock-on effect on the health and education outputs (The Daily Observer, 2015). Findings shows, allocation of sanitation sector in fiscal year (FY) 2015-16 budget is only 0.03 percent. The total budget allocated to these hard-to-reach areas like char, haor, hill-tracts, tea gardens and coastal belt is near to zero and have not received adequate attention. Inequality also exists between the allocation of rural and urban-centric sanitation projects (Rahman, Wazed and Islam, 2018). The increase of budget allocation in urban area from 2016-17 to 2017-18 fiscal year is 32.15 percent, while rural finds an increase of 15.29 percent. Therefore, it could be argued that despite having less allocation the progress towards achieving rural sanitation is satisfactory whereas urban sanitation provisions are still lagging behind due to the complex social, technological and governance related problems.

Political leaders can play a vital role in improving *'pee-poo'* provisions in the slum areas. It is well recognized that, slum settlements act as vote banks of the political leaders (Das, 2003). They are often convinced and the slum dwellers are continuously requested them to secure and safeguard their settlement using their authority and power. The leaders also put an invisible pressure to the concerned authorities not to disregard the logical demand of the slum dwellers. Getting the pressures from both of the sides, the service provider organization or the concerned authority sometimes get troubled, confused and disturbed that ultimately ended up with chaos. This situation, in turn, has reduced the capacity of the government to implement equitable and effective policies to improve the welfare of the whole population. Rahman (2012) argued that capitalist urbanization within Dhaka city is evident in ignoring particular social classes and making infrastructure services fragmented, unequal and politicized. That is one of the reasons of keeping a safe distance from urban sanitation projects where different organizations do not want to enter in such politics (Rahman, Atkins and McFarlane, 2014). The result is inarguably visible while the slum residents are living in the city areas but they are often socially and politically marginalized and are not recognized as citizens in this so-called civilized urban society. International development assistance in the water and sanitation sector through local or national government departments often does not reach the urban poor (Islam et al., 1997) due to some policy-related constraints and thus the formal provisions targeting the urban poor remains very limited (Khan 2022) that ultimately hinder the pathway of developing *'pee-poo'* provisions in cities.

4.9 The Way Forward

Considering the above discussions in this paper, it can be argued that the development of *'pee-poo'* provisions and investments by GO-NGOs and donor agencies in the urban informal settlements are constantly being neglected in an outset where informal settlements lacking legal legitimacy and the constant risk of slum eviction that ultimately hindering the project intervention pathway. However, the issue of land tenure seemingly is the most important factor that is working as breeding ground of other related

problems such as, rural favouritism, state and people's negative perception and participation, identity crisis, slum eviction, restriction and willingness to provide *'pee-poo'* provisions in slum areas and so on. Based on the fieldwork experience, it is evident that the prevailing preference among the majority of residents in the study areas is for permanent land tenure or ownership, rather than prioritizing sanitation, a perspective that appears pragmatic. However, the attitude of the people could be unpredictable and it could be another hidden political agenda of the slum dwellers; while, it cannot be guaranteed that they will not sell their land after getting it legally. Therefore, it needs specific research as well as establishment of rigorous terms and conditions to make further decisions. Moreover, further debate about the technological options needs to be solved and it is evident that the choice of sanitation technology in urban slums also a result of political ecology and political economy and vice versa.

Considering the state of the situation of the country and urban slums in particular, a new direction is necessary to offer a sustainable solution which could be termed as 'More for Some' strategy. For three decades after the 'New Delhi Statement' (IELRC, 1990) in 1990, the concept 'Some for All', has dominated the sanitation sector, where 'low-cost' technologies have been offered to ordinary consumers (Ghosh, 2012). This research, however, understands the fact that the term 'low-cost' should be adopted more cautiously, as it does not necessarily offer long-term sustainability due to their short life span. At the very least, it is suggested that projects employing existing 'low-cost' technologies should persist until sustainable solutions are established (Agarwal, Chakraborty, and Banerjee, 2020). Hasan et al. (2005) argue that providing traditional water and sewerage services to underserved settlements is impractical in the short term. It is believed that the enhancement and extension of sanitation services are more likely to occur when all stakeholders actively participate. Concurrently, for urban areas, a sustainable solution could be introduced and promoted by constructing simplified sewerage systems or septic systems instead of household pit latrines in densely populated slum neighborhoods. These could be connected to nearby sewerage networks constructed gradually across the city. This approach aligns with the concept of 'More for Some,' advocating more significant investment in select projects to establish long-term sustainability through a robust 'social-technological-governance' system. It is imperative for all urban-focused organizations to participate equitably, reducing complexities and fostering a strong political environment.

The concept of 'more' should extend beyond technological aspects to include intensive motivational campaigns, encouraging people to discern between 'illegal-insecure-overpriced-dirty' and 'legal-secure-affordable-clean' *'pee-poo'* provisions. This shift in social norms and understanding, prompting individuals to change their current behavior and decisions, is more likely to succeed with public awareness generated through community education efforts (Chehimi, Cohen, and Valdovinos, 2011; Imam, 2023). However, this empowerment may enable impoverished individuals to attain a sufficient level of political capacity, urging the government to provide services that solve urban *'pee-poo'* provision related challenges.

To optimize the outcomes of the proposed integrated project implementation approach aimed at developing *'pee-poo'* provisions citywide, it is imperative to secure comprehensive participation from all stakeholders (Murphy et al., 2009). The

government's role would primarily involve granting legal rights to the land and providing support in the background for law enforcement, legal, financial, and managerial matters. NGOs, on the other hand, would be tasked with developing and executing field-level activities. Collaborative efforts between the government and NGOs hold the potential to foster enthusiastic participation from the community in this novel direction, instilling a sense of security for investing in their sanitation needs. Additionally, creating awareness about the operation and maintenance aspects is crucial. This involves ensuring that users understand and fulfill their responsibilities, coupled with regular institutional monitoring to identify and address any necessary actions. All these interconnected issues should be integrated into the sanitation policy, ensuring that the urban poor receive heightened attention from all stakeholders. It is also necessary to reduce the discrepancy of data on same aspects that often create disputes and increase the scope of politics and may widen the complexities of existing political ecology and political economy in the sanitation sector. Therefore, another baseline survey is required to see the current sanitation situation of Bangladesh which may stop the practice of producing sanitation related data that are politically constructed to support specific agendas of different stakeholders.

In conclusion, the involvement of political leaders and affiliated parties in the development process should prioritize the well-being of the people and align with a development-oriented approach. There is a belief that, with genuine intent, political leaders can create favorable conditions for the advancement of *'pee-poo'* provisions in slum areas, given the unwavering political passion and commitment that the people hold for their leaders. The collective efforts mentioned earlier fall under the umbrella of 'good governance,' a challenging goal in Bangladesh where the level of 'participation' among different stakeholders remains uncertain. Furthermore, predicting forthcoming development events is complicated, particularly in the context of the ongoing land tenure debates. It remains uncertain whether this issue is poised for resolution in the years ahead in Bangladesh.

5.0 Conclusion

The context in which urban sanitation are to be developed in Bangladesh is found unfavorable from the above discussions. An enabling political, regulatory context and a sustainable policy are required with a vision of minimizing urban sanitation problems. The matter of fact that the history of unstable and polarized politics, limited revenue, weak governance system, budget deficit and other red tape complicacies in the urban areas made the whole sector fragmented. Meanwhile, Bangladesh has made an admirable success in the sanitation sector and now the time has come to fill the gap where the service level is inadequate or deplorable. This research understands the fact that improving and extending sanitation services is only likely to happen if all the actors are involved having a centered, directional and pre-formulated political agenda. It will help rationalize or simplify the complex political ecology where all the relevant stakeholders will employ their own financial arrangements which may offer synergic political ecology and political economy in developing *'pee-poo'* provisions. From the grassroots reality, it can be said that, despite some limitations, the non-profit NGOs are still playing a better role in urban sanitation projects through offering their participatory governance strategy.

Here, it is necessary to ensure strong and effective social institutions such as CBOs that could play a vital role in managing the infrastructures locally and the benefactors' role would be promoting affordable technologies with pre-designed strong motivational campaign and necessary follow up/monitoring activities.

Crucially, this research suggests the implementation of a per capita sanitation coverage plan, coupled with the 'More for Some' concept. The proposed approach involves outlining infrastructure development based on an integrated regional strategy, aiming to diminish and ultimately resolve the extent of the sanitation problem. Introducing a per capita concept addresses the issue of resource allocation, ensuring that urban areas receive more funding in proportion to their population size. This strategy aims to optimize the allocation of resources and enhance the effectiveness of sanitation initiatives. This new political economy 'More for Some' contains potential ingredients to enable sound political ecology or sustainable political environment among the stakeholders. Significantly, this study reveals that the key driving factor for the successful operation of sanitation projects is the 'participatory strategy' employed by NGOs. Conversely, the most significant hindrance is identified as 'land tenure-ship.' The research underscores the necessity for a comprehensive and thoughtful understanding of local contextual issues, along with the recognition of hidden relational, financial interactions, and political dynamics, to address the challenges associated with urban sanitation in Bangladesh. Therefore, the research outcome may help in responding to existing sanitation challenges through understanding the political ecology and political economy from the both service provider organization, beneficiaries and other sector actors. It may assist in preparing a 'short-term' and 'long-term' strategic plan that should be based on the existing factors that facilitate and hinder sanitation interventions. Focusing to the breeding ground of the problem the land tenure issues should be handled to create a clean development ground for extending *'pee-poo'* provisions in urban slums; because, it is believed that 'a major solution may resolve other interrelated problems'. This study also suggests that the future direction of water and sanitation programs should be based on an integrated political economy approach involving education, hygiene and health, simultaneously with water and sanitation infrastructure to tackle the 21st century's urban sanitation problem. All of the above issues may help at different levels of development initiatives of *'pee-poo'* provisions in urban slums and offer solutions through longer term, sustainable, hassle-free and legal sanitation services for the poor people.

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