

A Socio-Cultural Investigation of KAPs on Domestic Waste Disposal System in Sylhet City

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Abstract: - Domestic waste disposal system is recognized as an essential issue for environmental purity and pollution, which is related to health and hygiene of city dwellers. Waste generation is increasing in proportion to the rise of population, urbanization, industrialization, and with the change of lifestyle of people. Safe management and disposal of household waste has become critical phenomena of urban dweller for a sustainable and liveable environment. Sylhet city is a part of it, and the diverse local culture and beliefs influence the domestic waste disposal system, which now becomes a challenging issue of the urban environment. This study strives to investigate how the city dwellers dispose the domestic waste through conventional approaches as their existing knowledge, attitudes, and practices with changing context and needs. The researcher administered this study by using the qualitative approach, and data has been collected by applying in-depth interviews, observation, and case study methods. After eliciting data, it has been analyzed as research objectives and then turned it into the theme and concept of domestic waste management system. The findings of the study show that waste management efficacy is strengthened by urban dwellers mental setting that is constructed based on prevalent local and outer influences. The awareness concepts of cleanliness derive from various effective action as well as cultural beliefs and practices.

Keywords: Waste, Cleanliness, Cultural belief, Mythical practice, Stakeholders

I. INTRODUCTION

The disposal of domestic waste is a major concerning issue in city life. To manage this issue, urban dwellers need adequate knowledge. City householders' shortage of management knowledge makes serious problems in disposing of domestic waste (Sinha and Enayetullah, 2000; WRI et al., 1996). Particularly for the developing countries, it's a challenging issue that relates ecological, social, and economic consequences (Butu, 2014). Domestic waste dumping is recognized as an essential cause of environmental pollution and health hazard (Mamady, 2016; Pfammatter and Schertenleib, 1996). Waste is also an unavoidable by-product of human activities. It is unusable and worthless materials or substance which is leftover after primary use. Improving living standards in cities, urbanization and economic development are important causes leading to complexities and quantities of waste generation. A member of urban society is producing massive waste than before. The urban people massive consumption of new product creates enormous wastes. In developing countries, due to inadequate infrastructure facilities, understanding and resources have a crisis of waste disposal system and management (O'rien 2005). The growing

domestic disposal waste has become an issue for urban dweller to the consequence's urbanization (Idris, et al., 2004). The last decade in Bangladesh waste generation has improved enormously at an average annual rate of 8.90% per capita per year (Hasan and Islam, 2005). It is estimated that waste generation in Bangladesh would be reached above 46000 tons per day by 2025 (Nahela, Daily Star, 2015). The study area Sylhet city is the part of this process and having more than 1 million inhabitants. Therefore, it is necessary to make awareness among the urbanites about household garbage along with industrial products' wastes how to dispose of those things.

A mismanaged waste disposal system degrades the quality of urban life and the environment. Therefore, the researcher wants to explore Knowledge, Attitude and Practices (KAP) of household waste disposal system with cause and consequence of local settings. As the United Nations Conference on Environment and Development (UNCED), which held in Rio-De- Janeiro (Brazi) in June 1992, requires all countries to develop waste treatment and disposal criteria. The city dwellers should dispose of all kinds of waste as to international guidelines (Rahman, 2006). Waste is a social contagion in which the negative qualities are transmitting to surrounding people. Two main factors are causes of urban waste problems. Firstly, the increasing amount of waste results from the changes in lifestyle and consumption patterns. Secondly, various types of waste are produced, such as plastic or vehicle-related waste (Hofny, 2006). One of the most burden issues of Sylhet City Corporation would be waste management at the beginning of the 21st century. Waste is found everywhere, especially in main roads, houses, schools, parks, lakes, hospital clinics, and the dust bins are seen overflowing on the streets. It is a big problem for the pedestrian of city dwellers, as traffic pathways are becoming worse. It has an intense negative impact on urban lives, including social contagion to surrounding people.

The purpose of this study is to focus on the origin of domestic waste and its dispose of knowledge, ideas, and practices. Different varieties of waste including food waste, polyethylene, solid waste, plastic, glass, paper, and metal are produced in our everyday life (Sivakumar and Sugirtharan, 2010), which makes disposal system more complex. This study investigates various factors which impede effective and efficient domestic waste management.

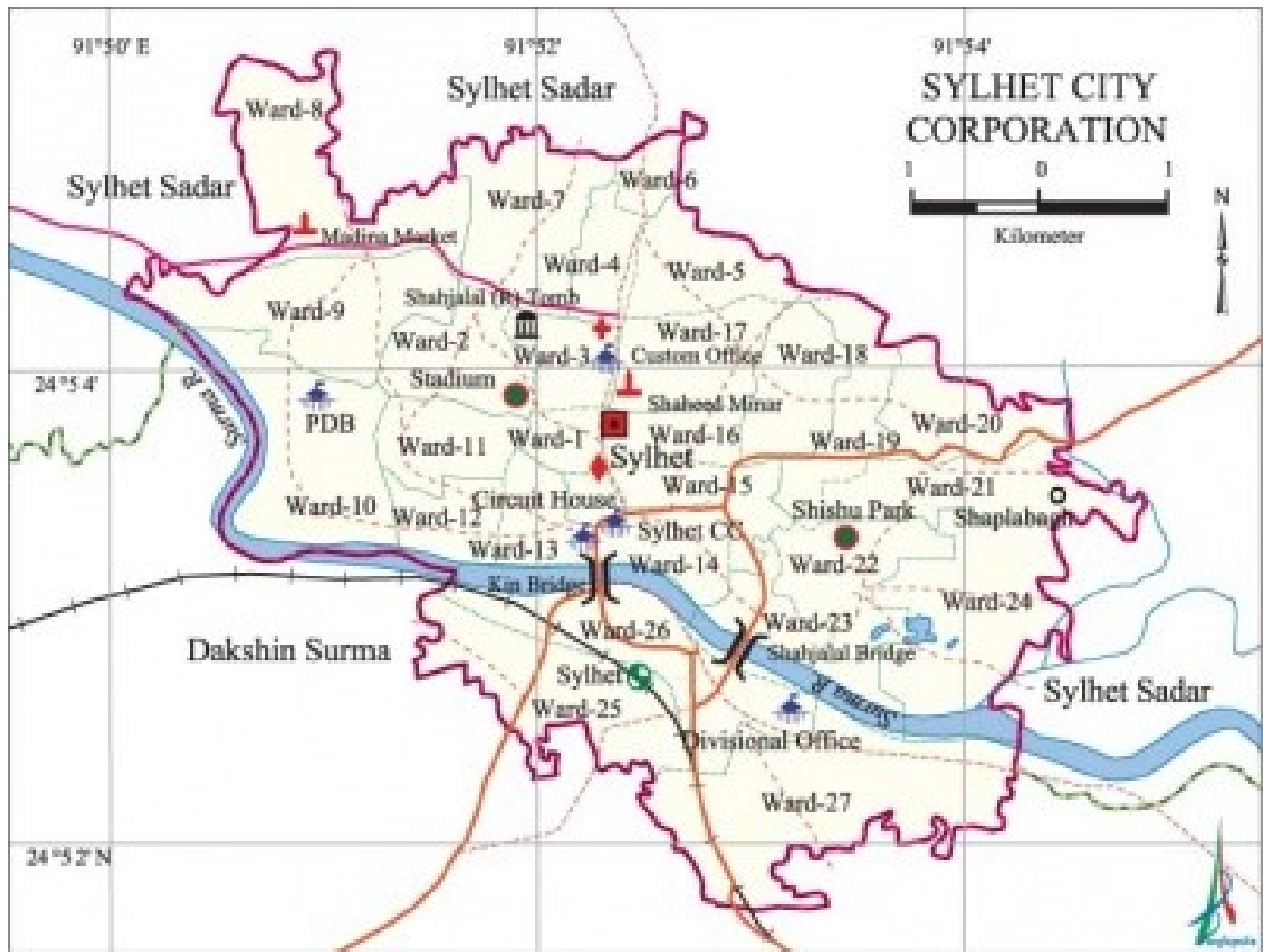


Figure 1: Map of Sylhet city.

Source: Banglapedia

Mistaken attitudes and misconceptions of people towards disposal issues contribute to waste management problems and health hazards (Banjo et.al., 2009). Local beliefs and culture are related to domestic wastes disposal practices (Roberts et.al., 2017). The study was undertaken to understand and analyze the household waste disposal practice in Sylhet City Corporation.

II. MATERIALS AND METHODS

Study Area

To conduct this study a research area has been selected in Sylhet City Corporation in larger Sylhet Division (Figure 1). It is known, Sylhet has a great historical background as the very early history of non-divided Bengal. It is familiar that Sylhet has a great historical background and has a very early history of non-divided Bengal. Once it was the part of Assam. It has a unique socio-economic and cultural heritage with greenery landscape and climate, which is quite distinct from the other part of the country. Sylhet City Corporation area is 27.96sq. Km, located in between 24°51' and 24°55' north

latitudes and in between 91°50' and 91°54' east longitudes. On the north and east, Sylhet city neighbours Sylhet Sadar Upazila and on the south and west it is bounded by Dakkin Surma Upazila. There are 27 Wards in Sylhet city Corporation, and two residential areas such as Sraboni and Shah Sikander have been selected under Modina market in ward number 9 for primary data collection. Akhalia high-way road is on the west and Ambarkhana road is on the east and Osmani medical and Bagbari road is on the south of the study area. This study area was purposively selected adopting a pilot survey technique.

This study is administered by qualitative research design with social survey method to know the socio-cultural knowledge, beliefs, and practices of the disposal system of domestic waste. The main idea behind using qualitative research is to know how the cultural beliefs and attitudes of householder work on domestic waste disposal strategy in a local setting. In this study, a qualitative approach has been used to know the perception of waste disposal of household-head. The researcher uses primary and secondary sources of data to get a pragmatic understanding of research objectives. In

primary sources of data collection, data were collected by using various methods and techniques - in-depth interviews, observation, and case study methods, as secondary sources of data, Newspapers, Journals, and Articles are considered as relevant material to the subject of the study. The researcher collected data for this study throughout several weekends of six months from 2018 to 2019. The researcher engaged on 60 households and in open-ended interviews administered in Bengali language. From this study area, the researcher has selected 60 participants from different background both male and female of the different profession such as housewife, teacher, and businessman. To conduct this study researcher uses emic and etic approaches in data collection process about the experiences of the participants, their daily activities, and the context of prescribed issues. After eliciting data, it has been analyzed and later thematised as research objectives and research questions.

III. RESULTS AND DISCUSSION

The consequences of modernization, urbanization, and industrialization waste disposal systems are a big challenging issue to the development of health and hygiene situation of the urbanites and their setting. Cultural belief and prevalent practice play a vital role to reshape householder disposal behaviour. The findings of this study have shown the waste disposal trend and culture, including existing knowledge, attitudes, and practice. Where and how the city householder put and organizes the particular debris. What way it is packed or dumped, either it is (open place, ditch, home-dustbin and pilling on and under the ground) processed as religious perspectives or in cultural and ritual spirit or it is somehow related to sacred and profane based disposal behaviour. Sometimes it may call mythical belief, which is responsible for waste disposal system. The following concepts and themes of KAPs of domestic waste disposal systems researcher have illustrated.

Waste Disposal Trend and Culture

Currently, city dwellers live in an industrial and technological arena, where production, distribution, and consumption have increased. Hence, the household waste disposed of also increased simultaneously. Therefore, domestic waste disposal becomes a significant issue to the householder and consider it as a serious problem to health and the environment. The study findings showed that the participants accumulate the domestic waste from the house as their local prolong mentality. The city corporation-supported any campaign has not touched the heart of the varlet of households. They do not follow any specific method or health rubrics for waste disposal management. Waste dispose of is practiced as householder norms and customs. Everybody disposes of waste as their system according to householder's varlet age, gender, education, income, and position based on the types of wastes.

Participants practice disposing of waste in several ways such as open place, drain, home-dustbins, and pilling waste into the ground. Disposing of waste in an open place is a

collective dynamic in the study area. Householders dispose of waste in an open place to save their cost and showing their inability to pay for the disposing process. The informants are throwing waste into the water outlet, which is another scenario of disposal practiced among them. Sometimes participants are disposing discards into roadside ditches. They keep all kinds of waste into polythene, dispose of it attached to the sewer. It has been found that participants frequently dispose of garbage at a far distance of the open communal site, ditches, ponds, and lakes. In the household quarter, waste is put into small containers. They keep waste in a plastic basket or bowl. Without any separation, they keep waste in this basket. Sometimes they use an old plastic bowl or other broken container. This picture of this study is similar to the study of Visvanathan and Trankler, 2010; Vining & Ebreo, 1990; Chan, 1998 and Tucker, 1999. Someone builds a small container with brick or bamboo materials and keep daily dirt there. This finding shows that most of the varlet dumps open dumping or open landfills, which are most common features for all developing countries whereby the refuse is dumped in low lying areas on open land where waste is tipped haphazard. A few participants said that a few kitchen discards are used sometimes as fowl feed. The study figures out based on data that half of the householders dispose waste at home dust-bin, at the same time, one-fourth householders manage it in an open place. The rest householders dispose of waste at pilling land and water outlets. The nature of domestic debris is industrial food packets, vegetable peels, fish scales, and piece of papers, bottles, and polythene.

Religious Precept Stimulate to Dumping Performance

Religion plays an active role in reshaping waste disposal performance. It is seen as a powerful force to create a positive habit of practice and attitudes of mind to be successful disposal behaviour. Religious belief is very much powerful that guides everyday lives. In the study area participants also practice religious customs for discarding waste every day. According to participant views, spiritual belief motivates individual to remain clean, and others are interested in participating in cleaning campaigns. Moral and religious ethics of city dwellers work as the most effective technique to dispose of waste in proper time at the proper place. It instigates participant not to throw waste on the streets freely. Religious customs motivate householder to dispose of waste efficiently. They believe that "cleanliness is part and parcel of Iman of Muslim believer." This belief influences them to dispose of waste more actively. When anyone gives more importance to the holy books, he/she follow the cleanliness and practice it seriously. This situation is being practiced among the participants in the study area, and the participants become conscious of their disposal place and practice. Religious belief prevents them from disposing of waste in any sensitive and public place. It promotes disposing of mentality significantly. The concept of sacred and profane also derived from the religious belief that motivates their disposal practices.

Sacred and Profane Associated to Disposal Practices

Sacred is a concept that motivates householders to dump outlook. The household associate always wants to remain clean their respective residence with prayer places. If any waste is seen somewhere, they immediate clean it, they think dirt unclean the room. A group of participants observed that various followers of religion like Hindu/Muslim or other religions' people at the time of worship keep the place sacred by burning incense and later ashes of incense is cleaned for purity. The participants offered different food item to God to get a blessing from Him, and after finishing worship, they clean the holy place. A group of participants illustrated that 'every day in the morning they remove all types of waste and the unwanted thing which spread stink in the surrounding area, and then they finish bath for holiness. As a religious norm, participants are used to disposing of waste every day. After disposing of waste and cleaning room, they take a bath and go to worship and do other activities. In the study area, most of the household participants are Muslims and Hindus.

Both followers of religion believe in the sacred and profane concept. In Islam religion, Muslim emphasize on the prophets' way of life, where life is surrounded by physical and mental purification. They believed that their Prophet Muhammad (Pubh) was clean ultimately. As the Prophet's spirit, they suppose that waste should be disposed of regularly. They believed that in the holy book Al Quran is described waste disposal system and cleanliness in sura "al Hajj". They believe every verse of it maintain this spirit. As a Muslim, they follow Al Quran that motivates to dispose of waste in a better way.

Conversely, Hindus believe in the Gita. A participant illustrated, "we believe Hindu religious precept and try to keep ourselves tidy from all physical and mental pollution. This statement also influences Hindus to obey the religious precept of overall cleanliness.

Profane means are forbidden. According to all participants in every religion has profane or taboo side. As a Muslim/Hindu, they are administered by sacred and profane issues. Religious belief compels participant to uphold well being of people. If, anyone speech regarding cleanliness is not inspired in any religious precept that seems to be harmful to health, hygiene, and environment, and that is profane and consider it as taboo. The aim of profane is to nourish the concept of domestic waste disposal system properly and expedite it to a large extent. In everyday life, the participant maintained profane issue to keep them pure and purify their niche. So, they become aware not to throw waste anywhere and not to throw unwanted things sporadically in the public and private sphere. This belief strongly influences them to dispose of waste in the proper site. They think if they dispose of waste as their will in any place, it would be harmful to health, air, and environment. Disposal behaviour is actively controlled and constructed by belief. In the Hindu religion, the profane concept is also followed. In the morning they dispose

of all kind of wastes because they think if they do not practice it, they became impure. One of the participants illustrated that "we do not touch anything and even not wash dishes and take a bath before domestic waste disposes of. It seems to us. We are impure till before doing that." Householders do not start any work without disposing of waste.

Mythical Belief induce Disposal Practice

Myth influence on householder's disposal behaviour strongly. Local prevalent knowledge reshapes mythical belief and recognizes it as part of the culture. Traditionally household members dispose of waste in the morning. They never dispose of waste at night, which is forbidden to them. A group of participants said, 'we accumulate all kinds of waste at night. It seems to us, and waste should not dispose of at night.' Householders believe and firmly maintain this custom. If they dispose of waste at night, Angel will not come at home and increase of Genie. However, Householders believe various types of diseases could be spread out if waste is disposed at night. In the study found that various customs associated with the disposal of waste. Traditionally householders practice this custom. Usually, members of the family cannot go outside before the disposal of waste. Participants believe that before disposal of waste if anyone goes outside, God may harm him. A group of participants illustrated that 'no one in their family could not go outside till before disposal of waste'. Householders, even members of the family cannot go working place from the stale room (local people called it basi room). It seems to them harmful to health. However, mythical perspectives make prompt householders to dispose of waste regularly. The previous study (Roberts, et.al., 2017) showed that waste is not just treated as dirt that needed to be discarded. However, it should be treated and accumulate as food for spirit beings. Because they think the spirit being is greeted by unwanted food particles. While the spirit being will be satisfied then the miseries will automatically run away.

Different Stakeholder's Engagement to Cleanliness

Female householder thinks disposal task of domestic waste is only for them. They are more liable to dispose of waste than other family members. Sometimes family member assists in keeping the basket of waste outside from house. When *moylaowala* (garbage carrier) come and knock at the door, then female household-head or their respective assistant gives the loaded basket of waste to them. Most of the cases maidservant, elder son or daughter also helps householder to reserve waste and give the waste-basket to garbage carrier. The aged member of the family who is breadwinner never does the work of disposal. They are considered as an honourable member of the family. Honour concept is strictly associated with waste management and practice system. Usually, disposal of waste is also done by house-varlet, and those are not engaged in productive activities in the family. Waste has been collected, preserved and placed by the weaker member of the family such as children or dependent women, widow or daughter-in-law or housemaid (Afroze, et.al., 2008; Banjo

et.al., 2009). However, the study findings showed that in some instances, older people of the family are skill managers for the domestic waste management system. Community-based strategic decision is a new approach in a domestic waste management system. Local people recruit boys or male persons; they are known as 'Moylaowala,' they collect waste from door to door following a specific schedule. They carry it by their three-wheel van and dump it in a particular place where it is segregated as organic and inorganic materials by the street man, women and, children. These people are self-employed, and later they sell it in the scrap market for their livelihood.

On the other hand, city dwellers/householders pay money to the garbage collector (van-man) near about 100 to 150 TK per month. These types of payment systems are also observed to the previous study of Ahsan & Zaman (2014). Another observation is that most of the participants live in a rented house; they keep waste in a big container or brick hole from outside of the home that is given by the house-owner. The owner observes and monitors it for proper disposal. If waste becomes vast, the house-owner forbids keeping it in dram/hole due to overflow. The house-owners always try to aware the leaseholders/tenants to dispose of waste timely, what they learned from opinion-leader, social activist, health workers, and cleaning campaign. The sense of waste dumping concept and strategy of city dwellers are stronger than earlier due to the awareness of house-renter and house-owners. Besides, City Corporation and various NGOs play a dynamic role to dispose of waste from the household. However, city corporation vehicles and agencies do not collect waste directly from the household, and then it is transferred to City automate van/vehicle. The city corporation authority dumps it in a safe place. City Corporation provides this kind of service instead of paying taxes of household owners or by paying money of local community peoples. The findings also show that city corporation vehicle comes two times in a week if some reasons vehicles fail to come in the respective area, the householders suffer very much to remove waste because of having limited space of urban disposal site.

IV. CONCLUSIONS

The KAPs study of domestic waste management indicates that wastes are classified as an organic and inorganic material leftover, which need to dispose of properly to avoid the messy environment of urbanites households. It is a cause of an unhealthy household problem to the urbanites if not manage it well. The findings found that the increasing amount of waste results from the changes in lifestyle and consumption patterns of goods. Income and household size are the most significant factors affecting the quantity of waste producing from householders' consumption. The rates of waste generation of the rich family are generally higher than the lower family. This study also shows that wastes disposal practice is related to the personified issue. This issue derives from personal responsibility, shared and learned-culture of the domestic waste management system, including acquired education.

Informant thinks if they do not dispose of the garbage from the settled place, it views ugly and spread the bad smell around the setting. The concept of 'health and what others think' that issue imposes individual to become clean and disposes of domestic wastes. Research findings illustrated that some dominant features instigate to the cleanliness practices. Telepathic and mythical belief, sacred and profane ideas, as well as religious precept, induces householder to dispose of waste appropriately. Besides these, different stakeholders' engagement and their roles help to proactive the urbanites to apply hygiene knowledge and practice to the domestic waste treatment process.

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