

Study on locations of public toilets necessary in Sylhet Metropolitan city

Shah Md. Hasin Shad

Abstract

Proper sanitation is a human right. The need for public toilets is growing as the urban areas are increasing. Sylhet is a metropolitan and tourist-centered city. This place is the habitat of many people and a preferred travelling destination for many. As the city grows, the lack of public toilets is also causing some problems. There are only seven public toilets in Sylhet metropolitan area. This article tries to find locations in the Sylhet metro area where public restrooms should be installed. The paper examined the existing public toilets and collected data by interviewing local residents and toilet caretakers. Observing the tourist movement in Sylhet city and studying different articles were also done to set a proper approach. The report only suggests the places where public toilets should be constructed. No design has been proposed in this study.



IJSB

Accepted 09 August 2022
Published 12 August 2022
DOI: 10.5281/zenodo.6984196

Keywords: *Public toilet, Location, Sylhet Metropolitan, Existing public toilet.*

About Author (s)

Shah Md. Hasin Shad, Lecturer, Leading University, Sylhet, Bangladesh.

1. Introduction:

A city is a successful one when it can fulfill the basic needs of its people. One of the basic needs is the facility of proper sanitation (Yan et al., 2021). The lack of sanitation system is considered as a global problem (Reddy et al., 2019). Daily a person spends 8-10 hours outside for work (Shafi, Imam, Opel & Islam, July 09, 2011). During this time, he needs a private space to clear his bladder and bowel if needed (Kitchin & Law, 2001). According to World Health Organization, public toilets are essential for age-friendly cities (Help the Aged, 2007). To create a sustainable and comfortable city public toilet is essential (Greed, 2004). Due to rapid growth of urban area in developing countries, increases the high density and unplanned settlements which are dependent on public toilet for healthy sanitation (Mariwah et al., 2017). The lack of public toilets makes elderly people and the people with medical conditions suffer (Richard & Knight, 2012). The little facility of public toilet is the physical and symbolic evidence that the urban dwellers are not invited in the public sphere (Ellisa & Luana, 2022). So public toilet is essential for sustainable and healthy city and from ages, public toilet is constructed and maintained by municipalities (Antonioni et al., 2016). Sylhet is a divisional city where Sylhet metropolitan is the divisional headquarters (SFD, 2022). It is on the bank of Surma and is one of the oldest towns on the sub-continent. It is famous for Shah Jalal Dargah, the pioneer of spreading Islam in Bangladesh. It was updated as a city corporation in 2002. There are 27 wards under Sylhet city corporation. Many people come to Sylhet every year for work, business, education and tourism. The number of residents living in Sylhet city is 479,837 (Triphobo, 2022). On average, every day 10000 people visit Sylhet for tourism purposes (Mintu Deshwara, 2021). Though Sylhet is an important metropolitan city there exist some major problems. One of the major problems is the lack of public toilet. The number of toilets and their accessibility is extremely poor. There are only 7 public toilets installed in Sylhet metropolitan area, which is very few in comparison to the required number. This paper studies the location and condition of existing public toilets. This paper is also studied which of the public toilets are successful and which are not. In this research, the most needed places for the public toilet are identified.

Existing Condition of Public Toilets in Sylhet City:

There are 7 public toilets in different locations of Sylhet metropolitan area which are constructed by Sylhet city corporation (fig-01). The filling station and market toilets are not counted as the public toilets facility in here. The toilets have different issues for which people face different challenges. These problems were identified through field survey to understand the existing situation and this data in the following table which will help the new proposals (Tab-01).

Kumargao Bus stand Public Toilet:

It is located at the end side of the Bus stand. Daily 200-250 people use this toilet and most of the users are bus workers like drivers, helpers and counter officers. There are 2 toilets and 2 urinals for men and only 2 toilets for the women. And on top of that, these toilets are terribly unhygienic with minimal privacy. Moreover, no handicap ramp is provided in these toilets.

Osmani Medical Public Toilet:

It is located in the emergency unit of Osmani medical. Daily 300-350 people use this toilet and among these people majority users are CNG drivers and relatives of the patients. There are 3 toilets and 4 urinals for men and only 2 toilets for the women. 2 shower rooms for men and woman. Cleaned toilet and have privacy between men and women toilet.

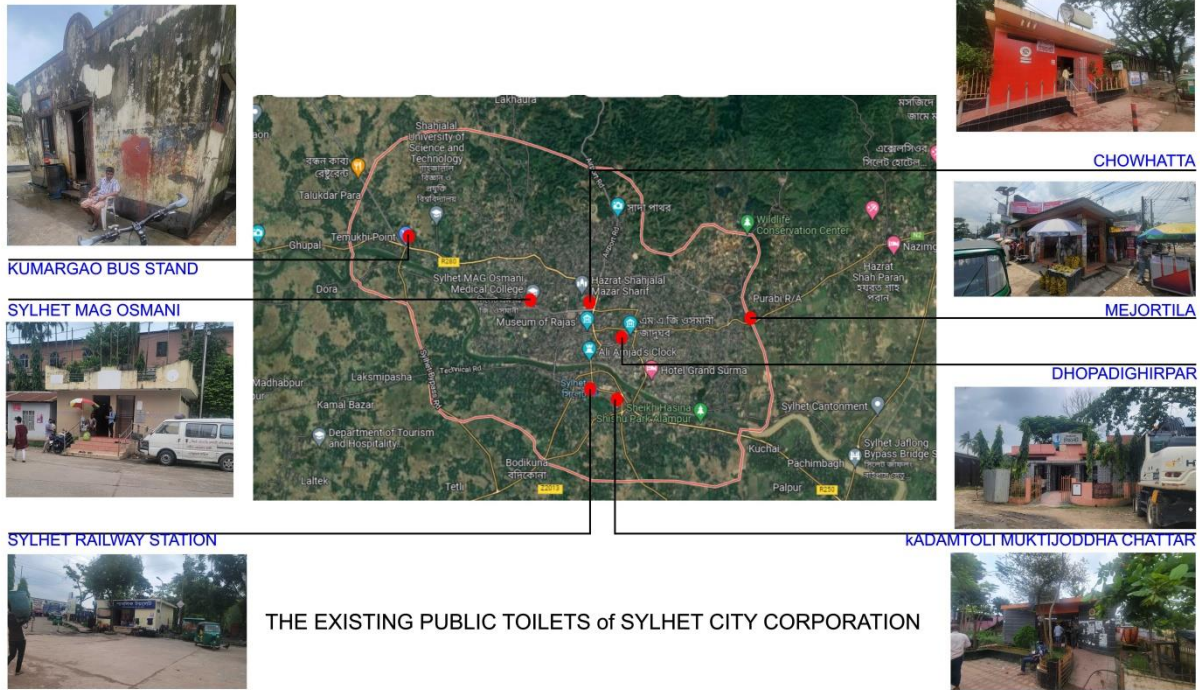


Figure: 01: Existing Public toilet position in the city
Source: Google map (modified by author)

Table: 01: Overview condition of existing public toilets

Existing Condition	Kumargao Busstand	Sylhet Osmai Medical	Cowhatta	Sylhet Railway Station	Kadamtoli Muktiyoddha Chattar	Dhopadighir Par	Mejortila
Cleanliness	Very much Uncleand	Clean	Clean	Clean	Clean	Clean	Very much Uncleand
Separate Gender toilet	No separate gender toilet	separate gender toilet	separate gender toilet	separate gender toilet	No separate gender toilet	separate gender toilet	No separate gender toilet
Security	Not much	Exist	Exist	Exist	Exist	Exist	No
Toilet Fixture Condition	Very poor	okay	okay	okay	okay	okay	Very poor
Handicape Excibility	No	No	Yes	No	Yes	Yes	No
Easily Locatable	No	Yes	Yes	Yes	No	Yes	No

Chowhatta Public Toilet:

This is located in the middle of chowhatta and Daragh gate point and visible from the main road. On average, 300-350 people use this toilet on the daily basis. Most of the users, of this toilet, are local people working near the area and some tourists who come to Daragh. There are 3 toilets and 4 urinals for men and only 2 toilets for the women are allocated. The toilet is well maintained and has privacy.

Sylhet Railway Station Public Toilet:

It is located in the main entry of Sylhet railway station. Daily 200-250 people use this toilet. Most of the users are bus drivers and passengers of the train. There are 2 toilets and 4 urinals

for men and only 2 toilets for the women. Four shower rooms for men and women. The toilets are not clean and do not have privacy; these have no handicap accessibility.

Kadamtoli Muktijoddha Chattar Public Toilet:

It is located in the main entry Kadamtoli Muktijoddha Chattar. Daily 350-400 people use this toilet. Most of the users are bus drivers and passengers of the bus. There are 2 toilets and 2 urinals for men and only 2 toilets for the women. Two shower rooms for men and women. The toilets are clean and do not have privacy; these have no handicap accessibility.

Dhopadighir Par Public Toilet:

This is located behind the Osmani Shishu Park and visible from the main road. On average, 90-100 people use this toilet on the daily basis. There are 2 toilets and 2 urinals for men and only 2 toilets for the women are allocated. The toilet is well maintained and has privacy with handicap accessibility.

Mejortila Public Toilet:

It is located behind Bus shade of major tila. There is only one toilet which is under the control of shop owners nearby it. The general public cannot use it. There are only 2 toilets and not distinguish between men and women. Not cleaned at all.

2. Literature Review:

Outside their house, sometimes people need a private place to clear their bladder and bowel (Kitchin & Law, 2001). This place is called public toilet. There is no actual law on public toilet. A public toilet is a facility of pay-per-use (Afacan & Gurel, 2015). People pay money to the caretaker of the toilet after using it who keeps the toilet clean and usable. Without public toilet a city cannot be a successful city. Public toilet is necessary to build sustainable, user-friendly, safe, accessible and equitable cities. Cities with inadequate toilet provision for the people cannot achieve the title of sustainable, inclusive and healthy cities (Bichard et al, 2004). Public toilet also helps to control some medical conditions. The woman and aged people face the problem to control their bladder. 60% of woman age over 40 and 50% age over 50 face this problem (Minassian et al., 2008). Delaying the use of the toilet to urinate when women are outside houses cause dysfunction and poor bladder health (Hartigan et al., 2020). To control bladder cancers public toilet is needed (Bichard & Knight, 2012). Lack of public toilet hamper the movement of city people (Knight and Bichard, 2011). Many women limit their travel based on the availability of toilet (Kitchen and Law, 2001). Lack of adequate toilet provision can lead to the avoidance of travelling (Norton, 1982). That's why a designer must consider every age, gender and people's ability before designing public toilet (Greed, 2009). Now we can see handicapped people didn't get equal consideration like normal people (Kitchin & Law, 2001). The provision of public toilet is also matter of creating great design and land use (Afacan & Gurel, 2015). Public toilet is also source place for transmitting Covid-19 virus (Sun et al., 2021). So the facility should be controlled from central authority to maintain its workability (Njeru, 2014).

3. Methodology:

The face-to-face interviews were done with the caretakers of the toilets. From there some data of using the toilet was gathered. A questionnaires survey was done through the general people of Sylhet to find out the public opinion. 350 people of different categories were interviewed through questionnaires. The field survey for this paper was done to understand the actual condition of existing public toilets. The public toilets which were surveyed in this paper, were made by Sylhet City Corporation. To understand the work how it should be done, some

references had been studied from other countries case studies. Considering all the aspects and challenges the researcher proposed some locations where some public toilets are immediately needed in Sylhet city.

4. Public reaction on public toilet:

There was a survey done, through some questions, on 300 people of different ages (fig-02) and qualifications (fig-03) who live in Sylhet metropolitan area. The survey is done to understand the uses of existing public toilets and how many people use it with their demand for new public toilets.

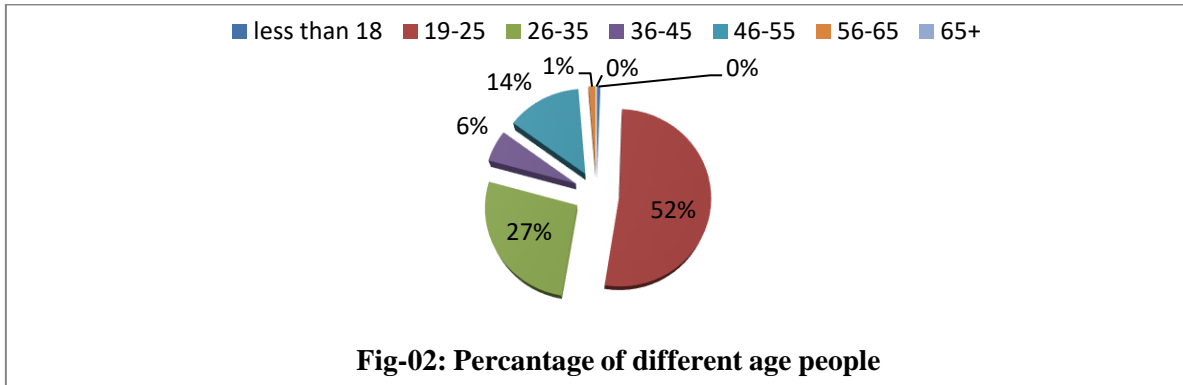


Fig-02: Percentage of different age people

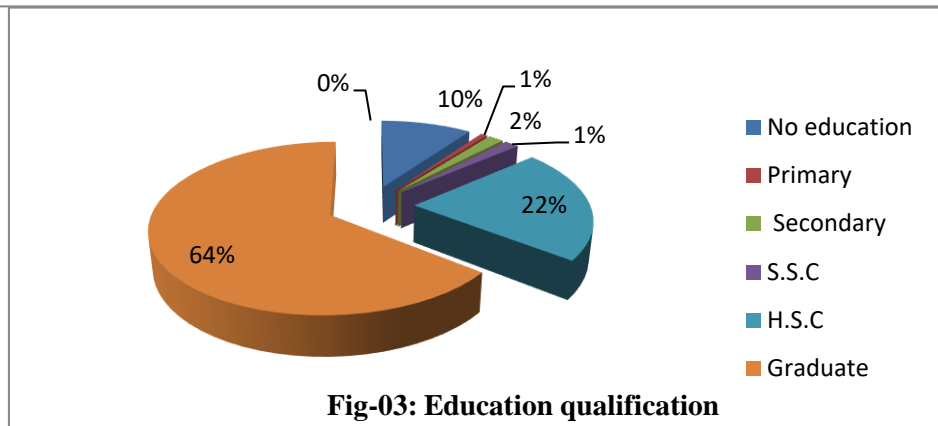
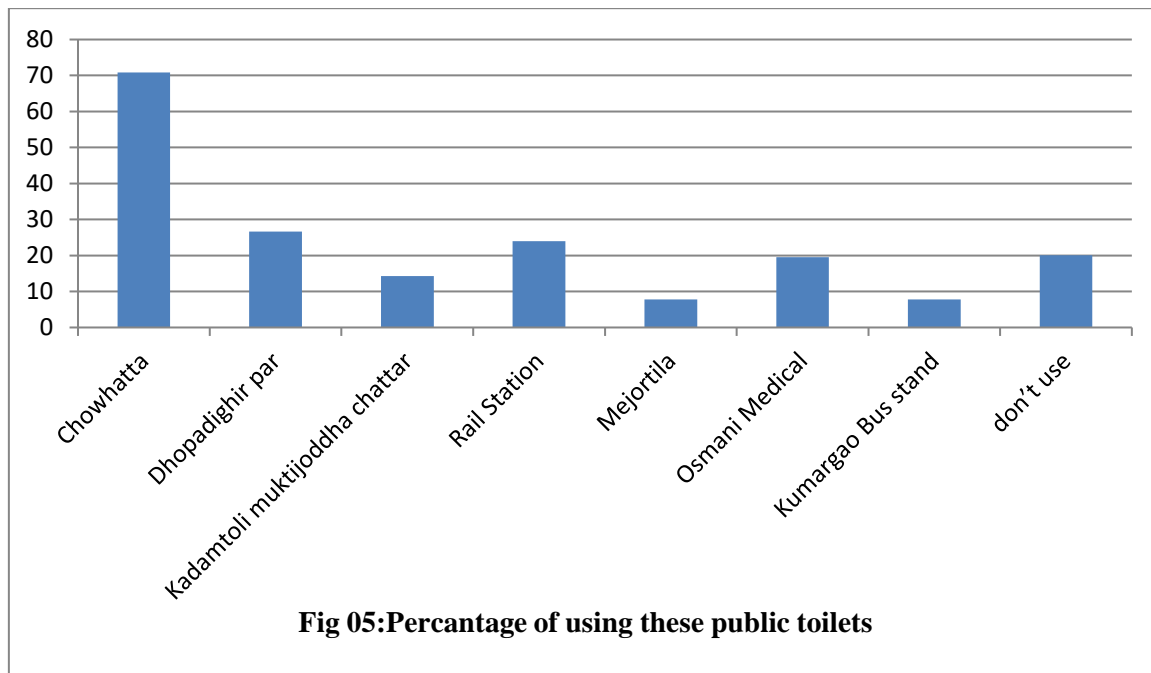
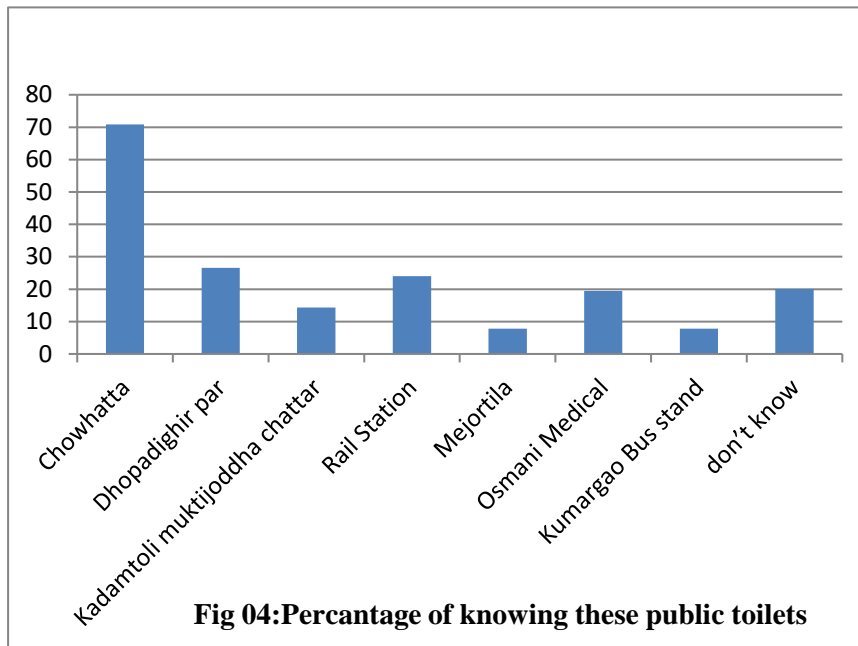


Fig-03: Education qualification

People on existing public toilet:

There are a substantial number of people who do not know about the existing public toilet. Through this study, it became known that, not a single person knows all the 7 of the toilets, 2% know only 5 of them, 15% know 4, 20% know 3, 55% know 2 and 8% know only 1 of the toilets (fig-04). Among them, 27.3% of people have used any of these public toilets (fig-05).



People demand on public toilet:

From this survey, 99.7% of people think they need public toilets in distinguished locations. They think these 7 public toilets are not enough to support the city because there less in number and are not located where people needed the toilets most. Logically enough, the people in Sylhet city corporation want toilets in those positions where they go for their daily activities.

5. The places that are most visited by public:

For their daily needs and their education or work people stay out of their house more than 8 hours a day, this data is on the people who live in Sylhet. Sylhet is a tourist place and most of the tourist stays in hotel which are in the Sylhet city from here they go to visit surrounding tourist areas. Their movement is quite different from the local people.

Resident's people of Sylhet City corporation most visit:

There are few common places in Sylhet where people spend most of their time these places vary for a divergent functions: the MahajanPatti, Laldighi par, Bandar bazaar and Amberkhana are for business purposes. Madina Market, Zindabazar, Lamabazar, Noyasharak and Kumarpara for shopping purposes. Sust Gate, and Eidgagh are those places where people spend their leisure time with friends. There are also other places like Pathatola, Tilagor, Subidbazar, Housing state, Rikabi bazar where people visit for different purposes mostly like education, exercise and medical checkup (fig-06).

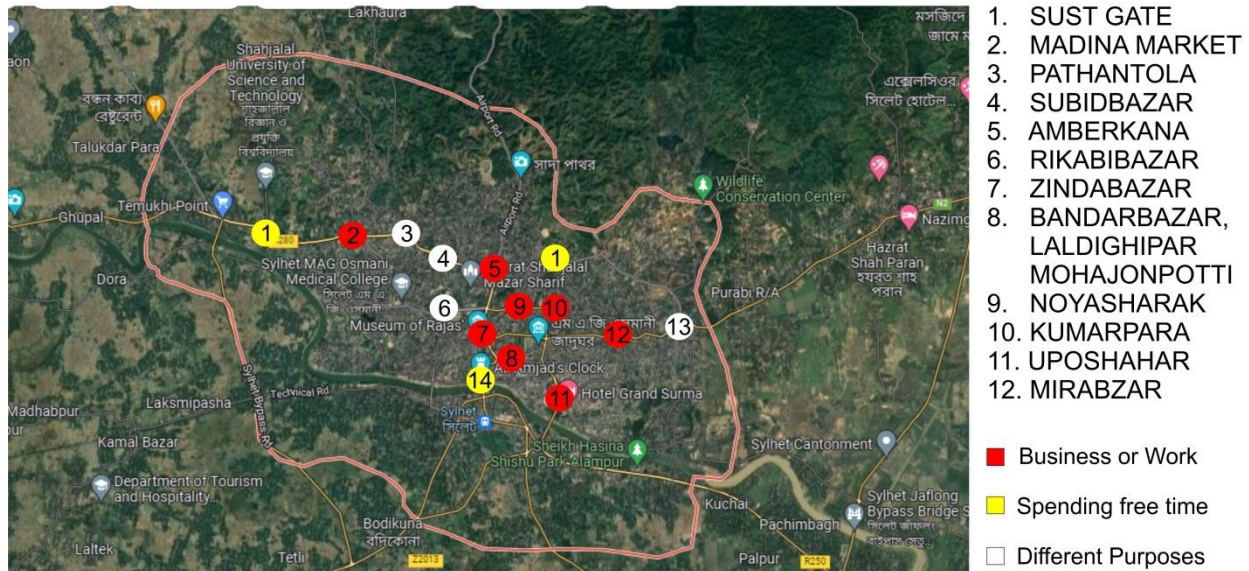


Fig 06: The places sylhet city people visit most
Source: Google map (modified by author)

Tourist people of movement in the sylhet city:

As a tourist place, lots of people visit Sylhet every week and most of them come by bus and train. From bus and train station some people go to Zinda Bazar panshi or pach bhai restaurant to take their meal and then go to their hotel or tourist spot. Other people who are staying in Sylhet, come to amberkhana which is the point from where people go to jaflong, bichanakandi, bholaganj, ratargul and shah poran mazar. The shah jalal mazar the places which is also near amberkhana and is visited by all the people (fig-07).



Fig 07: Major Route of tourists in sylhet city
Source: Google map (modified by author)

6. Recommendations

Sylhet metropolitan city needs more public toilets than the existing 7 toilets. Among the 7 toilets Kumargao bus stand's toilet and Mejortila public toilet must be relocated so that the people can easily find them. There should be public toilets near Amberkhana, Rikabibazar, Zindabazar, Tilagoar, Mirabazar, Uposahar, Bandarabazar, Eidgagh, Madina Market point and in front of sust gate because there is a huge number of people visit these places every day. One public toilet will be enough for laldighi par and mohajon potti. Theoretically, the kean bridge people can use the bandarabazar toilet because it is inside the 500m area. There should be one public toilet between pathantola-subidbazar and another one should be between subidbazart-amberkhana (fig-08). Increasing the availability of public toilet in different places encourage the residents to have a healthy life (Park & Bliss, 2019). If all these can be achieved then most of the people can easily access to these toilets. Public Toilets should be accessible for all kind of people (Maroko et al., 2021). There should be provision for handicapped people, extra toilet for handicapped people is needed.

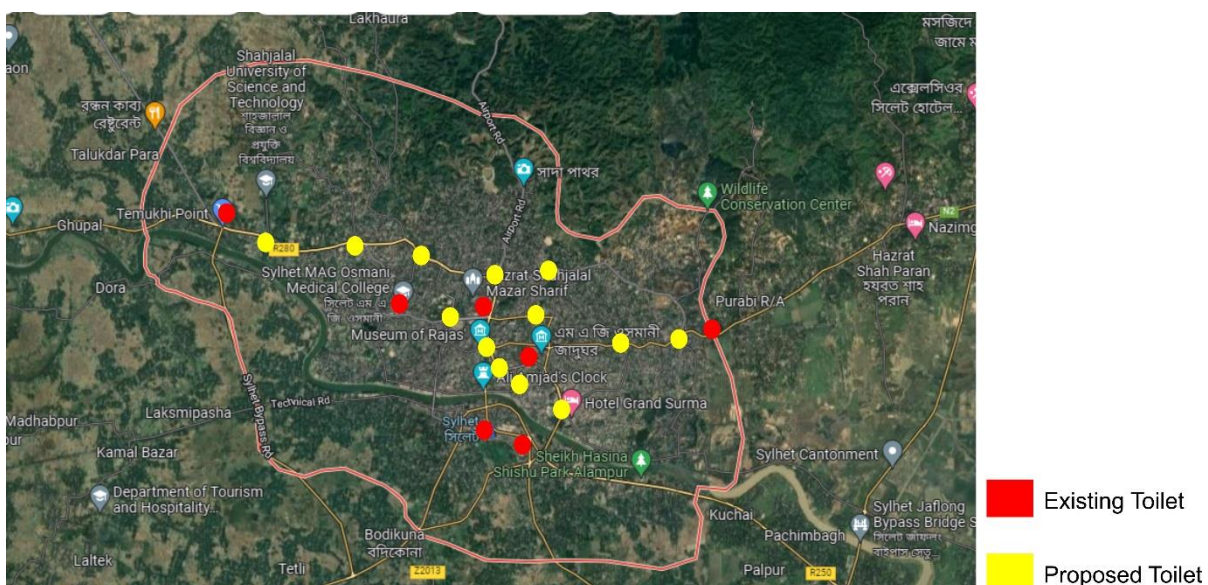


Fig 08: Proposed public toilet Locations

7. Conclusion

Sylhet is developing day by day and the area of Sylhet city corporation also have been increased in recent years. It is the responsibility of the local authority to provide all the facilities which are needed by the residents. People need toilets outside home as many as possible so that they can use them in their emergencies and there should be within a one-kilometre range. The study proposed the places where the public toilet should immediately be installed. In this regards the people will get confidence to move quickly inside the city. This will help Sylhet to become a sustainable and healthy city. If public toilets are constructed in this location, it will also improve the public hygiene of Sylhet City. The limitations are the local authority initiative.

References:

- Afacan, Y., & Gurel, M. O. (2015). Public toilets: An exploratory study on the demands, needs, and expectations in turkey. *Environment and Planning B: Planning and Design*, 42(2), 242–262. <https://doi.org/10.1068/b130020p>
- Antoniou, G. P., De Feo, G., Fardin, F., Tamburrino, A., Khan, S., Tie, F., Reklaityte, I., Kanetaki, E., Zheng, X. Y., Mays, L. W., & Angelakis, A. N. (2016). Evolution of toilets worldwide through the millennia. In *Sustainability (Switzerland)* (Vol. 8, Issue 8). <https://doi.org/10.3390/su8080779>

- Richard, J. A., & Knight, G. (2012). Improving public services through open data: Public toilets. *Proceedings of the Institution of Civil Engineers: Municipal Engineer*, 165(3), 157–165. <https://doi.org/10.1680/muen.12.00017>
- Richard J, Hanson J, Greed C, 2004 Inclusive Design of Away from Home (Public) Toilets in City Centres: Pilot Study, Clerkenwell, London VivaCity 2020 EPSRC Research Report, University College, London
- Ellisa, E., & Luana, L. (2022). Female restrooms in the tourist destination: how the socio-spatial conditions of public toilets influence women's perception of safety. *Journal of Asian Architecture and Building Engineering*, 21(4), 1624–1639. <https://doi.org/10.1080/13467581.2021.1941995>
- Greed, C. (2004). Public toilets: The need for compulsory provision. *Proceedings of the Institution of Civil Engineers: Municipal Engineer*, 157(2), 77–85. <https://doi.org/10.1680/muen.2004.157.2.77>
- Greed C H, (2009), "The role of the public toilet in civic life", in Ladies and Gents: Public Toilets and Gender Eds O Gershenson, B Penner (Temple University Press, Philadelphia, PA) pp 35—48
- Hartigan, S. M., Bonnet, K., Chisholm, L., Kowalik, C., Dmochowski, R. R., Schlundt, D., & Reynolds, W. S. (2020). Why do women not use the bathroom? Women's attitudes and beliefs on using public restrooms. *International Journal of Environmental Research and Public Health*, 17(6). <https://doi.org/10.3390/ijerph17062053>
- Help the Aged, 2007 Incontinence and Older People: Is There a Link to Social Isolation?, https://www.ageuk.org.uk/globalassets/age-ni/documents/information-guides/ageukig15_bladder_and_bowel_problems_inf.pdf
- Kitchin, R., & Law, R. (2001). The Socio-spatial construction of (In)accessible public toilets. *Urban Studies*, 38(2), 287–298. <https://doi.org/10.1080/00420980124395>
- Knight G, Richard J, 2011 Publicly Accessible Toilets: An Inclusive Design Guide (Helen Harnlyn Centre for Design, Londo
- Mariwah, S., Hampshire, K., & Owusu-Antwi, C. (2017). Getting a foot on the sanitation ladder: User satisfaction and willingness to pay for improved public toilets in Accra, Ghana. *Journal of Water Sanitation and Hygiene for Development*, 7(3), 528–534. <https://doi.org/10.2166/washdev.2017.007>
- Maroko, A. R., Hopper, K., Gruer, C., Jaffe, M., Zhen, E., & Sommer, M. (2021). Public restrooms, periods, and people experiencing homelessness: An assessment of public toilets in high needs areas of Manhattan, New York. *PLoS ONE*, 16(6 June), 1–20. <https://doi.org/10.1371/journal.pone.0252946>
- Mintu Deshwara(2021), The Daily Star[Online] [Acccesed on June 12, 2022] <https://www.thedailystar.net/business/economy/industries/tourism/news/sylhet-tourism-road-recovery-2157746>
- Minassian VA, Stewart WF and Craig Wood G (2008) Urinary incontinence in women: variation in prevalence estimates and risk factors. *Obstetrics & Gynecology* 111(2), Pt 1: 324– 331
- Njeru, J. N. (2014). Rethinking public toilet technologies in Nairobi: The case of Ikotoilet facilities. *Journal of Water Sanitation and Hygiene for Development*, 4(2), 324–328. <https://doi.org/10.2166/washdev.2014.109>
- Norton C (1982) The effects of urinary incontinence in women. *International Rehabilitation Medicine* 4(1): 9–14
- Park, Y. S., & Bliss, D. Z. (2019). Availability of Public Toilets in Parks and Recreational Sites in Selected US Cities. *Journal of Wound, Ostomy and Continence Nursing*, 46(3), 235–239. <https://doi.org/10.1097/WON.0000000000000522>
- Reddy, Y. M., Raghavan, S., & Vedala, S. C. (2019). A Narrative Exposition on Public Toilet Usage by Women: A Study from Warangal. *Indian Journal of Gender Studies*, 26(1–2), 108–137.

- <https://doi.org/10.1177/0971521518808100>
- SFD(2022). Sylhet City Corporation - Bangladesh [Online] [Accesed on June 11, 2022] <https://sfd.susana.org/about/worldwide-projects/city/286-sylhet-city-corporation#>
- Shafi, S.A., Imam, A.M., Opel, A., & Islam, M.K. July 09, 2011 Making public toilets work : An assessment of public toilets in Dhaka city. Retrieved from <https://www.thedailystar.net/news-detail-193444>
- Sun, K. S., Lam, T. P., Tang, W. S., Chan, H. Y., Lam, K. F., Chow, E. C. Y., Wu, D., Zhou, X. D., Xu, J. Y., & Ho, P. L. (2021). Improving Public Toilet Environment and Hygiene Practices in an Asian City: Voices From Hong Kong Residents. *Asia-Pacific Journal of Public Health*, 33(4), 378–387. <https://doi.org/10.1177/1010539521993685>
- Triphobo(2022), Sylhet Tourism [Online] [Accesed on June 12, 2022] <https://www.triphobo.com/places/sylhet-bangladesh>
- Yan, R., Cheng, S., Chen, J., Li, X., Sharma, S., Nazim Uddin, S. M., Mang, H. P., Chen, C., Li, Z., Li, T., & Wang, X. (2021). Operating status of public toilets in the Hutong neighborhoods of Beijing: An empirical study. *Journal of Environmental Management*, 287(February). <https://doi.org/10.1016/j.jenvman.2021.112252>

Cite this article:

Shah Md. Hasin Shad (2022). Study on locations of public toilets necessary in Sylhet Metropolitan city. *International Journal of Science and Business*, 14(1), 11-20. doi: <https://doi.org/10.5281/zenodo.6984196>

Retrieved from <http://ijsab.com/wp-content/uploads/952.pdf>

Published by

