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Household: Wash roles and responsibilities for women, adolescents (girls and boys), aged and informal male workers at Pora Bari slum in Kallaynpur, Dhaka

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Abstract

The study is situated within the broader context of the Sustainable Development Goals (SDGs), which aim to ensure access to clean water and sanitation for all by 2030. However, achieving these goals in informal settlements such as the Pora Bari slum requires a nuanced understanding of different demographic groups' specific challenges and needs. By studying the roles and responsibilities of women, adolescent boys and girls, aged people, and informal male workers, this study seeks to contribute to a more comprehensive understanding of the gendered dynamics of WASH in slum communities and inform inclusive and effective interventions. A total of 25 interviews were conducted using questionnaires, offering the respondents more freedom on what they wanted to discuss.

The primary goal of this research is to identify household-WASH roles and responsibilities for the following group living in Pora-Bari slum: 1. Women, Adolescents & Aged 2. Informal Male workers, we decided to use components of Moser's framework to identify their roles (triple roles) in the case of WASH. First, we created a questionnaire for our targeted groups. Next, based on Moser's framework, we separated the questionnaire into three sections: reproductive, productive, and community Role. Finally, we went to the location for the survey and gathered data for our paper. We used Microsoft Excel to make a perception of what the following groups think of their role in Wash-related work. This study aims to fill gaps by exploring the roles and responsibilities of different demographic groups in the context of WASH in the Pora Bari slum. By examining the specific contributions and challenges faced by women, adolescent boys and girls, aged people, and informal male workers, the study seeks to inform more targeted and effective interventions to improve WASH conditions in the slums.

Keywords: SDGs, wash, Moser's framework, access to water, NGO

Introduction

In the slums of Bangladesh, access to clean water, adequate sanitation, and proper hygiene, collectively known as WASH, is a critical challenge. The roles and responsibilities of various marginalized groups, including women, adolescent boys, adolescent girls, aged people, and informal male workers, play a crucial role in addressing these challenges. However, the specific contributions and needs of these groups are often overlooked in the development of WASH interventions. This paper seeks to explore and understand the roles and responsibilities of these different demographic groups in the context of WASH in the slums of Bangladesh.

Women in the slums of Bangladesh often bear the primary responsibility for managing household water and sanitation needs. They are also responsible for ensuring the hygiene and health of their families. However, they may face specific challenges related to access to water sources and sanitation facilities, as well as time constraints due to other domestic duties and economic activities. Understanding the roles and responsibilities of women in WASH is crucial for designing interventions that address their specific needs and empower them to play a more active role in improving WASH conditions in their communities [1].

Adolescent boys and girls also have important roles to play in the context of WASH. They may be responsible for collecting water, maintaining sanitation facilities, and promoting hygiene practices within their families and communities. However, they may face barriers such as limited access to education and resources, which can affect their ability to fulfil these responsibilities effectively. By studying the roles and responsibilities of adolescent boys and

girls in WASH, we can identify ways to support and empower them to become agents of change in improving WASH conditions in slum areas.

Aged people in the slums of Bangladesh often face unique challenges related to WASH. As they may have limited mobility and health issues, they may struggle to access water and sanitation facilities. Additionally, they may also be responsible for caring for grandchildren or other family members, adding to their WASH-related responsibilities. Understanding the specific needs and roles of aged people in WASH is essential for ensuring that interventions are inclusive and address the challenges faced by this demographic group.

Informal male workers, who often engage in occupations such as rickshaw pulling, street vending, and construction work, also play important roles in WASH within slum communities. They may be responsible for contributing to the household income, making decisions about WASH-related expenditures, and ensuring the maintenance of water and sanitation facilities. However, they may also face occupational hazards and economic instability, affecting their ability to fulfil their WASH-related responsibilities. Studying the roles and responsibilities of informal male workers in WASH can provide insights into addressing their specific needs and integrating them into WASH interventions effectively.

Understanding the roles and responsibilities of women, adolescent boys, girls, aged people, and informal male workers in the context of WASH in the slums of Bangladesh is essential for designing inclusive and effective interventions. By studying the specific contributions and challenges faced by these demographic groups, we can develop targeted strategies to improve WASH conditions and promote the well-being of all slum dwellers [2].

The Porabari slum in Kallaynpur, Mirpur, Dhaka, Bangladesh is one of the many informal settlements in the country that lacks access to basic WASH facilities. The slum is home to a diverse population, including women,

adolescent boys and girls, aged people, and informal male workers. However, the specific roles and responsibilities of these different demographic groups in the context of WASH have not been well studied [3].

Previous research has highlighted the importance of understanding the gendered dynamics of WASH in slum communities, as women often bear the primary responsibility for managing household water and sanitation needs. However, the roles and responsibilities of other demographic groups, such as adolescent boys and girls, aged people, and informal male workers, have not been as well explored.

This study aims to bridge this gap by examining the roles and responsibilities of different demographic groups in the WASH context of the Pora Bari slum. The research intends to inform more targeted and effective initiatives to improve WASH conditions in the slums by examining the distinct contributions and challenges faced by women, teenage boys and girls, the elderly, and informal male workers. It also aims to identify the roles and responsibilities of women, adolescents, the elderly, and informal male workers for household WASH. Finally, it plans to evaluate the results using the Moser framework's triple roles to compare their participatory roles in WASH activities.

Study Area

One of the major slums in Dhaka is Kallaynpur Pora Slum, a community in Mirpur with over 20,000 residents. The government organization Housing and Building Research Institute (HBRI) is the owner of the site. The people who live in Kallaynpur Pora Slum are hardworking, friendly, and honest. Their only concern is giving their children a bright future, but to achieve that, they must overcome many challenges. In their home village, river erosion forces them to move in slum. The red arrow mark on the map indicates the Pora Bari slum in Kallaynpur, Dhaka. The red arrow mark on the map indicates Pora Bari's slum in Kallaynpur, Dhaka.



Fig 1: Pora bari Slum

Framework of the study

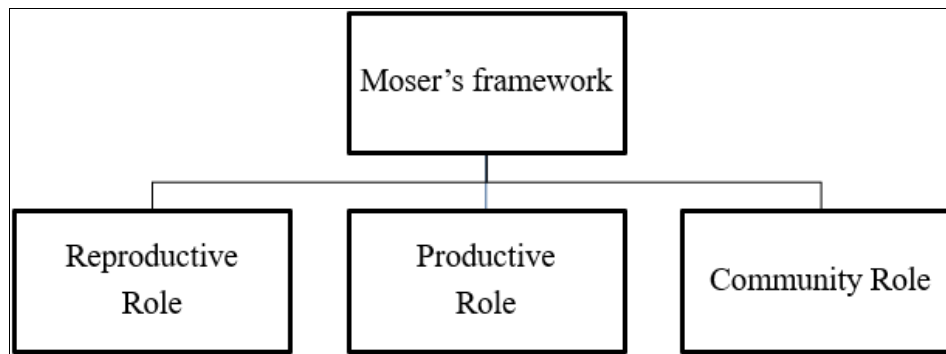


Fig 2: Moser's Framework

Table 1: General questions for the study

Women	1,5,6,7,8,9,10,12,14,18,19,20,21,22,28,29,30
Adolescent (Boys)	1,2,3,4,7,8(a,c)
Adolescent (Girls)	
Aged people	1,2,3,9,10,13,15,16,17,18,
Informal Male workers above 18	2,3,5,7,8,8(ii,iii,iv),9,12,14,15,16
Informal Male workers below 18	1,2,4,5,8,9,11,10,12,13,17,19,20,21,22,23

Table 2: Arrangement of our questions according to Moser Framework

Main Activities	Women	Adolescent (Boys)	Adolescent (Girls)	Aged people	Informal Male Worker above 18	Informal Male Worker Below 18
Reproductive Role	2,3,4,11,13,15,17,23,24,26,27	5, 8(b),6	1,2,3,4,5,6,7,8,9,11,12,13, 14	4,5,6,7,8,11,12,19, 20,	4,6,10, 13,17, 18,19,	3,6,7, 14,15, 16,24,25, 26
Productive Role	2,16,25		10		8(I),11	18
Community Role	31,32,33,	9	15,16,17	14,21,22,23, 24,25	20,21,22	27,28,29,30

Methodology

Field Visit

On 4th November, 2023 we visited Pora Bari slum at Kallyanpur, Dhaka. Where we met with Women, Adolescent (girls and boys), Aged and Informal Male workers to identify gender mainstreaming in the water, sanitation and hygiene sector. We asked them so many questions that can enrich the design of household-WASH roles and responsibilities of them on the basis of Moser's Framework. The Framework provides the basis for our project increased engagement in slum household WASH. The Moser Framework introduces the notion of triple roles, i.e., productive, reproductive, and community involvement for delineating their roles and responsibilities.

Questionnaire Survey and Data Collection

In-depth Interviews: In Pora Bari slum, 5 women, 5 adolescent girls, 5 adolescent boys, 5 aged people (Men), and 10 informal male workers were interviewed in-depth, individually roadside and/or in their own houses. A total of 25 interviews were conducted using questionnaires offering the respondents more freedom on what they wanted to discuss.

The primary goal of this research is to identify household-WASH roles and responsibilities for the following group living in Pora-Bari slum;

1. Women, Adolescent & Aged
2. Informal Male workers

We opted to apply Moser's framework components to determine their responsibilities (triple roles) in the instance of WASH. First, we developed a questionnaire for our previously identified target groups. Next, using Moser's paradigm, we divided the questionnaire into three sections: reproductive, productive, and communal role. Finally, we went to the survey site and collected data for our article. We utilized Microsoft Excel to get a sense of how the following groups see their involvement in Wash-related tasks.

Data Analysis and Results

Reproductive role

Access to Clean Water In most cases, adolescent boys, adolescent girls, and people depend on women to collect water. However, informal male workers sometimes participate in water collection for families.

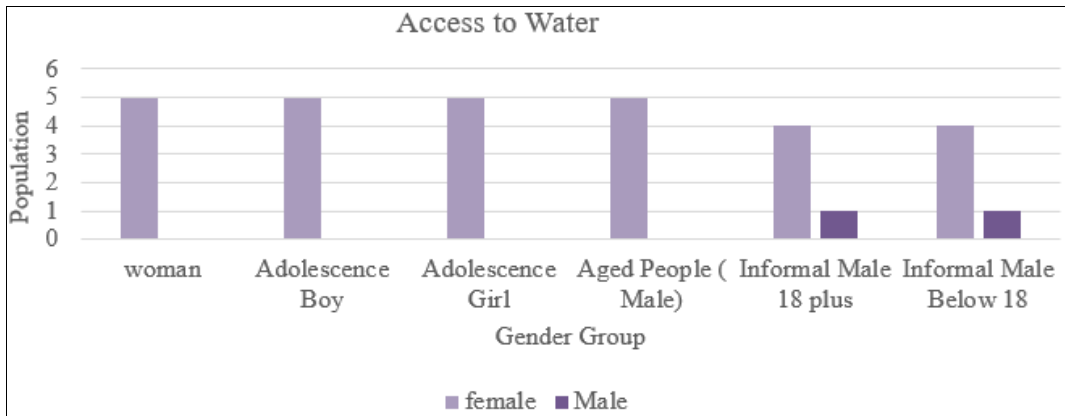


Fig 3: Access to water

Toilet housekeepers, Adolescents and Informal male workers participate in the toilets cleaning every week or month based on cleaning needs. The rotational toilets

cleaning approach per family per day is a common scenario in slums.



Fig 4: Cleaning Toilets

Water collection per day generally, around 0-20 liters of water are collected by Informal male workers, adolescent girls, and adolescent boys. Women collect the maximum amount of water for the family per day, approximately 20-

50 liters a day and water collection times depend on the needs of the family and sometimes it reaches to 3-5 times more in a day.

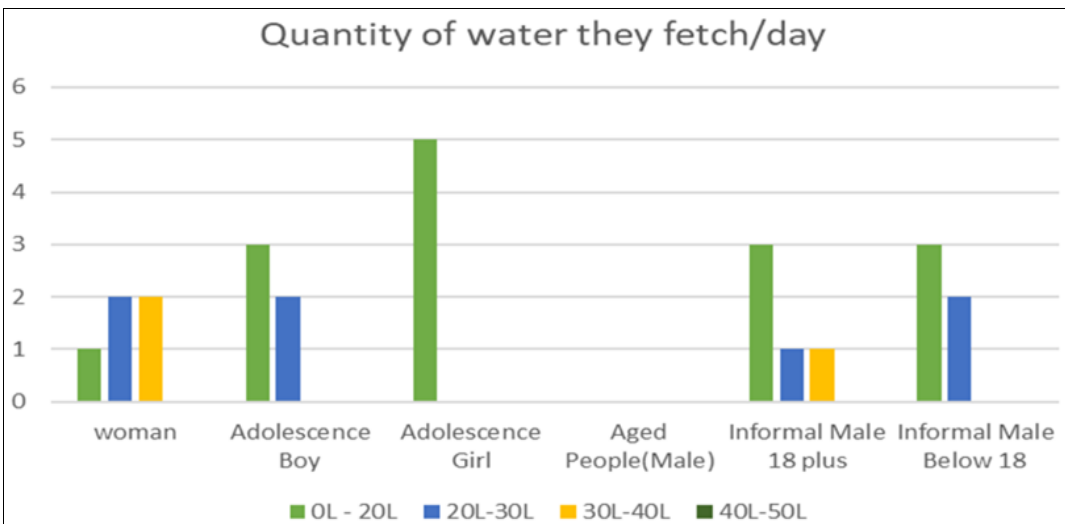


Fig 5: Quantity of water they fetch/day

Role in Toilet cleaners and informal male workers are more responsible for cleaning the toilet than others and adolescent boys and girls are not that much responsible for it.

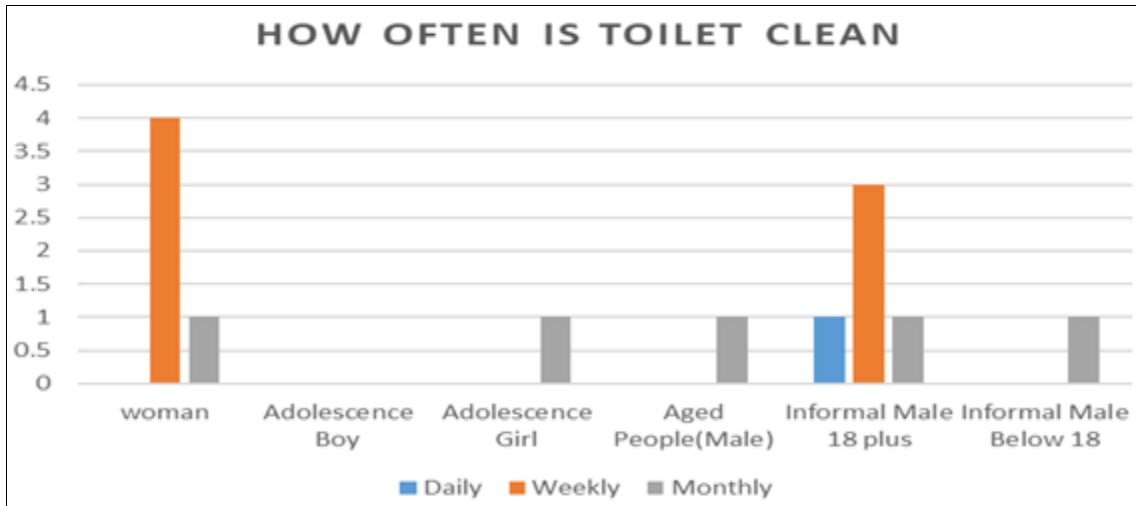


Figure 6: How often is toilet clean

Access to the toilet among all participants about 66.67% think that they have easy access to a toilet and 33.33% think that they are unable to access toilet facilities easily.

Adolescence Girls are more deprived than others are. In the case of toilet use, the informal male workers and adolescent boys get more priority over others.

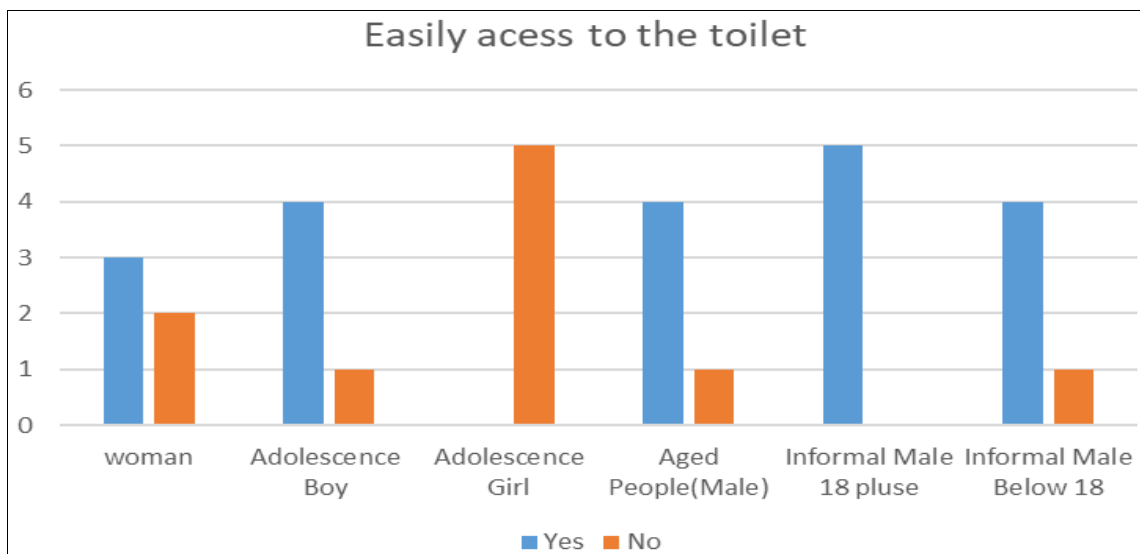


Fig 7: Easily access to the toilet

Productive Role

Participation in productive Roles Almost all informal male people and 80% of women are connected with productive

roles in their families. Aged (male) people sometimes contribute to productive roles based on family needs.

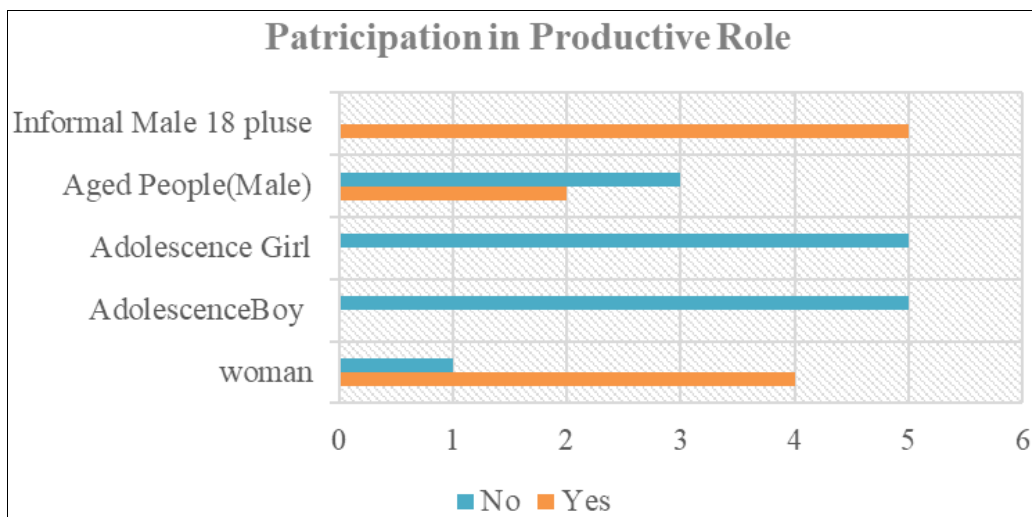


Fig 8: Participation in productive role

Contribution to utilities bill Women, Aged people, and Informal people mainly contribute to utility bills such as toilet cleaning, water bills etc.

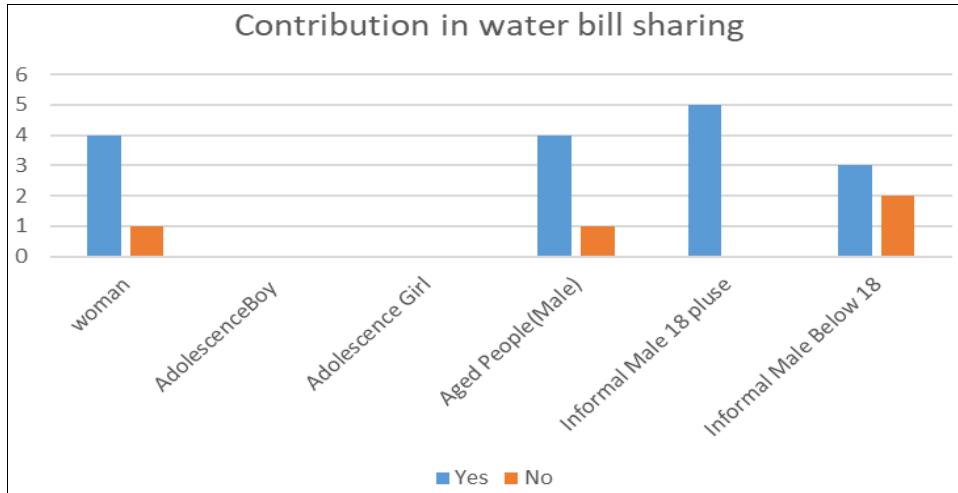


Fig 9: Contribution to water bill sharing

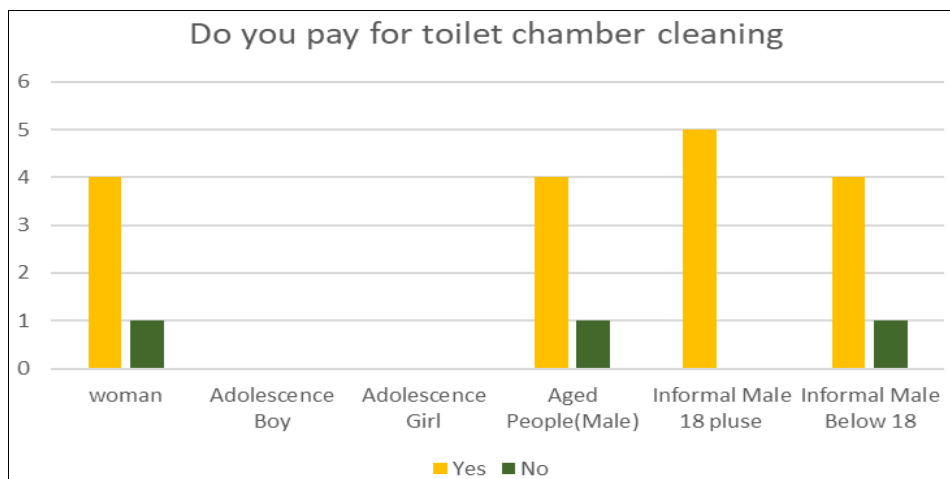


Fig 10: Contribution to toilet chamber cleaning

Contribution to hygiene maintenance Women, aged people, and informal male workers monitor, contribute to the finance sectors of the family, and provide bills.

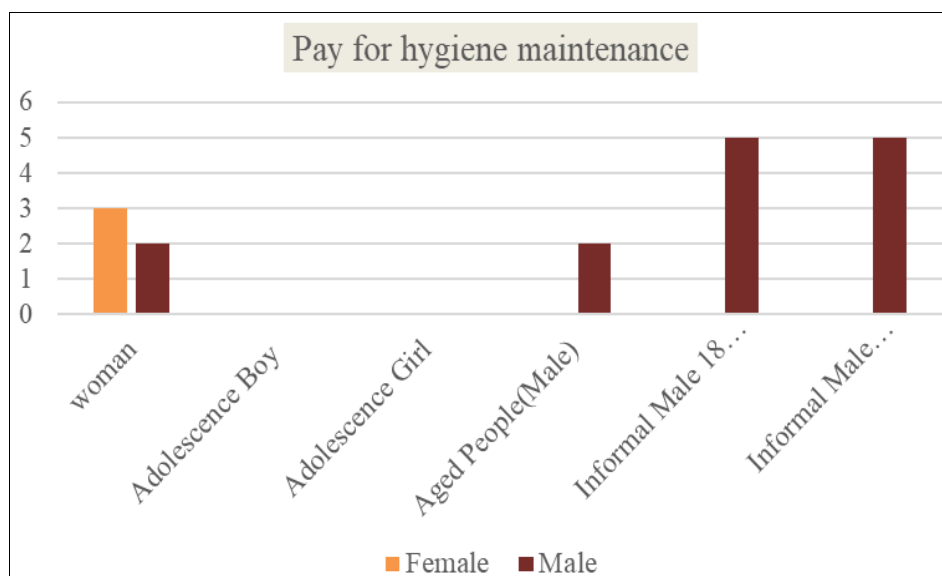


Fig 10: Paying for hygiene maintenance

Extra pay for drinking water in crisis time Adolescence boys and girls are not contributing for extra pay. Woman and informal worker pay extra for drinking water during crisis times.



Fig 11: Extra pay for drinking water during crisis time

Community Role

Women are playing more support in this role than informal males, aged people, and adolescent boys.

Informal males below 18 are less supportive in that case. Among all our participants, 53.333% are supportive but 46.67% are less supportive.

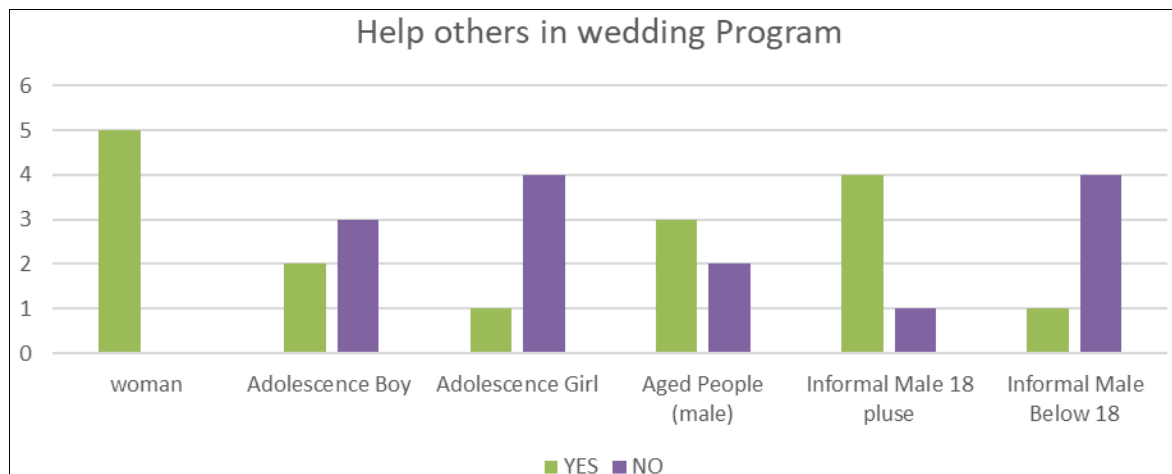


Fig 12: Helps others in wedding program

Community Role: (potential)

From the flow chart, it has been shown that the female and

male participant is 36.67% and 63.33%.

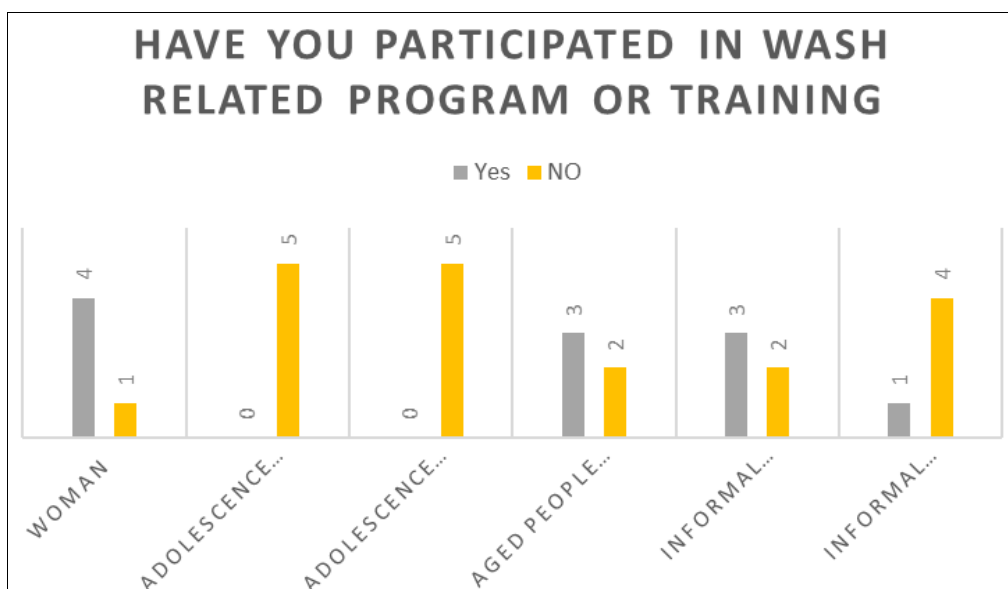


Fig 13: Participation at WASH- related training program

Adolescents have no knowledge about NGOs and 70% of participants said that they are getting support from NGOs and 30% said that there is no NGO work done there.

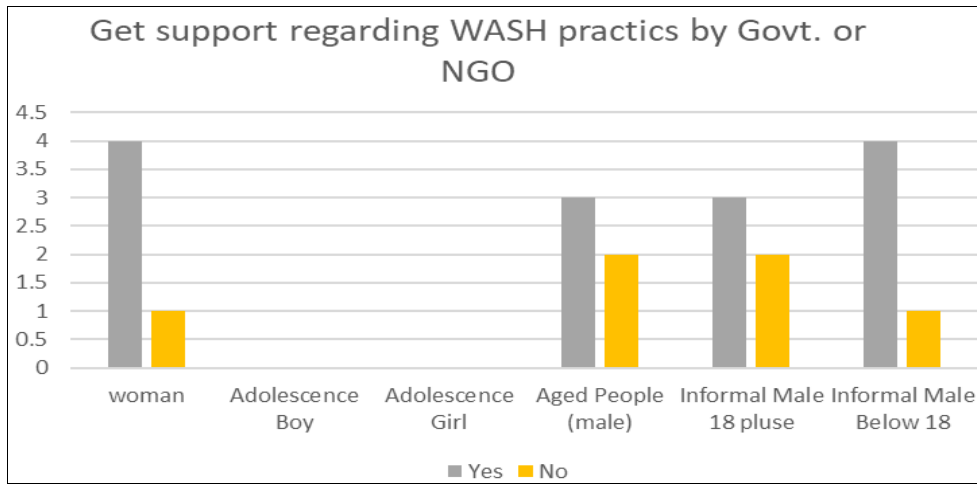


Fig 14: Get support regarding wash practices by Govt. or NGOs

Special Needs of Women and Adolescent Girl

Proper hygiene during crisis in menstrual period are not maintain for woman but adolescence girls have proper hygiene than woman.

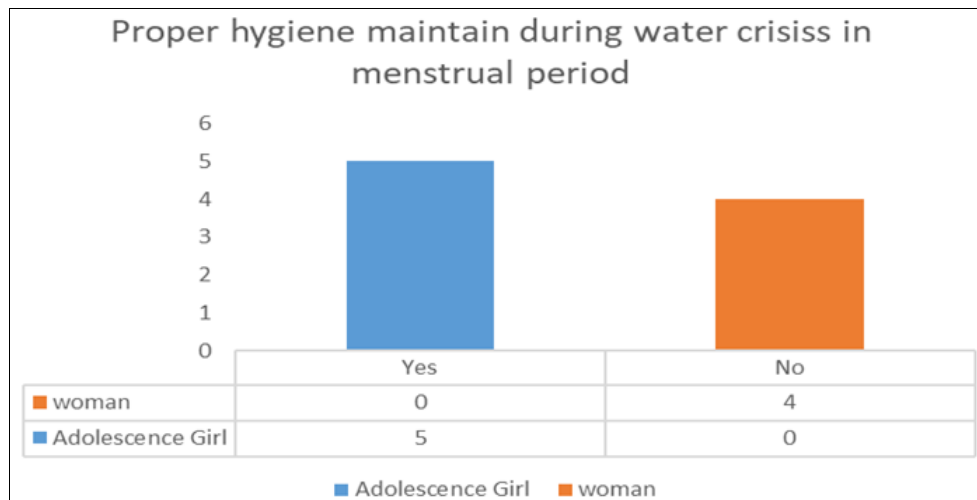


Fig 15: Proper hygiene maintained during the water crisis in the menstrual period

Women consume more water than adolescent girls do during their menstrual period. Women need 2 to 5 liters on the other hand adolescent girls need at least 2 liters.

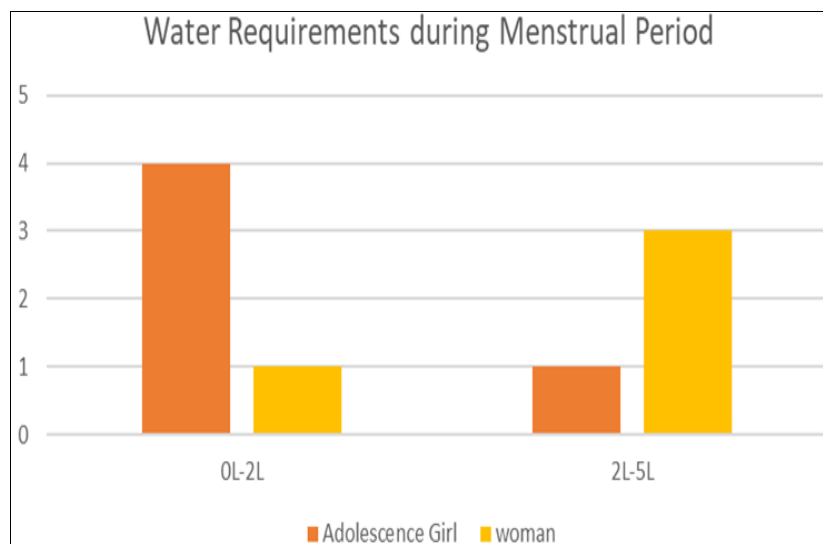


Fig 16: Water requirement during menstrual period

Conclusion

Gender roles in Dhaka’s slums remain largely traditional,

with men acting as the primary breadwinners while women handle household responsibilities. Among the surveyed

participants, 60% are engaged in productive work, whereas 40% do not contribute economically. Notably, informal male workers (100%) occupy all productive roles, while both men and women share responsibility for paying utility bills. Water collection is a significant burden primarily placed on women. An overwhelming 93.33% of women are responsible for fetching water for their families, whereas only 6.67% of men participate in this task. Adolescent girls bear an even heavier burden, with 100% of them involved in water collection, often at the cost of their education. Access to sanitation facilities is a major concern, particularly for women and adolescent girls. 66.67% of them face difficulties accessing toilets, highlighting an urgent need for improvement. The lack of adequate toilet facilities significantly affects hygiene and safety, emphasizing the necessity for increased government and NGO intervention to expand sanitation infrastructure. Toilet cleaning responsibilities also fall disproportionately on women and adolescent girls, who account for 85% of those engaged in this task, compared to 15% of informal male workers. This indicates that women and adolescents play a crucial role in maintaining sanitation, further emphasizing gendered labor division in slum communities. When it comes to skill development and training programs, men participate more than women do. Among women, 80% attended training sessions, while 20% did not. For informal male workers over the age of 18, 60% participated, while 40% did not. However, informal male workers under 18 displayed the reverse trend, with a lower participation rate. Additionally, adolescent boys and girls did not take part in community-based training programs. Limited access to toilets poses a major public health challenge. In some areas, 30 families share just 2 toilets, leading to overuse and poor sanitation conditions. This situation increases reliance on public toilets and worsens hygiene problems, necessitating government and NGO intervention to expand toilet facilities.

Recommendations for Improving WASH Management

- 1. Increase Toilet Facilities:** The government and NGOs should collaborate to build more toilets to reduce overcrowding.
- 2. Raise Awareness on WASH Practices:** Educational programs should be implemented to improve hygiene and sanitation awareness.
- 3. Regular Monitoring and Evaluation:** Continuous assessments of WASH projects should be conducted to ensure effectiveness and sustainability.
- 4. Engage Local Stakeholders:** Collaborative efforts with community leaders, NGOs, and local authorities can help develop innovative and practical solutions to WASH challenges.
- By addressing these issues, living conditions in Dhaka's slums can be significantly improved, promoting gender equity and better hygiene management.

References

- UN Women. UN Women values and competencies framework [Internet]. [cited 2025 Feb 15]. Available from: <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/About%20Us/Employment/UN-Women-values-and-competencies-framework-en.pdf>
- University of Illinois Urbana-Champaign. What is gender analysis? [Internet]. 2016 [cited 2025 Feb 15]. Available from: https://ingenaes.illinois.edu/wp-content/uploads/ING-Info-Sheet-2016_09-1-Gender-Analysis-Tools-for-EAS-Ludgate.pdf
- November MJ, Jones M. The Kallyanpur Pora Bostee

situation: A problem or an opportunity? The Business Standard [Internet]. 2020 Nov 28 [cited 2025 Feb 15]. Available from:

<https://www.tbsnews.net/thoughts/kallyanpur-pora-bostee-situation-problem-or-opportunity-164143>.

- Sommer M, Ferron S, Cavill S, House S. Violence, gender and WASH: spurring action on a complex, under-documented and sensitive topic. *Environment and Urbanization*. 2015 Apr;27(1):105-116.
- Esplen E, Brighton Institute of Development Studies. Gender and care: overview report. Brighton: Institute of Development Studies; c2009 Jan.

Appendix

Questions that can enrich the design of household-WASH roles and responsibilities for Women, Adolescents, Aged and Informal Male workers

Questionnaire for roles and responsibilities of women in household WASH of Pora Bari at Kallyanpur slum (women)

- How many members are present in your family?
- Are you a housewife or do any other productive work?
- Who is responsible for fetching water?
- If more than one member is engaged in water collection, who collects water and how many times a day?
- What is the distance of the source of water from your house?
- Is water always available in your main water source?
- How long does it take to go there, get water, and come back?
- How many times do you need to collect water?
- Can you tell /show me about the size of the water container you use?
- What is the quantity of water for drinking and household purposes?
- Do you collect the water by walking or using any vehicle?
- What do you think about the quality of your drinking water?
- Do you need to boil water for drinking?
- Do you or any member of your family suffer from any waterborne diseases?
- Do you have to manage extra water for any of your disabled or elderly members?
- Do you have to contribute to the water bill?
- During the time of the water crisis, who deals with it?
- What kind of toilet facility do members of your household usually use?
- How many toilets are there and how many of them are functioning?
- Where is the toilet facility located?
- How many persons have to share per toilet?
- Are there separate toilets for men and women?
- After how many days toilets are cleaned and how cleaning process is maintained?
- After how many days chamber of toilets are cleaned?
- Who will pay for this?
- Do you wash your hands before food preparation, cooking and taking food?
- Do you have adequate water for handwashing?
- Do you use soap for handwashing?
- During your menstrual period are you able to wash and change in privacy while at home?
- What hygiene materials did you use during your menstrual period?
- Did you get any training programs from NGOs?

32. If yes, how many trainings did you get?
33. Who were selected for training and were they benefited?

Questionnaire for roles and responsibilities of Adolescent(boy) in household WASH of Pora Bari slum

1. What is the source of water? (Inside home/ outside home)
2. Is there any problem with drinking and bath water?
 - If yes then what is that?
3. How many members of your family?
4. Place of bath? (Inside home/ Outside home)
 - How Many times in a week?
- a. How many buckets?
- b. Quantity of water for the bath?
5. Who carries the water to the washroom?
6. How many times water is carried to the washroom in the morning, evening and night?
 - who carried?
7. What are you doing in the crisis moment?
8. Where is the place you used for evacuates?
 - How many toilets are there?
 - Who cleaned this?
 - How many times in a month?
9. Is there any NGO training centre in your area?
 - a. If yes then tell me the process of training them.
 - What was the last commencement of this training?
 - What is the improvement after this training?

Questions Pattern for Adolescent (Girls)

1. Who brings adolescent girls bath water?
2. Do adolescent girls have any contribution to bringing water?
3. How do adolescent girls maintain hygiene and sanitation?
4. How much water is consumed during the menstrual period of adolescent girls?
5. How many times do adolescent girls go to fetch water every day?
6. What kind of containers do adolescent girls carry water? Could it be the cause of their physical illness?
7. Do adolescent girls bring water on foot or in a vehicle?
8. Are there separate toilets for adolescent girls? How many litres of water is needed every day if it is separate? How do they manage this water?
9. Are adolescent girls forced to fetch water or do they go voluntarily?
10. Do school-going adolescent girls fetch water? If so, when and how often?
11. What is the amount of water used by a school-going adolescent girl and a normal adolescent girl?
12. How do they maintain hygiene when there is a water shortage during menstruation?
13. Do they face any issues while bringing water?
14. How many days a week do they take a bath? Approximately how many litres of water do they use per shower?
15. Have they received any training program?
16. What action has been taken so far by NGOs related to hygiene and sanitation for adolescent girls?
17. Did they get any help from NGOs or other organizations from childhood to adolescence?

Questions Pattern for Aged People

1. Location of Water Sources a) Inside the Home b) Outside the Home (Include the Distance from the Home)

2. How much water is needed each day (measured in volume using buckets or pitchers)
3. How many people make up a family?
4. How many times do you collect water per day?
5. Who is in charge of collecting water and why?
6. Do you regularly go to get extra water for yourself? If so, how often do you do it? Please explain why.
7. How do you carry water (rickshaw, van, bucket, pitcher)?
8. Who takes care of your wash?
9. Do you have water use restrictions or minimum water requirements?
10. During what time or month do you experience difficulties because of a water shortage?
11. How do you manage water during a time of scarcity?
12. Who provides you with water and how much do you use at that time?
13. Describe the water-related problems (Specified Problems) that are troubling you.
14. What do you believe about the causes of and difficulties in resolving water-related problems?
15. What solution do you predict for your water-relevant issues?
16. How many toilets are there in this slum?
17. Please include the toilet distribution plan and the number of users per toilet.
18. What difficulties do you have in using the toilet?
19. Who is in charge of toilet cleaning and how are you doing it?
20. When it's necessary to clean the toilet's chamber
21. Do you receive any WASH-related training?
22. How many NGOs are active here or have done so in the past, together with names
23. When did you get training last time?
24. What is your improvement by the training?
25. Identify the major 10 problems in this slum regarding WASH

Question for Informal males above 18

1. What do you do for a living?

Answer: _____

2. Number of family members in the household _____
3. Drinking/Household Water Source
 - Public water sources
 - WASA supply
 - City corporation supply
 - Rainwater
 - Tube-well
 - Lake/ River/ Ponds
 - Other _____
4. Who is responsible for ensuring that there is a reliable and clean water supply in your household?
 - Male _____
 - Female _____
5. How much water do you fetch every day?

Answer: _____

If can't Answer Question no 5 ask them below this sub-section Question

Which pot you use to collect water (Size of that)

Answer: _____

6. Are there any challenges your household faces in accessing clean water, and how are these challenges addressed?

Answer: _____

7. Where do you take a shower?
- Home
 - Outside (Near his/her working spot)

8. Do You have a motor in your house for water supply?
- NO
 - Yes

If the answer is yes

- Who gave that water bill _____
- How many hours you run the motor _____
- Size of the tank _____
- Capacity of motor _____ (HP/Watt)

9. When do you face a problem in supplying water (Crises time)?

Answer: _____

10. What hygiene practices are emphasized in your household, such as handwashing, personal hygiene, or food hygiene?

Answer: _____

11. Do you financially contribute to WASH-related expenses in your household, such as purchasing water treatment products or maintaining sanitation facilities?

- Male
- Female

12. What are the main challenges your household faces in terms of WASH, and how do you cope with or address these challenges?

Answer: _____

13. Are there any specific WASH-related needs or improvements you would like to see in your household?

Answer: _____

14. You do to improve your improvements your water problem?

Answer: _____

15. How many toilets are there in this slum area?

Answer: _____

16. How many people use toilets daily?

Answer: _____

17. Who is responsible for cleaning toilets?

Answer: _____

18. What difficulties do you have in using the toilet?

Answer: _____

19. How often is the toilet cleaned?

Answer: _____

20. Are you involved in any community-level initiatives or organizations related to WASH, such as promoting clean water access or sanitation improvements?

Answer: _____

21. Have you participated in any WASH-related training or education programs?

Answer: _____

22. Are there any support systems or resources available to help you and your household maintain good WASH practices, either from the government or non-governmental organizations?

Answer: _____

Informal Male (below 18)

1. Number of family members in the household _____

2. Drinking/Household Water Source

- Public water sources
- WASA supply
- City corporation supply
- Rainwater
- Other _____
- Tube-well
- Lake/ River/ Ponds

3. Who is responsible for ensuring that there is a reliable and clean water supply in your household? (Male or Female) _____

4. How much water do you fetch every day?

- If can't Answer name the family member who brings water _____

5. Which pot do you use for collecting water (Size of that) _____

6. How many time you collect water _____

7. What are the uses of this water _____

8. Are there any challenges your household faces in accessing clean water, and how are these challenges addressed? _____

9. How many days a week do they take a bath? _____

10. Do water-related problems affect your work? _____

11. Where do you take a shower?

- Home
- Outside (Near his working spot)

12. Do you have a motor in your slum for water supply?

- NO
- Yes.If the answer is yes
 - a. Who gave that water bill _____
 - b. Number of time the motor is started _____
 - c. Number of hours the motor is run _____
 - d. Size of the tank _____
 - e. Capacity of motor _____ (HP/Watt)

13. When you face a problem in supplying water (Crises time)? _____

14. Who deal with water in Crises Time _____

15. Who brings with water in Crises Time _____

16. How do you manage water during a time of scarcity? _____

17. What hygiene practices are emphasized in your

- household, such as handwashing, personal hygiene, or food hygiene? _____
18. Do you financially contribute to WASH-related expenses in your household, such as purchasing water treatment products or maintaining sanitation facilities? _____
 19. What are the main challenges your household faces in terms of WASH, and how do you cope with or address these challenges? _____
 20. Are there any specific WASH-related needs or improvements you would like to see in your household? _____
 21. Do you do anything to improve your water problem? _____
 22. How many toilets are there in this slum area? _____
 23. How many people use toilets daily? _____
 24. Who is responsible for cleaning toilets? _____
 25. What difficulties do you have in using the toilet? _____
 26. How often is the toilet cleaned? _____
 27. Are you involved in any community-level initiatives or organizations related to WASH, such as promoting clean water access or sanitation improvements? _____
 28. Have you participated in any WASH-related training or education programs? _____
 29. Are there any support systems or resources available to help you and your household maintain good WASH practices, either from the government or non-governmental organizations? _____