

# PRELIMINARY REPORT

2022



## MEASURING URBAN SANITATION AND EMPOWERMENT (MUSE) PRELIMINARY FINDINGS: Women in Dakar, Senegal

### BACKGROUND AND METHODS

**Background:** Women's and girls' roles in household water, sanitation, and hygiene (WASH) are well-documented. Yet, there are limited data on how WASH conditions, programs, and policies impact women's empowerment, or how women's empowerment impacts WASH.

**Aim:** The aim of the MUSE project is to create and validate measures of sanitation-related empowerment in urban settings. Data generated can be used to inform Citywide Inclusive Sanitation (CWIS) programming.

**Methods:** Office National de l'Assainissement du Sénégal (ONAS), People and Data, and Athena Infonomics, in partnership with Emory University, surveyed 720 adult women in Dakar, Senegal from April 11 – April 27, 2021. Surveys were conducted in nine areas selected in collaboration ONAS. The survey included 16 scales and five indices to assess the three domains of empowerment: Resources, Agency, and Institutional Structures and their associated subdomains, adapted from van Eerdewijk (2017) (Figure 4). The survey also included questions on population demographics, WASH facility access and practices, and relevant WASH experiences related to the COVID-19 pandemic and lockdown. Further validation of scales in other locations is ongoing.

**This report presents preliminary findings from the data collected in Dakar, Senegal.**

#### FUNDER

BILL &  
MELINDA  
GATES  
foundation

#### PARTNERS

ATHENA  
INFONOMICS



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### KEY FINDINGS

- **64%** used a sanitation facility in their own yard or plot, and **20%** needed to collect water for sanitation.
- **Two thirds (66%)** agreed or strongly agreed that others were likely to listen if they spoke up in a community meeting about sanitation issues.
- **The majority (94.7%)** agreed that, in their communities, it is women more often than men who are expected to assume most responsibilities related to maintaining the cleanliness of family sanitation facilities.
- **29%** reported that they would need to ask permission before spending household money on small sanitation-related expenses, such as toilet paper, soap, etc.
- **60.2%** agreed or strongly agreed that women typically have to delay going to a sanitation location more often than men because of their responsibilities.

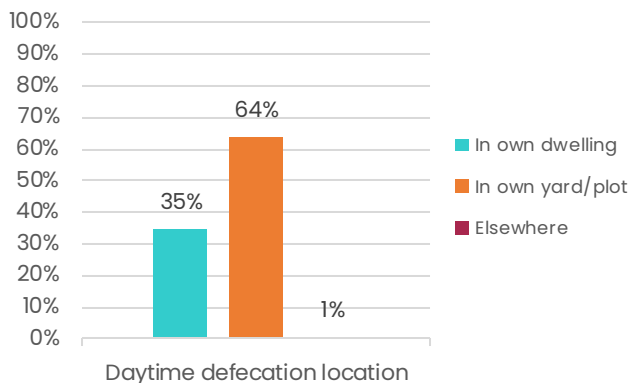
## PARTICIPANT DEMOGRAPHICS

- **43.2 years:** average participant age
- **55.6%** were married
- **10.2 people:** average that live in household
- **93.4%** completed at least primary education
- **42.4%** were employed outside the home
- **4.3 hours:** average time spent outside home

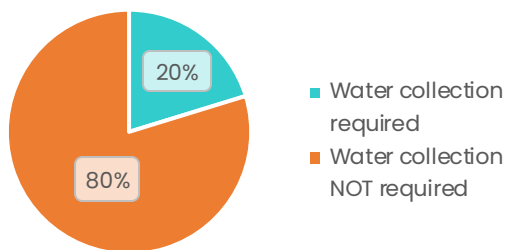
## WASH ACCESS AND PRACTICES

### Sanitation

- The majority (**64.1%**) used a sanitation location in their own yard or plot (**Figure 1**). Of those, **24.4%** had a sanitation location within 500 meters of their dwelling.
- The most common sanitation facilities were: flush toilets (**47.3%**) and buckets or flying toilets (**38.5%**).
- **36.6%** used a shared sanitation facility. Of those, **91.0%** shared with known households and **9.0%** shared public facilities.
- **93.8%** reported their sanitation facility was lockable from the inside, and **6.5%** had insufficient lighting inside.



**Figure 1.** Locations where women reported defecating during the daytime



**Figure 2.** Proportion of women reporting they need to collect water for sanitation

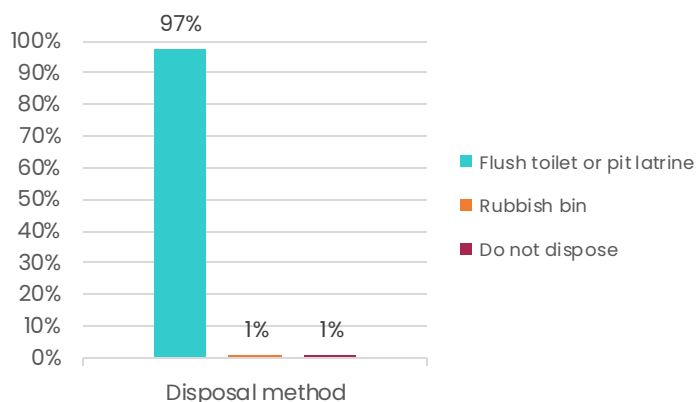
### Water

- **20.0%** needed to collect water for sanitation-related purposes (**Figure 2**).
- Of those, **42.8%** had to pay for the water used for sanitation-related purposes.

### Menstruation

Among the **47.6%** of respondents who menstruate:

- **79.0%** used single-use or disposable materials.
- **6.1%** avoided engaging in income-generating activities during their periods.
- Most used a privately-owned toilet (**74.0%**) inside the house or a bathing room (**13.7%**) in their house for changing menstrual materials.
- The majority disposed of their materials by flush toilet or pit latrine (**97.4%**) (**Figure 3**).



**Figure 3.** Reported methods of menstrual material disposal

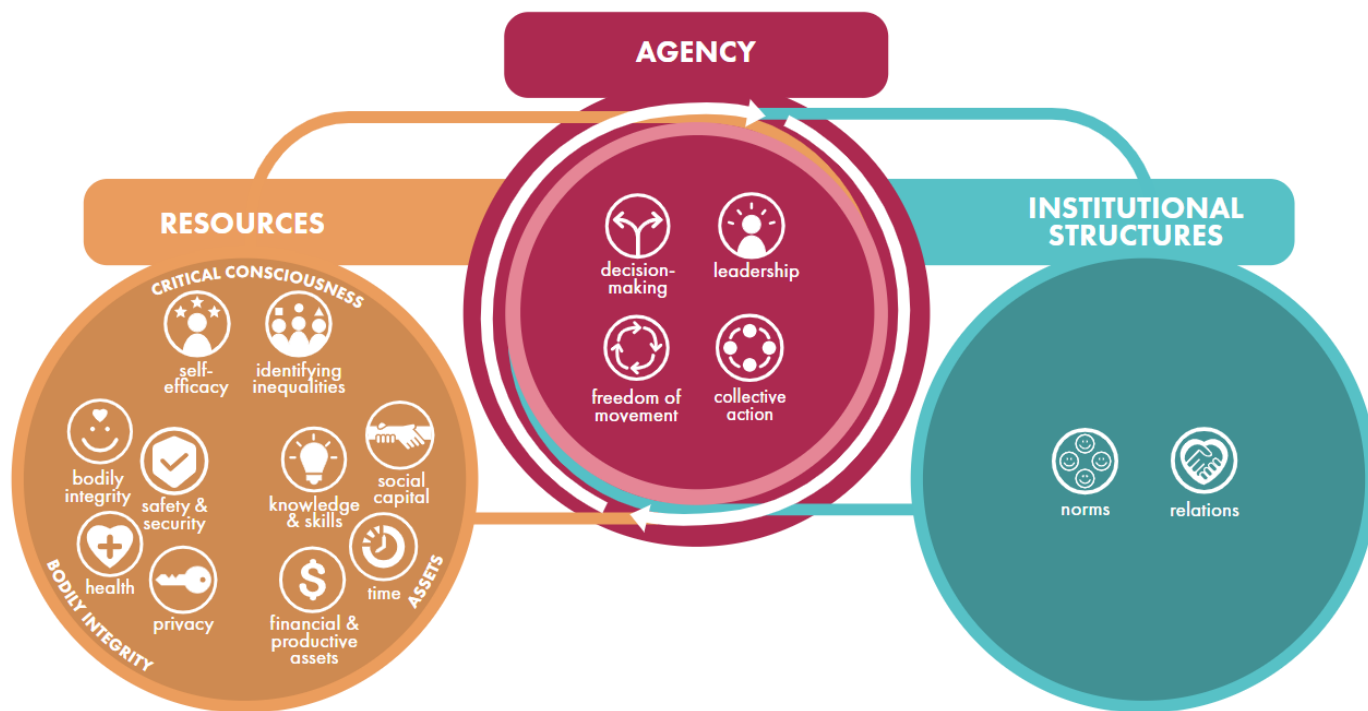
## IMPACT OF COVID-19

### As a result of the coronavirus pandemic or resulting lockdowns or restrictions:

- **12.7%** of respondents reported having less money available for sanitation related costs.
- **3.2%** of respondents reported heightened anxiety or stress when using shared sanitation facilities.
- **2.4%** of respondents reported using alternative strategies for sanitation needs.

## EMPOWERMENT DOMAINS

Empowerment, as defined for this study, is composed of 3 domains: Agency, Resources, and Institutional Structures (**Figure 4**). The MUSE survey includes 16 scales and 5 indices for sub-domains of empowerment within these 3 domains. Below, we present example findings for individual items from each domain.



**Figure 4. Conceptual Model of Empowerment** adapted from van Eerdewijk, et al. 2017.

### AGENCY

Agency involves the subdomains of Decision-Making, Leadership, Collective Action, and Freedom of Movement.

#### Decision-Making

The majority of respondents (**91.0%**) agreed or strongly agreed that they would be welcome to participate in a discussion if their household was making a decision about sanitation-related issues. At the community level, **66.3%** of respondents agreed or strongly agreed that others were likely to listen if they spoke up in a community meeting about sanitation issues.

#### Leadership

The majority (**91.7%**) agreed or strongly agreed that women are as capable as men to take on official leadership roles in sanitation initiatives.

#### Collective Action

**73.7%** agreed or strongly agreed that they were confident members of their community will work with one another to achieve sanitation-related goals.

#### Freedom of Movement

The majority (**98.6%**) reported that they could go to a sanitation location alone, without asking permission or requiring accompaniment. **43.8%** reported that they could go to a community meeting or training outside of their neighborhood alone, without asking permission or requiring accompaniment.

## INSTITUTIONAL STRUCTURES

*Institutional Structures include the subdomains of Norms and Relations.*

### Norms

The majority of respondents (**94.7%**) agreed that, in their communities, it is women more often than men who are expected to assume most responsibilities related to maintaining the cleanliness of the sanitation location that their family uses. **97.4%** agreed that it is appropriate for women to attend sanitation related meetings where men are present.

### Relations

Interactions with service providers were not always free of conflict; only **66.8%** reported that their interactions with local leaders or authorities about sanitation-related issues are generally free of conflict, and **60.8%** reported that they feel comfortable reporting sanitation-related problems to service providers when they arise. **78.7%** of respondents reported that their family would encourage or help them to participate in a community initiative to improve sanitation.

## RESOURCES

*Resources includes the subdomains of Bodily Integrity, Critical Consciousness, Financial and Productive Assets, Time, Social Capital, Knowledge and Skills and Health, Privacy, and Safety.*

### Bodily Integrity

The majority of respondents (**89.2%**) reported they often or always felt satisfied with the sanitation location they used most often.

### Health

**35.3%** of respondents reported that their sanitation location was sometimes or never clean enough to maintain their health in the past 30 days.

### Safety and Security

**4.4%** of respondents agreed or strongly agreed that women in their community face the risk of being physically harmed by men or boys when going to sanitation locations. **5.3%** personally felt unsafe in the place where they typically go for sanitation during the day in the past 30 days. Of those who personally felt unsafe, **34.2%** typically used a sanitation facility in their own dwelling and **65.8%** typically used a facility in their own yard or plot during the day.

### Privacy

**86.3%** of respondents reported that they often or always feel that their sanitation location was private enough for their needs in the past 30 days.

### Financial and Productive Assets

**29.4%** of respondents reported that they would need to ask permission before spending household money on small sanitation-related expenses, such as toilet paper, soap, or pay-per-use latrines. **22.5%** reported that they have control over money that they could use to pay for household latrine or toilet construction, and **21.8%** reported that they have control over money they could use to pay for household latrine or toilet improvements or repairs.

### Time

**16.3%** of respondents agreed or strongly agreed that the sanitation-related needs and responsibilities of their household often make them miss out on other activities they would like to do.

### Social Capital

**63.3%** of respondents reported that they have someone in their household who would help with chores, such as cooking or providing childcare, so that they could tend to their own sanitation needs.

### Knowledge and Skills

One third of respondents (**33.4%**) reported that they have skills, like budgeting, organization, or mobilizing, to contribute to sanitation-related projects in their community.

### Self-Efficacy

**37.7%** of respondents felt that they could change sanitation conditions in their community if they wanted to.

### Critical Consciousness – Identifying and Questioning Inequalities

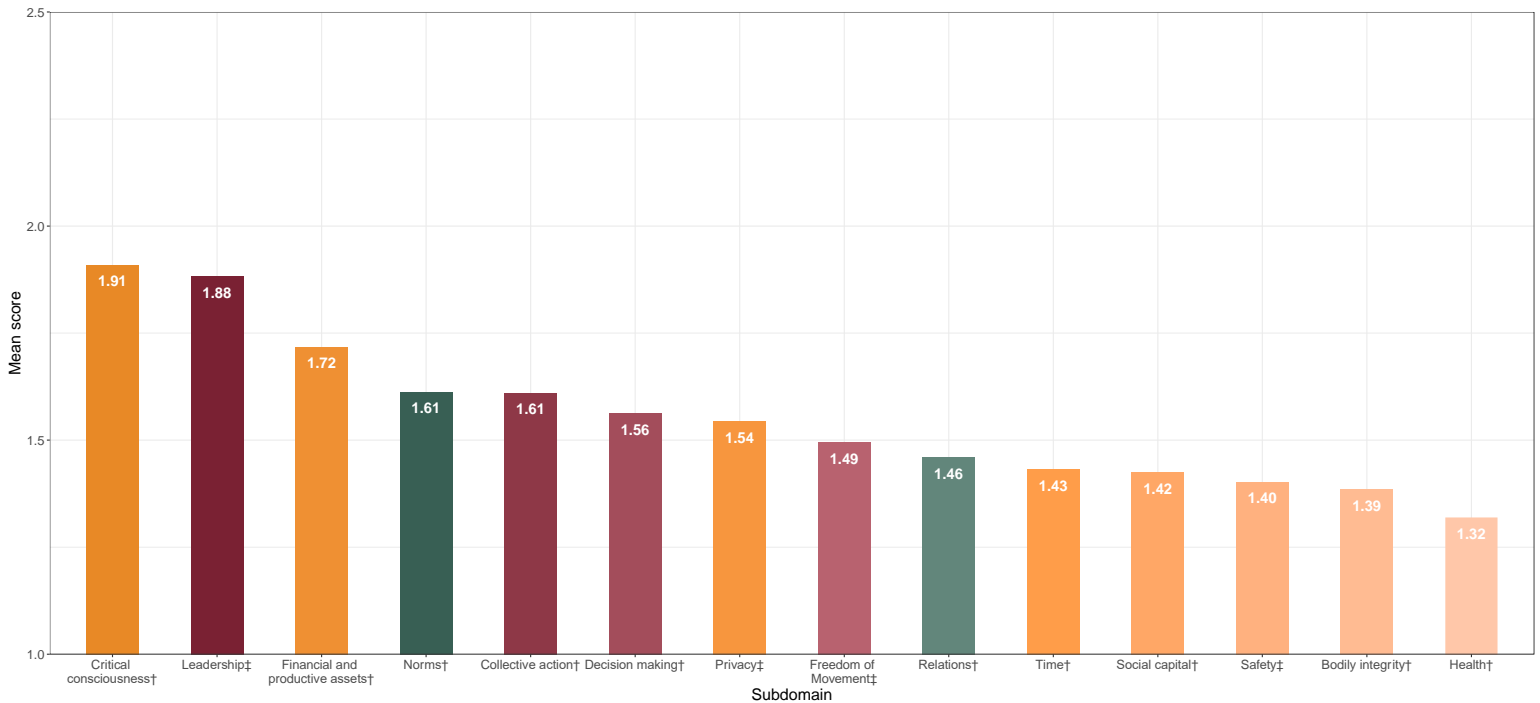
**60.2%** agreed or strongly agreed that women typically have to delay going to a sanitation location more often than men because of their responsibilities.

## PRIORITIZATION OF EMPOWERMENT DOMAINS

To learn how participants prioritized the empowerment sub-domains, participants were asked about the degree to which each empowerment sub-domain is a concern or problem to them.

For each sub-domain prioritization question, participants responded to scores ranging from 1 to 4. Higher scores indicate a greater priority. The prioritization scores were then averaged across participants.

The two sub-domains with the highest mean prioritization scores were: Critical Consciousness and Leadership (Figure 5).



† Indicates degree to which subdomain is a concern  
 ‡ Indicates degree to which subdomain is a problem  
 The scores range from 1 to 4:  
 (1) Not concerned at all (2) A little concerned (3) Moderately concerned (4) Extremely concerned  
 (1) Not a problem (2) A very small problem (3) A medium sized problem (4) A big problem

**Figure 5.** Participants’ prioritization of empowerment sub-domains

## REFERENCES

van Eerdewijk, A. H. J. M., Franz Wong, Chloe Vaast, Julie Newton, Marcelo Tyszler, and Amy Pennington. "White paper: A conceptual model on women and girls' empowerment." (2017).