CCGHR Knowledge Translation Summer Course

Case Study 3

Talk the talk and wash the WASH: a Knowledge Translation approach to the Empowerment in WASH Index

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1. What is the KTA problem?

Water, sanitation, and hygiene (WASH) are gendered. In many cultures, women and girls bear the responsibility of caring for WASH at home, which includes water collection, cooking, cleaning, and childcare (MacArthur, Carrard & Willets 2020). Women and girls also have biological particularities related to WASH, that encompass urination, defecation, and the periods of menstruation and pregnancy (MacArthur, Carrard & Willets 2020). Limited or unsafe access to WASH has serious health implications. Water-related diseases can be contracted in ways that affect entire communities, such as through the ingestion of contaminated water or through water scarcity in general. On the other hand, water-related diseases can occur in ways that affect women and girls in particular (White et al. 1972). Being responsible for fetching water, women and girls are more exposed to water-based and water-related insect vectors, transmitted respectively through a host that lives in the water or through an insect that breeds in or bite near water sources (White et al. 1972). Additionally, women could face psychological distress and social anxiety related to the risks of accessing hygiene facilities outside of the household, and motor health issues resulting from carrying water for long distances (Bisung and Elliott 2017).

A recent systematic review of the WASH sector noted that there has not been enough focus on bridging practical gender needs with strategic gender interests from academics in the area (MacArthur, Carrard & Willets 2020). The Empowerment in WASH Index (EWI) is a recently-developed tool that tries to address this gap by measuring gender-sensitive empowerment outcomes and processes in WASH interventions and expanding the technical approach that is mainstream in the field (Dery et al. 2020). EWI is based on the idea that empowerment is a desired end result in itself, but also a means to improving access to WASH by empowering the end beneficiaries, particularly women (Dery et al. 2020). However, the definition of empowerment that guides EWI is based on literature review rather than on consultations with the knowledge users - i.e., community members, more specifically women and girls. This raises the question of how can empowerment in WASH be measured and fostered if women are not contributing to its conceptualization? This gap is reflected in the perceived limitations of the index, indicated by its proponents. As noted, in one of the case studies in which EWI was applied, in Ghana, women were not present at the project meeting in Asufiti North District, which highlights the importance of having a knowledge translation approach to the index and making sure that it can be used as a tool by knowledge users to advance access to WASH in ways that are relevant to them. Our case study aims at addressing this knowledge to action gap through the proposition of a ground-truthing companion that can expand the definition of empowerment embedded in the Empowerment in WASH Index according to women's and girls' needs.

2. Who does it affect and how?

Inadequate access to WASH affects low-income communities everywhere in the world, but more strikingly in the Global South. To put it in numbers, in 2017, around three quarters of the populations of Least Developed Countries (LDC) lacked handwashing facilities with soap and water; half of those lacking basic drinking water services lived in LDCs; nine out of ten of every person without basic sanitation services lived in Central and Southern Asia, Sub-Saharan Africa, and Eastern and South-Eastern Asia; and Sub-Saharan Africa was the region with the lowest rates of access to improved water sources globally, ranging from 40 to 80% of households (UNICEF & WHO 2019; Ritchie & Roser 2019). That of course affects women of all ages, but also men and boys in different ways. As stated before, women and girls have peculiarities related to their interaction to WASH that further complicates this scenario. Taking pregnancy as an example, we see that 1 million deaths yearly are due to unclean births. Circa 26% of neonatal deaths and 11% of maternal deaths are caused by infections. Additionally, around 44 million pregnant women experience health complications caused by sanitation-related hookworm infection (United Nations, n.d.). Women are also disproportionately afflicted by psychosocial stressors caused by inadequate access to WASH. A scoping review conducted by Bisung and Elliott (2017) showed that women and girls are commonly concerned with sexual assault near defecation and water collection points, aside from experiencing shame, restrictions to their freedom in accessing WASH services, and fear of facing punitive action where open defecation is discouraged by local leaders.

Despite women's traditional role in caring for WASH in the household, they often have less of a say in the decision-making processes related to WASH resources, both within the house and within the community (Dery et al. 2019). Case studies undertaken in Burkina Faso and in Ghana using the Empowerment in WASH Index showed that male residents in WASH-deprived communities are more empowered in WASH than female ones. In Ghana, 63% of women were considered empowered versus 76% of men (Bori et al. 2019). According to this study, input in decisions about involvement in community WASH activities and group membership are the two main contributors to women's disempowerment. These indicators reveal that, in these communities, women have less say in community WASH activities and are participating less frequently as active members in group decision-making processes related to WASH. To a lesser degree, the studies indicated that men are also disempowered, especially when it comes to personal decisions related to WASH and household WASH roles and responsibilities (Bori et al. 2019). These inequities reinforce the idea that a gender-sensitive perspective is much needed in the WASH sector, and transformative research should promote changes to gender roles and power dynamics in order to offer a useful tool of empowerment to knowledge users themselves (MacArthur, Carrard & Willets 2020).

3. What do we know about it?

Improvements in WASH have important consequences for all individuals but perhaps even more significant ones for women and girls (MacArthur et al. 2020). Emerging literature suggests that inadequate access to WASH affects women and girls in several ways, including through low participation in economic activities, adverse biomedical outcomes, psychosocial stress, and poor educational outcomes (Bisung & Dickin 2019).

Despite the significant linkages between WASH services and gender equality, measurements of empowerment related to WASH have so far been limited, especially when compared to other sectors such as agriculture and reproductive health (Bisung & Dickin 2019). There is increasing recognition that bridging practical gender needs such as access to water with strategic gender interests such as changes in power and roles is critical to achieving transformational changes in gender equality (MacArthur et al, 2020). The literature in the field conceptualizes equity and empowerment as pathways to equality (MacArthur et al. 2020)

Empowerment is commonly viewed as the process of achieving gender and other social equality outcomes. It offers a broader framework for understanding the synergies and interactions between agency, capabilities and institutional opportunities (Dickin et al. 2021). The concept of empowerment is personal, meaning that each person has a unique definition of what it means to be empowered, based on their life experiences, personalities and aspirations (Alkire et al. 2013). WASH infrastructure is often argued to empower women, particularly through pathways associated with reducing the time spent on collecting water. However, while these pathways contribute to improved access, they do not address inequalities in control of resources or the transformation of unequal power relations (Dickin et al. 2021). To generate better evidence on the relationship between empowerment and WASH and health outcomes, more systematic approaches are needed to track changes, such as those developed in other sectors. For example, in the agricultural sector, the Women's Empowerment in Agriculture Index (WEAI) is a tool that was developed to measure the empowerment, agency, and inclusion of women in the Agricultural sector (Alkire et al., 2013).

To address the lack of tools to measure empowerment in the WASH sector, the novel Empowerment in WASH Index (EWI) was created such as the WEAI, to measure agency, participation and empowerment in the water and sanitation sector (Bisung & Dickin 2019). It is made up of indicators to assess empowerment in relation to WASH roles and responsibilities, and in relation to broader society (Bisung & Dickin 2019). The approach for constructing EWI was adapted from the WEAI mentioned above, and calculates who is empowered and how much they are empowered in order to create a comparable index (Alkire et al. 2013).

4. What do we think we don't know?

Although tools that measure empowerment in WASH are emerging in research, the question of whether improvement in WASH acts as a source of empowerment for women and girls in different contexts, is still lingering. It is often difficult to attribute causality between an intervention and empowerment because gender relations are embedded and mediated by other cultural and social norms that are difficult to account for, such as ethnicity (Bisung & Dickin 2019). For instance, research performed in Eastern India suggests that most women with subsidized latrines indicated preferring going out to openly defecate in the evenings even if they did not feel the need to. This was a time for them to chat with others and disconnect from household chores, relax, and socialize (Routray et al. 2015). In light of this, empowerment through WASH might not be sustainable without attention to other areas of life, including entrenched cultural gender norms and social norms (Bisung & Dickin 2019). How then can we incorporate context-specific definitions of empowerment in EWI tailored to each local community, as they might differ? Also, if WASH is not a priority, or if different components of WASH are of interest in a community than those captured by the index, how can it effectively measure empowerment?

The majority of studies in the sector of WASH and gender has thus far been performed in Sub-Saharan Africa and South Asia, indicating a research gap and opportunity to explore the WASH-gender nexus in other cultural contexts within the Global South (MacArthur et al. 2020). There has also been a more prominent focus on women of reproductive age than on adolescent girls, indicating a knowledge gap on the effects of gendered WASH on the lives of a diversity of female categories such as girls, elderly women as well as boys and men (MacArthur et al. 2020).

5. What are the biggest gaps to understanding the KTA challenge?

Progressively, the concept of empowerment has become a common component for many WASH interventions. However, the concept itself is complex and multi-dimensional (Dery et al. 2020). While empowerment is seen as a transformative outcome   that can arise from different WASH interventions, there is a need to understand what empowerment means to the recipients of interventions in real life practice settings (St-Cyr Tribble et al. 2003). Through a scoping review, the work from Dery (2020) explores how the concept of empowerment has been utilized in the WASH sector. While the review provides greater understanding of the dimensionality of empowerment in WASH interventions, it does not present the understanding of empowerment from a community or individual perspective in a local context. In this sense, there is a need to go beyond the literature and explore ways in which the concept of empowerment could be understood from a local perspective.

The aim of our case study is to address the limitations of the term empowerment currently embedded in the Empowerment in WASH Index. In this sense, one of the biggest barriers identified is the translation of the term empowerment into a local context that captures the needs of women, girls and gender minorities accordingly and without 'imposing' Western values. One of our colleagues in the Knowledge Translation course highlighted this issue as a very practical one. As noted by her, some languages don't even have a word that is equivalent to 'empowerment'. This further stresses the need for dialogues with knowledge users when implementing the Empowerment in WASH Index. This latter issue should be further discussed as how to prevent a westernized interpretation of the term empowerment and the right of "outsiders" to exert change in a culture that is not theirs (Luttrell et al. 2009).

6. Promising practices and recommendations for the KTA challenge

As we have made the case above, factors that contribute to empowerment can vary from one community to the other, and characteristics of empowerment can be unique to local contexts. We therefore suggest a ground-truthing protocol in order to verify components of EWI with the local knowledge of practitioners and knowledge-users. Ground truthing or verifying with local practitioner knowledge can serve to ensure that the index reflects the local context and that what it measures is meaningful to the community of study.

The objective would be to ground-truth the EWI with local key informant knowledge and perceptions of empowerment. In a future study, focus groups of knowledge users and practitioners can be asked for their input on empowerment perspectives as experienced in their field of work. Alternatively, these focus groups could be asked to provide feedback on the EWI and participate in a survey that will be used to assign weights to the variables in the index (Lavoie et al. 2018; Oulahen et al. 2015).

According to Oulahen et al. (2015), studies that create an index to measure social vulnerability to hazards often conclude that the index should undergo some type of review or validation to ensure that it makes sense. Lacking are studies that create an index and then present it to local practitioners for validation and incorporation of their feedback (Oulahen et al. 2015). The exercise of ground truthing thereby advances an understanding of empowerment by testing a research/literature-led statistical methodology against the local knowledge of practitioners working in the study area.

In this sense, we recommend the use of ground- truthing practice in combination with the implementation of studies that leverage both technical and social data through participatory data collection. An example of this could be transect walk, participatory mapping, daily routine charts and matrix ranking. Such types of studies can capture valuable insights into the social relations within the technical sector and could provide

researchers and practitioners with a better understanding of the power dynamics in the community (MacArthur et al. 2020).

Additionally, we suggest the use of transformative studies and scoping reviews of gendered WASH which look at both the connections between practical aspects of WASH interventions and the power dynamics between different social groups in different social contexts (Macura et al. 2020). Such transformative approaches often engage across disciplines and methodologies to explore and transform the lived experiences of participants through participatory or mixed methods. The engagment of transformative studies with feminist concepts such as agency, relations, and structures can enhance a better understandig of the power dynamics in the home, community, and broader public sphere. Finally, in all of these attempts, it is important to remember that gender-transformative research has to promote the inclusion of different voices, recognising different groups related to age, class, gender, and economic status (MacArthur et al. 2020).

Synthesis

TALK THE TALK AND WASH THE WASH: A KNOWLEDGE TRANSLATION APPROACH TO THE EMPOWERMENT IN WASH INDEX

WHAT IS THE KTA PROBLEM?

There are substantive **gender inequities in** access to water, sanitation, and hygiene **(WASH)** worldwide. Newly **developed tools,** such as the **Empowerment in WASH Index** are trying to measure that, **aiming to advance gender equity in the sector.** Nonetheless, there has **not been enough focus on bridging practical gender needs in the WASH** sector and the application of EWI has seen **limited engagement of women and girls** themselves.

WHO DOES IT AFFECT?

Gender inequities in access to WASH affect entire communities, but more strikingly women of all ages in the Global South. WASH-related infections cause millions of deaths that could be avoided if women and girls had improved access to water, sanitation, and hygiene. Additionally, structural gender-based violence deepens health inequities related to WASH, exposing women and girls to risks that range from sexual violence to general feelings of shame and fear when using inadequate sanitation facilities

WHAT DO WE KNOW ABOUT IT?

Despite the significant linkages between WASH services and gender equality, **measurements of empowerment related to WASH have so far been limited,** especially when compared to other sectors such as agriculture and reproductive health (Bisung & Dickin 2019). There is **increasing recognition that bridging practical gender needs** such as access to water **with strategic gender interests** such as changes in power and roles **is critical to achieving transformational changes in gender equality (**MacArthur et al, 2020).

WHAT DO WE THINK WE DONT KNOW ABOUT IT?

The question of whether improvement in WASH acts as a source of empowerment for women and girls in different contexts, is still lingering. It is often difficult to attribute causality between an intervention and empowerment because gender relations are embedded and mediated by other cultural and social norms that are difficult to account for, such as ethnicity (Bisung & Dickin 2019).

WHAT ARE THE BIGGEST GAPS?

The **Empowerment in WASH Index** is one of the most **promising tools** currently available to measure gender inequities in WASH. Nonetheless, it is based on a **definition of empowerment that stems from literature review**. In its application in Burkina Faso and Ghana, EWI has not seen enough engagement from women and girls. For this reason, **the biggest gap in this KTA problem is understanding the definitions of empowerment in WASH for women and girls in different cultural contexts**, as well as their priorities in the sector.

TOOLS AND PRACTICES

Factors that contribute to empowerment can vary from one community to the other, we therefore suggest a ground-truthing protocol in order to verify components of the EWI with the local knowledge of practitioners. Ground truthing can serve to ensure that the index reflects the local context and that what it measures is meaningful to the community of study. we recommend the use of ground-truthing practice in combination with the implementation of studies that leverage both technical and social data through participatory data collection.

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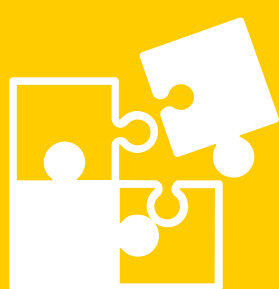
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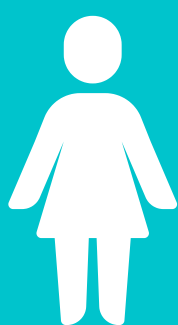
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