The Water, Sanitation and Hygiene Gender Equality Measure (WASH-GEM)

Summary Brief

What is it for? The WASH-GEM is a quantitative measure designed to assist practitioners and researchers to explore gender outcomes associated with water, sanitation and hygiene (WASH) programs for women and men, as “what’s measured matters”

What does it measure? The WASH-GEM has five domains of change, designed based on empirical evidence, practical experience, and academic literature. The five domains explore changes at both WASH-related gender dimensions as well as broader gender dynamics beyond WASH. The WASH-GEM anticipates that changes in WASH outcomes can lead to changes in gender equality, and highlights how wider gender dynamics influence WASH programs.

How do WASH and gender equality connect? The WASH-GEM builds on research on how WASH interventions can influence changes in wider gender equality dynamics. It measures aspects of gender equality both directly related to WASH and also broader gender equality dynamics beyond WASH (Willetts et al., 2010; Leahy et al., 2017; MacArthur et al., 2020).

Because of the deep gender dynamics associated with WASH-related roles and responsibilities, there is an opportunity to create positive changes that support both WASH and equality. These dynamics also serve to enable or constrain changes related to gender equality in WASH, which are important for WASH programs to understand.

Why do we connect WASH and gender? (MacArthur et al., 2020)

- WASH is integrally connected to traditional gender norms. Women are often responsible for water collection, cooking, cleaning, hygiene and childcare.
- The involvement of women in WASH instrumentally can lead to positive impacts on WASH intervention efficiency and sustainability.
- Women and girls uniquely and inherently have challenges with regards to WASH including menstruation and pregnancy.
- There is a moral imperative ideologically to address gender equality in development programming both as a means and end in itself.

waterforwomen.uts.edu.au/wash-gem
The five WASH-GEM domains are **Resources, Agency, Critical Consciousness, Structures, and Wellbeing**. They can be articulated in five simple phrases. These phrases help field teams engage with the WASH-GEM.

**How is the WASH-GEM calculated?** In a similar approach to the *Women’s Empowerment in Agriculture Index* (the WEAI) (*Alkire et al. 2013*), the WASH-GEM is made up of a number of indices and scales.

- **Indices** - A composite score that groups unique items/themes to represent a range of ideas together. For example, a group of questions that help us understand access to WASH, with each question covering a different aspect of WASH access.

- **Scales** - A group of items that together reflect an underlying theoretical concept. For example, a group of questions that help to understand collective agency.

The WASH-GEM is purposely not aggregated into a single number as there are many overlapping and connecting aspects across the five domains. Scores are compiled and presented for each domain.

Within the five WASH-GEM domains, there are **17 themes**. The themes can be categorised as WASH or Beyond WASH, and they can be an index, a scale, or a single item (or question).
How can it be used? The WASH-GEM can be used for monitoring, evaluation, and learning (MEL) in a variety of contexts. The tool primarily is used to compare differences between women and men.

- **Descriptive (diagnostic)** – The WASH-GEM can be used at a single point in time to explore and describe the situation within a particular context. This is often completed as formative research upon which to build interventions that address contextual gender equality dynamics. Descriptive studies can be used with comparative analysis by geography.

- **Evaluative (before and after)** – The WASH-GEM is designed to be used to explore the impact of an intervention on a population. This is primarily done through a sub-set of beneficiaries, comparing their status at the beginning and end of a project. Comparisons can also be undertaken by geographic region, different socio-economic groups. Most evaluative purposes will also include descriptive analysis of the baseline and endline data sets.

How has the WASH-GEM been used so far? We applied the WASH-GEM as a descriptive (diagnostic) tool in Nepal and Cambodia in 2020. To illustrate the kinds of findings that the WASH-GEM can lead to, below we present results from the agency domain within the validation piloting phase (n=3,056). We present a single item with its related theme and domain below.

### Average Agency score by country and gender

<table>
<thead>
<tr>
<th>Domain</th>
<th>Cambodia</th>
<th>Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency</td>
<td>0.63</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>0.61</td>
<td>0.71</td>
</tr>
</tbody>
</table>

### Average Self-efficacy score by region, country and gender

<table>
<thead>
<tr>
<th>Domain</th>
<th>Kampong Thom</th>
<th>Kandal</th>
<th>Prey Veng</th>
<th>Dałekh</th>
<th>Sarlahi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>0.48</td>
<td>0.40</td>
<td>0.39</td>
<td>0.46</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>0.41</td>
<td>0.46</td>
<td>0.46</td>
<td>0.63</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>0.63</td>
<td>0.65</td>
<td>0.63</td>
<td>0.65</td>
<td>0.65</td>
</tr>
</tbody>
</table>

### Confidence to take on new roles beyond the household, by region and gender

<table>
<thead>
<tr>
<th>Domain</th>
<th>Kampong Thom</th>
<th>Kandal</th>
<th>Prey Veng</th>
<th>Dałekh</th>
<th>Sarlahi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Confidence</td>
<td>20%</td>
<td>50%</td>
<td>30%</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>

- Not confident at all
- Not very confident
- Somewhat confident
- Very confident
How was the WASH-GEM developed? The WASH-GEM was co-developed in 2019-2021 in collaboration with iDE Cambodia and SNV Nepal within the DFAT Water for Women Fund. The conceptual model for the WASH-GEM was developed through a collaborative, iterative process informed by critical review of relevant literature and deepened through engagement with practitioners and specialists in the fields of gender, WASH and international development. The tool has been tested and refined through a process of collaborative piloting with in-country partners in Nepal and Cambodia. The WASH-GEM seeks to expand beyond women’s empowerment in WASH to explore the gender dynamics between women and men.

Learn More

Explore the WASH-GEM and connected tools online at waterforwomen.uts.edu.au/wash-gem

We are currently co-developing e-training materials and resources with our civil society partners.

If you would like to get in touch, please email juliet.willetts@uts.edu.au

Water for Women is Australia’s flagship water, sanitation and hygiene (WASH) program supporting improved health, equality and wellbeing in Asian and Pacific communities through socially inclusive and sustainable WASH projects. Water for Women is delivering 18 WASH projects in 15 countries together with 11 research projects over five years (2018-2022).