

# Closing the gender data gap and tackling the gender digital divide within the Feminist Foreign Policy Framework - Policy Brief

## 1. INTRODUCTION

Feminist Foreign Policy (FFP) is the framework and roadmap that enables us to put the empowerment of women and marginalized groups at the heart of every domestic and international policy to effectively tackle issues of national security, regional conflicts and climate change. The German Government, as it is making FFP its new *modus operandi*, is uniquely positioned to pave the way with its ability to mobilize resources, influence international stakeholders, and tie FFP criteria to procurement contracts and funding opportunities.

Within the FFP framework and throughout this brief, we will be discussing obstacles to deriving the right policies (“What problem are we trying to solve?”) and the right implementation tools (“How are we helping to solve the problem locally and at global scale?”). One of the key challenges to designing the right policies is the lack of data - particularly the **gender data gap**, and, on the implementation side, we face the **gender digital divide**, which confines access to empowering knowledge and critical resources for women, and impedes the use of digital tools for policy implementation. We will highlight both in detail throughout this brief.

The gender data gap prevents us from taking evidence-based action specific to women’s needs and the gender digital divide exacerbates inequities in access to knowledge, resources, and opportunities while limiting the implementation potential of information and communication technology (ICT) tools. Improving equitable data collection and leveraging digital solutions tied to the implementation of a FFP framework are two critical steps that the German Government is uniquely positioned to promote and support to enable more efficient, effective and targeted policies that empower women and vulnerable groups.

## 2. CHALLENGES

Action cannot be taken and policies should not be designed on facts that are not known or mapped out. Understanding the situation of women is essential to prioritizing the right support, monitoring, evaluation, accountability and continuous improvement. However, there is a lack of timely, quality data collection on women-specific issues, several key data points are not disaggregated by gender, and the majority of data collected globally is from men, also known as the gender data gap. For example, the contributions and labor conditions of many women are not measured, as women’s labor is often considered part of their household responsibilities, or within the informal labor sector for which little data is collected.<sup>1</sup> Obliviating the gender data gap is more important than ever. Notably, the advent of machine learning (ML), artificial intelligence (AI), and other algorithmic, statistical approaches introduce new challenges, as any biased data used to train an algorithm will reflect inherent gender biases.<sup>2</sup>

Another key challenge is the gender digital divide; when women (particularly those in rural areas with low income) have less access to digital tools and services than men. By consequence, they have less access to knowledge and resources; from daily weather forecasts that could inform agricultural practices, to life-saving information during natural disasters.<sup>3</sup>

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<sup>1</sup> Seglah, H.A & Blanchard, K. (2022) Invisible Again: Hyper-Marginalised Groups and Disaster Data. Accessed from <https://www.drrdynamics.com/publications>.

<sup>2</sup> Criado Perez, Caroline. Invisible Women: Data Bias in A World Designed for Men. Harry N. Abrams, 2019.

<sup>3</sup> Erman, Alvina; De Vries Robbe, Sophie Anne; Thies, Stephan Fabian; Kabir, Kayenat; Maruo, Mirai. 2021. Gender Dimensions of Disaster Risk and Resilience : Existing Evidence. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/35202> License: CC BY 3.0 IGO

For example, over 75% of the deaths in the 2004 tsunami in the Pacific were women, due to the lack of access to early warning systems.<sup>4</sup>

Women's health is also affected, as mobile phone ownership is associated with better reproductive maternal newborn and child health (RMNCH) indicators.<sup>5</sup> Without smartphones or computers, women are unreachable in the digital world, missing linkages to social services and job opportunities.

### 3. SOLUTIONS

#### 3.1 Data collection

Encouraging and investing in responsible, timely, and gender-disaggregated collection of data will enable decision-makers to identify and target key issues to improve the status of women through gender-responsive action. Quantitative data helps describe the situation (e.g. lower literacy rates among women), qualitative data can tell us why women may have lower literacy rates (e.g. societal belief that boys should receive more education), and data analysis can investigate patterns and our level of confidence in the data (e.g. we're confident that women in mountainous areas have lower literacy rates than women in the plains), and predictive modeling and ML can anticipate how we expect women's literacy rates to evolve over time based on different factors. As important as the data itself are the continuous processes accompanying the data collection, analysis, implementation, monitoring and evaluation of data-derived insights, policies and outcomes. Relying on ICT tools, we are able to continually assess and analyze data real-time, enabling rapid responses and better informed policies. Furthermore, continuous data collection is the basis for descriptive statistics, analytics and advanced statistics, i.e., ML/AI, etc. Here, it is important that we view the application of advanced statistics and ML as an aspirational goal as many topics still lack information earlier in the data value chain, like basic descriptive statistics.

Ensuring that data is collected from a representative population of both women and men and disaggregated by gender enables the comparison and contrast with men's data to increase equity and tailor activities for women. Ensuring other demographics are collected and considered are also important to further understand the population and any equity concerns, such as income.

Responsible data collection starts with how women are treated and considered during the process, to maximize their comfort, safety, and benefits from data collection. Factors to consider include:

1. **Time** of year and day, to avoid busy agricultural periods and culturally inappropriate times for women to meet.
2. **Location**, respecting cultural norms (i.e. is it appropriate to visit women at home?), or where and how long women are expected to travel, and how they will be compensated for their time and transportation.
3. **Enumerators** should always be trained on how to ask questions and ensure respondents never feel judged, while maintaining consistent practices for reliable data.
4. **Staff and family** present in the room will also affect women's responses; thus planning should consider how many people will be there, what their genders are, and what language is expected to be spoken.

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<sup>4</sup> MacDonald R (2005) How Women Were Affected by the Tsunami: A Perspective from Oxfam. PLoS Med 2(6): e178. <https://doi.org/10.1371/journal.pmed.0020178>

<sup>5</sup> LeFevre AE, Shah N, Bashingwa JJH, et al. Does women's mobile phone ownership matter for health? Evidence from 15 countries. BMJ Global Health 2020;5:e002524. <https://gh.bmj.com/content/5/5/e002524>

Responsible data collection must also consider what is done with the data after it is collected; how will the individual's privacy and identity be protected, while still sharing data back with communities when they may benefit from such knowledge. It is a woman's right to keep information about her health, location, finances, and business strategy private. At the same time, if this data is deidentified and aggregated at a population level, it can serve as a powerful tool, first and foremost to women themselves. Stigmatized issues like abortion, sexual assault, and domestic violence isolate women, but publishing statistics on these topics show women that they are not alone and build demand for a supportive infrastructure.

### 3.2 Digital Solutions

Beyond serving as tools for data collection, digital solutions can increase women's autonomous access to knowledge that can enhance livelihoods, entrepreneurship, and empowerment. Through the FFP, the German Government can promote three key factors to unleashing the potential of digital solutions: accessibility, digital literacy, and co-creation.

Before digital solutions can be leveraged at scale, efforts need to be made to increase the accessibility and affordability of internet and smartphones. Nearly half of the world's population does not have internet access, and the majority are women.<sup>6</sup> Once access is achieved, women's digital literacy must be supported so they have the capacity to use digital solutions to their full benefit. For example, smartphone trainings featuring experiential peer-to-peer learning and family mentors build women's capacity to use smartphones on a day-to-day basis, and to eventually apply their skills to digital applications.<sup>7</sup> Yet long before digital applications are ready for women's use, they should undergo participatory design processes together with women to assess usability, gather feedback, and ensure the final product avoids gender bias and meets their needs.<sup>8</sup>

## 4. CONCLUSION

The German Government is uniquely positioned to improve the status of women worldwide through the funding, policy promotion, and international influence on:

### 4.1 Data collection

1. **Collecting more data on women-specific issues**, helping policymakers monitor gaps and achievements, and promoting solidarity and knowledge-sharing among women;
2. **Collecting data from a representative population (including women and vulnerable groups)** to avoid a men-centric assessment of needs and best actions among policy makers, as well as biased ML/AI;
3. **Collecting women's data responsibly and respectfully**, through consideration of time, location, cultural norms, enumerators, and present staff and family members; and
4. **Protecting individual data**, while sharing anonymized and aggregated data for community learning.

### 4.2 Digital solutions

1. **Supporting accessibility & affordability** of internet and mobile phones to support women's access to information, autonomous entrepreneurship, and community connections;
2. **Building digital literacy** through hands-on trainings that integrate peer-learning and family mentors; and
3. **Co-creating digital solutions with women** to ensure women's needs are considered and met.

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<sup>6</sup> Carlos Iglesias, "The Gender Gap in Internet Access: Using a women-centred method," Web Foundation, March 10, (2020), <https://webfoundation.org/2020/03/the-gender-gap-in-internet-access-using-a-women-centred-method/>

<sup>7</sup> Sarah-Beth Hopton, Max Rünzel, Laura Becker. (4/7/2022). AI-Driven Climate-Smart Beekeeping for Women | 2021 Project Report. <https://repo.mel.cgiar.org/handle/20.500.11766/67516>

<sup>8</sup> Idem

The practices and processes mentioned throughout this paper can improve data collection practices and foster more inclusive co-designed digital solutions, which contribute to a more equitable evidence base as a valuable contribution to Germany's FFP roadmap.

## BIOGRAPHIES

Since 2020, the authors have co-managed a series of projects focused on improving women beekeepers' livelihoods through a hive management application in Ethiopia, Lebanon, and Uzbekistan, funded by the German Federal Foreign Office and GIZ. Notably, *AI-Driven Climate-Smart Beekeeping for Women* (AID-CSB) has generated lessons learned and results on what works in the digital space, further elaborated throughout this brief.



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