

TRANSFORMING THE DATA LANDSCAPE

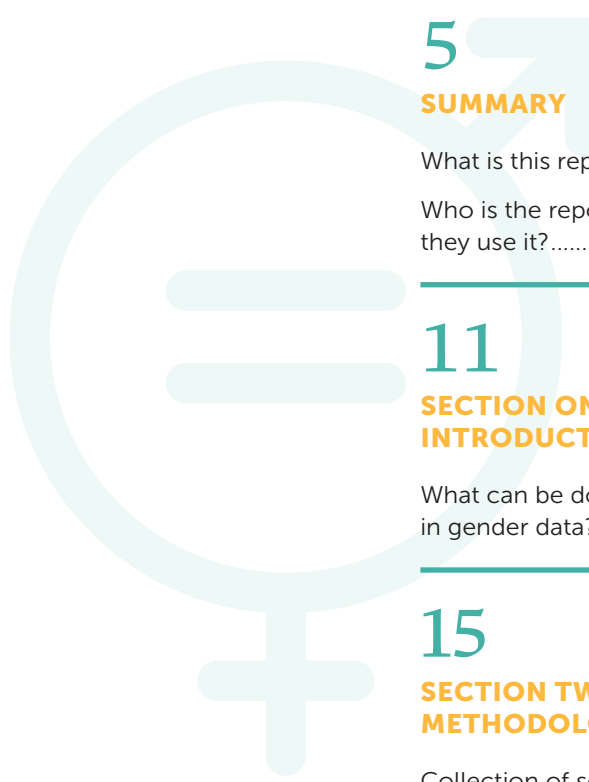
Solutions to Close Gender Data Gaps

data2x^o



| 2022 REPORT

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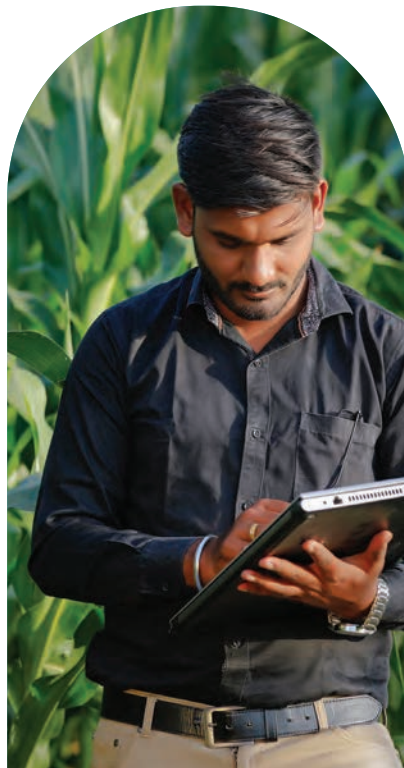
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2022 REPORT

Summary

What is this report about?

Despite decades of investment in promoting gender equality, gender data gaps continue to impede understanding of the lived experiences of women and girls. A lack of sex-disaggregated data encumbers efforts to craft and monitor the effectiveness of evidence-based policies that address gender inequalities. Moreover, even where these data are available, they are often stored and analyzed in silos or are underutilized. To transform the gender data landscape and realize gender equality, we must address barriers to moving data along the Data Value Chain (Data2X and Open Data Watch 2018). The purpose of the present research is to shift the conversation from identifying gender data problems to finding practical solutions to gender data gaps. It focuses on innovative approaches, matching solutions to problems, and presenting the acquired knowledge to encourage uptake and effective data use.

This report and the accompanying [Gender Data Solutions Inventory](#) document innovative solutions that have emerged in the last five years. The inventory catalogs 142 solutions

that are practical and, in many instances, scalable across six development sectors. It includes cross-domain solutions focused on improving the governance of statistical systems and encouraging the use of data and statistics by policymakers and the public. A few particularly promising solutions have been included in this report to provide a sample of the breadth and depth of the inventory and to provide a model of the investment, collaboration, and cross-sectoral partnership necessary to bridge gender data gaps and improve gender data use.

An analysis of the inventory points to priority actions that policymakers, advocates, funders, and data producers can take to increase the availability and use of gender data at the local, national, and international levels. Data producers across the statistical system should augment and refine traditional data collection methods. They can, for example, use verbal autopsies to supplement traditional cause-of-death data, conduct rapid gender assessments to collect data during crises, and employ geospatial data to augment data collected through household surveys.

By increasing the availability of gender data, we will be better equipped to monitor progress on the Sustainable Development Goals (SDGs) and assess the impact of new policies to improve the lives of women and girls. There is also a need to strengthen the enabling environment for data collection and use. This can include adopting robust data governance processes, using an intersectional lens to guide investment decisions, and building data literacy capacity through gender statistics courses for data users. Further, policymakers must integrate data in the policy formulation process to create evidence-informed policies. Without prioritizing use, no matter the strides made to increase data production efforts, data will not meaningfully impact the lives of women and girls.

This report and the accompanying Gender Data Solutions Inventory document innovative solutions that have emerged in the last five years.

STEPS FORWARD

To effectively fill gender data gaps and create a better enabling environment, actors within the national statistical system should work in partnership with local and global stakeholders to:



Step One

INCREASE SMART INVESTMENTS IN GENDER DATA SYSTEMS.



Step Two

EXPAND COLLABORATIVE EFFORTS TO CHAMPION GENDER DATA COLLECTION, ANALYSIS, AND USE.



Step Three

EXPAND AND ALIGN HOUSEHOLD SURVEYS TO INCREASE THEIR UTILITY AND QUALITY.



Step Four

STRENGTHEN CORE ADMINISTRATIVE SYSTEMS TO CREATE PERMANENT INFRASTRUCTURE TO GENERATE REGULAR, SEX-DISAGGREGATED DEMOGRAPHIC DATA.



Step Five

DEPLOY RAPID DATA COLLECTION METHODS TO MONITOR UNDERREPORTED ISSUES.



Step Six

DOCUMENT AND EXPAND THE USE OF INTERNATIONAL METHODOLOGIES TO IMPROVE THE QUALITY AND IMPACT OF GENDER DATA.



Step Seven

USE EXPERIMENTAL METHODS TO COLLECT DATA IN CRISIS SITUATIONS.



Step Eight

INCREASE GEOTAGGING AND GEOSPATIAL DATA USE IN CONJUNCTION WITH HOUSEHOLD SURVEYS TO BETTER DISCERN GENDER-DIFFERENTIATED RISKS AND OPPORTUNITIES.



Step Nine

ENSURE GENDER DATA ARE OPEN AND EASILY ACCESSIBLE TO INCREASE THEIR VALUE THROUGH USE AND REUSE.



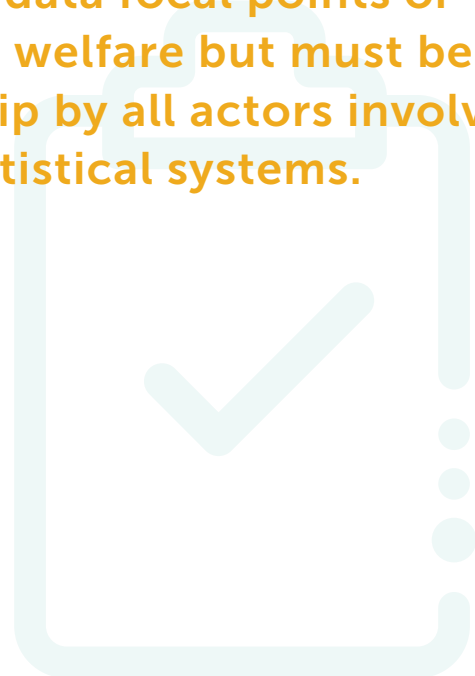
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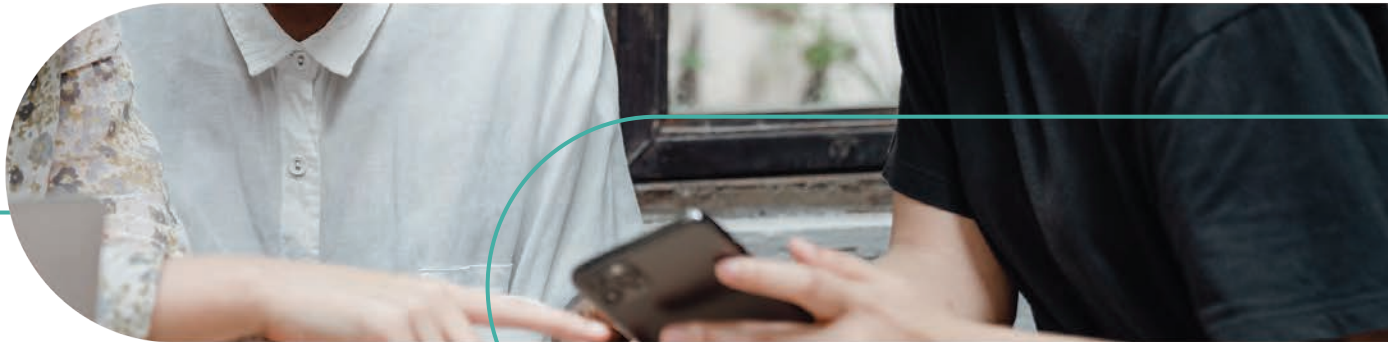
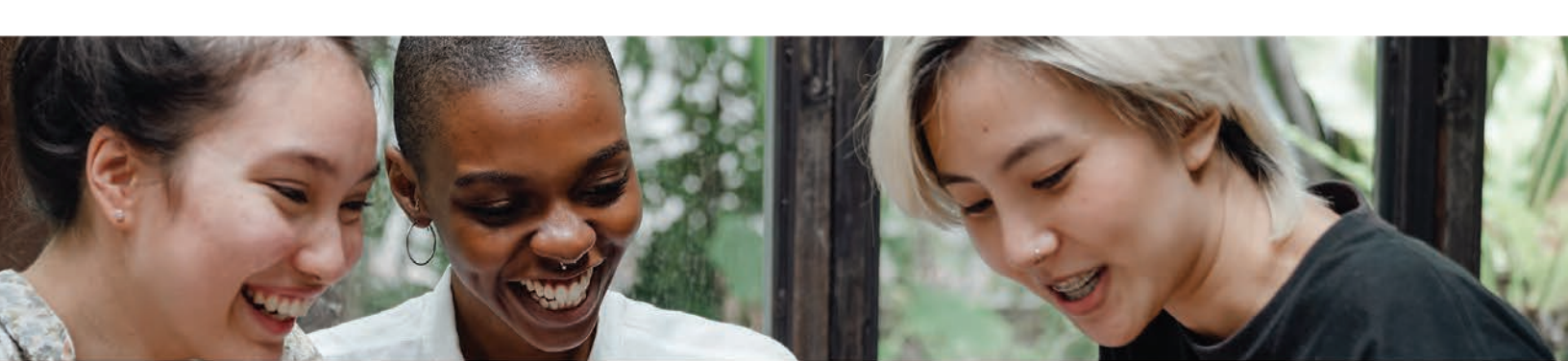
INVEST IN DATA TRAINING AND DATA LITERACY TO BUILD CAPACITY.

Apart from certain gender-specific topics, such as gender-based violence and menstrual health and hygiene, solutions to improve gender data systems will generally improve data systems overall. The reverse is also true: What improves data systems overall will often improve gender data systems. The breadth of solutions presented in this work underscores the cross-cutting nature of gender data. This is why investing in stronger data systems cannot fall only to gender data focal points or ministries of social welfare but must be borne in partnership by all actors involved with improving statistical systems.

To make good on our promise to leave no one behind, the development data community must identify, adopt, and scale solutions to fill persistent gender data gaps. Only with timely, accurate, and disaggregated data will we be able to hold ourselves accountable and ultimately achieve the Sustainable Development Goals.

Investing in stronger data systems cannot fall only to gender data focal points or ministries of social welfare but must be borne in partnership by all actors involved with improving statistical systems.





Who is the report for and how can they use it?

This research is designed to be relevant and actionable to all members of the data ecosystem, including national statistical offices, government agencies, policymakers, private companies, academics, civil society leaders, and the public. The report includes examples and recommendations to encourage and facilitate the production, dissemination, and use of gender data. Data producers can use the report and inventory to identify promising methodological innovations that improve and supplement traditional data collection practices. The solutions are categorized by six development sectors: economic opportunities, education, environment, health, human security, and public participation. They also include cross-domain innovations.

Policymakers, funders, and advocates can use the key takeaways from this analysis—

identified as priority actions in The

Way Forward—as a call to action, driving investment, collaboration, and future partnership. They

should pay particular attention to solutions that improve the enabling environment and build sustainable data systems for the future. The inventory also includes nascent innovations

that can be explored through further research and identifies opportunities for public-private partnerships and collaborations.





SECTION ONE

Introduction

Ever since the Millennium Development Goals promised to “promote gender equality and empower women,” (UN n.d.) statisticians, policymakers, and those working to deliver healthcare, provide access to education, and increase economic opportunities for women and girls have struggled with a lack of data. Gaps in sex-disaggregated data and lack of coverage of particularly relevant topics are now a fundamental obstacle to realizing the promise of the SDGs to leave no one behind.

What can be done about the gaps in gender data? In their 2014 report, “Mapping Gender Data Gaps,” Buvinic et. al. systematically examined gender data gaps in five statistical domains: health, education, economic opportunities, political participation, and human security (Buvinic, Furst-Nichols and Koolwal 2014). They characterized gaps as a lack of:

- Coverage and timely production—regular production of data covering the entire population
- Cross-country comparability—the use of international standard definitions and methodologies
- Complexity—data that cut across domains, revealing patterns and connections
- Granularity—data disaggregated by multiple characteristics

They posited that much of the data needed to produce important gender indicators already existed but needed to be located and made available, and they described initiatives underway to improve the availability of gender data. They also pointed to opportunities for using new technologies to complement standard methods or create new measures from non-traditional sources. These included crowd-sourced data, credit card and call detail records, remote sensing data, and the use of new survey methods and

WHAT ARE GENDER DATA GAPS?

In their 2014 report, “Mapping Gender Data Gaps,” Buvinic et. al. systematically examined gender data gaps in five statistical domains—health, education, economic opportunities, political participation, and human security (Buvinic, Furst-Nichols and Koolwal 2014). They characterized gaps as a lack of:



Coverage and timely production

REGULAR PRODUCTION OF DATA COVERING THE ENTIRE POPULATION



Cross-country comparability

THE USE OF INTERNATIONAL STANDARD DEFINITIONS AND METHODOLOGIES



Complexity

DATA THAT CUT ACROSS DOMAINS, REVEALING PATTERNS AND CONNECTIONS



Granularity

DATA DISAGGREGATED BY MULTIPLE CHARACTERISTICS

instruments. The report made a strong case that more and better gender data can and should be produced.

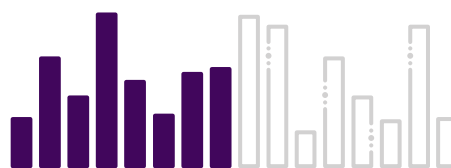
Following this report, Data2X and Open Data Watch described 20 indicators from the UN Women’s minimum set of SDG gender indicators that were “ready to measure” (UNSD 2019, Data2X and Open Data Watch 2019). These indicators were selected because they are, or can be, disaggregated by sex. They measure outcomes, not processes; they measure specific events or conditions affecting women and girls; and they can be used to measure progress over time in expanding women’s choices. As the title suggests, they could all be estimated from existing sources of information, primarily Demographic Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and Living Standards Measurement Study (LSMS) household surveys, labor force surveys or administrative data sources, using well-established methods.

Despite these efforts and those of countless other individuals and organizations, gender data gaps persist. Recent studies by Data2X and Open Data Watch of 25 countries in three regions found that only half of the potential gender indicators from the SDGs are available with sex disaggregated data and almost one-third are entirely unavailable (Wahabzada and Swanson 2021). There are many reasons these gaps persist: lack of financial and technical resources; lack of staff and staff training; lack of political commitment and misalignment of priorities; and, perhaps, lack of knowledge of how to use the data.

In “Mapping Gender Data Gaps: An SDG Era Update (Grantham 2020),” Dr. Kathleen Grantham set out to uncover the promising approaches to closing gender data gaps and the key barriers needed to be overcome to do so. Grantham noted that the issues that need to be addressed using gender data have expanded and the urgency of filling data gaps has increased as the SDGs enter their decade

of delivery. With every passing year, the need becomes more urgent.

The research reported here builds on Grantham’s survey by locating and documenting innovative solutions that have been published or written about since 2015 for closing gender data gaps in six domains—the five originally described by Buvinic et. al. plus the environment. A major contribution of this project is the [Gender Data Solutions Inventory](#), an online inventory of 142 solutions that address gender data gaps, including some that are cross-domain, along with solutions for improving the governance of statistical systems and increasing the use of statistics by policymakers and the public. A few have been selected for further discussion in this report.



ONLY 50%

OF THE POTENTIAL GENDER INDICATORS FROM THE SDGs ARE AVAILABLE WITH SEX DISAGGREGATED DATA.



ALMOST 33%

OF THE POTENTIAL GENDER INDICATORS FROM THE SDGs ARE ENTIRELY UNAVAILABLE.

The fundamental criterion for selecting the solutions included in the inventory is their relevance to improving gender data production and use. The emphasis is on practical methods that are likely to produce measurable results. Some are small and untested or still in a conceptual stage, but many have been deployed and are beginning to show results. The most promising have been widely implemented and are suitable for scaling up at the national level or replicating in other contexts. Their number and wide-ranging approaches demonstrate that there is no lack of imagination and energy for closing gender gaps. And there is widespread recognition that high-quality, open, and regularly available data are needed to design programs and monitor progress toward gender equality and women's empowerment.

In recognition of the gender data challenges during times of crisis such as the COVID-19 pandemic, the "Solutions for Building Resilient Gender Data Systems" brief (Data2X and Open Data Watch 2021a) used the inventory to highlight solutions that can be helpful to improve the resilience of gender data systems. However, the featured solutions are not just appropriate in times of crises. A comparison of the brief and this report highlights the importance of resilient gender data systems broadly. The systems necessary in a crisis are often the same systems needed for the functioning of data systems during other times. Strong civil registration and vital statistics can map the outbreak of disease and provide the legal basis for the participation of women in social services and banking. Better education administrative data systems can capture learning loss during disruptions and enable long-term education planning.



Geospatial data can identify areas of need based on population access to health facilities as well as help to record land tenure rights for women.

This report proceeds as follows: The next chapter describes the methodology for selecting and categorizing the solutions. Each solution is documented in the inventory, including tags describing their statistical domain and stage of implementation. The following chapter examines some of the most promising solutions in each of the six statistical domains and cross-domain solutions that strengthen data collection and use, such as big data methods and rapid gender assessments. To build sustainable solutions and ensure that gender data are widely available, there must be an enabling environment. Initiatives to promote good governance, provide adequate and predictable financing, and encourage the use of data in policymaking and implementation are discussed in the next chapter. The last chapter discusses the way forward. Now that we have identified the solutions, how do we mobilize resources and focus our efforts to make gender data an integral part of strategies for gender equality?

The systems necessary in a crisis are often the same systems needed for the functioning of data systems during other times.



SECTION TWO

Methodology

Methodology

Collection of solutions

Gender data solutions are tools, approaches, and technological or methodological innovations that improve gender data production and use. [The Gender Data Solutions Inventory](#) catalogs solutions identified through a comprehensive literature review of academic and other authoritative sources, such as reports from inter-governmental organizations and research published by civil society organizations. The examples in this report have been selected from the inventory, and they include solutions that have been implemented in small- and large-scale programs, along with some that are still conceptual.

The research team began the literature review in March 2021, searching for relevant solutions based on themes such as health and economic opportunities and areas of focus such as methods and governance. The first solutions in the inventory were drawn from peer-reviewed academic reports. The research team then expanded its scope to search for solutions from other authoritative sources, such as inter-governmental organizations and research published by civil society organizations. The solutions were then recorded in an Excel inventory based on their relevance to improving gender data collection and use and their cross-country scalability and replicability.

In addition to the literature review, the research team conducted a survey of gender data stakeholders in October 2021 to collect additional gender data solutions. The survey gathered 17 responses, 10 of which were added to the inventory. The selected solutions discussed in this report reflect the state of the inventory as of the end of October 2021.

Structure of inventory

The solutions in the inventory have been labeled with tags for filtering selections and further analysis. In addition to general tags such as region of origin and applicable sector, others have been added to define their role in data production and use. Here, we provide an overview of some of the tags used in the inventory.

The identified solutions were categorized according to thematic areas of development in Buvinic et. al. (Buvinic, Furst-Nichols and Koolwal 2014) and Grantham (Grantham 2020) and as tested in publications by Data2X and ODW (Wahabzada and Swanson 2021). The thematic areas are economic opportunities, education, environment, health, human security, and public participation. This report also added a seventh category for solutions that would apply across all sectors ('other relevant gender categories').

For each solution, the research team also tagged relevant actors involved in each solution, such as academia, civil society organizations, national statistics offices, and others. In addition, the research team categorized each solution by its focus, describing the challenge it aims to address, such as methods, underreporting, funding, governance, openness, and engagement. Additionally, the research team determined whether each solution fell into data production, data usage, or both major stages of the data value chain.

This is a broad overview of major tags used in the inventory. In 2022, Data2X and Open Data Watch will turn the existing inventory into a microsite for a better user experience. A corresponding technical note will also be available. Interested users may access an [Excel copy of the inventory here](#) that includes descriptions of the tags.



SECTION THREE

Solutions by Sector

THEMATIC SOLUTIONS

The Gender Data Solutions Inventory records 142 solutions across seven areas of development: economic opportunities, education, environment, health, human security, public participation, and cross-domain solutions which span across the previous categories. In our findings, many solutions are cross-domain, as demonstrated by the “double count” column of Table 1. Health, which has the largest number of gender indicators in the SDGs, has also attracted the largest number of solutions. Nearly 40 percent of the solutions address data gaps in health-related issues and another 27 percent address gender data gaps in economic opportunities, the second largest grouping in the SDGs. Human security, with only 9 percent of the solutions, is the least represented.

In this chapter, we feature a few solutions in each thematic area. These solutions were selected based on their area of focus, scalability for cross-country use and examples of impacts (if available). Each section concludes with a summary of the steps needed to scale up the solutions and their likely impact.

The implementation and the scalability of these solutions depend on reliable funding and technical capacity, often involving multiple actors working together in partnership. Table 2 describes the types of actors involved in the development or implementation of the solutions. As shown in the “solutions shared with other actors (double counts)” column, many actors are involved in multiple solutions.

Table 1: Solutions by area of development

AREAS OF DEVELOPMENT	NUMBER OF SOLUTIONS	SHARE OF TOTAL (%)	SOLUTIONS SHARED WITH OTHER AREAS (Double Counts)
Economic opportunities	38	20	3
Education	19	10	6
Environment	21	11	7
Health	51	27	12
Human security	13	7	4
Public participation	21	11	12
Cross-domain	26	14	3
Total*	189		47

**Note: Total includes 47 solutions applicable to more than once thematic area.*

The Gender Data Solutions Inventory records 142 solutions across seven areas of development: economic opportunities, education, environment, health, human security, public participation, and cross-domain solutions which span across the previous categories.



Table 2: Breakdown of solutions by type of actor

TYPE OF ACTOR	NUMBER OF SOLUTIONS	SHARE OF TOTAL (%)	SOLUTIONS SHARED WITH OTHER ACTORS (Double Counts)
Academia	28	9	11
Bilateral donor governments	19	6	14
Civil society organizations	47	14	20
Foundations	8	2	6
Government ministries, policymakers, and offices other than NSOs	69	21	44
Inter-governmental organizations	67	21	29
Multi-stakeholder or other partnerships	28	9	16
National statistics offices	34	10	25
Other organizations (such as media outlets/journalism or non-academic research institutions)	10	3	9
Private sector	15	5	9
Total*	325		183

**Note: Total includes 183 solutions applicable to more than one thematic area.*

The distribution of actors in Table 2 does not represent their relative magnitude and importance in the gender data ecosystem. Some may be undercounted. For example, foundations play a major role in development data initiatives and projects conducted by inter-governmental or civil society organizations, but

their support may not be explicitly mentioned in project descriptions. However, the table does suggest the potential for non-traditional stakeholders, such as the private sector and other organizations (media), to play a larger role in facilitating gender data solutions.

Economic Opportunity

INTEGRATION OF GENDER-RELEVANT MODULES ON ICT AND ASSET OWNERSHIP IN EXISTING HOUSEHOLD SURVEYS

Data on asset ownership and information and communication technology (ICT) access typically rely on survey sources. However, regularly conducted surveys require consistent funding from domestic sources and development donors along with capacity building and other forms of technical assistance from international organizations to support survey operations. Sex-disaggregated data on asset ownership, and access to ICT are needed to understand women's economic agency and involvement in household decision-making. Because of capacity constraints, ministries of labor or governmental ICT authorities may not collect gender-relevant data on a frequent basis.

Solution highlight: Integrating meaningful connectivity module into household surveys

In an increasingly digitized world, inequitable access to the internet can have spillover effects by preventing women from accessing financial technology and services. A report from the Alliance for Affordable Internet (A4AI) proposes a new target for meaningful connectivity that sets thresholds for regular internet use with an appropriate device and data download capacity using a fast connection. This proposed measure provides a sample module that can be integrated in household surveys. The meaningful connectivity module is versatile, allowing analysis of internet use by gender to assess the digital gender gap that goes beyond conventional measures of internet usage. So far, meaningful connectivity has been



piloted in household surveys in Colombia, Ghana, and Indonesia (Alliance for Affordable Internet 2020). The piloted surveys show that there is a greater gender gap in meaningful connectivity than in internet accessibility, where the gender gap towards meaningful connectivity is 17 percent in Colombia, 15 percent in Ghana, and 3 percent in Indonesia. The barriers to meaningful connectivity include service quality and availability, where there is an urban-rural divide; lack of time, where unpaid care work can take up more time for women; affordability, especially in consideration of the gender wage gap (World Wide Web Foundation 2020).

Solution highlight: Integrating modules on asset ownership into household surveys

Modules on asset ownership can be integrated into household surveys. The United Nations Statistics Division's (UNSD) "Guidelines for Producing Statistics on Asset Ownership" from a Gender Perspective includes sample modules on asset ownership for national statistical offices and other relevant actors to integrate into recurring household surveys (UNSD 2020).

The guidelines conceptualize asset ownership—such as the ownership of land or property—as documented ownership, reported ownership, right to sell, and the right to bequeath. The modules support gender analysis of asset ownership to encourage policymakers to address women’s economic empowerment, poverty reduction, and to further learn about women’s livelihoods.

Other economic opportunity solutions and findings

These solutions highlight the versatility of regularly conducted household surveys that incorporate gender-relevant modules on internet usage and asset ownership. With proper technical assistance and training, these modules are scalable in regularly conducted household surveys.

We found that of 142 solutions found in the inventory, 38 solutions are relevant to economic opportunities, 23 of which solely focus on economic opportunities while the remaining 15 cover multiple themes where economic opportunities are also a component. Of these solutions, about 53 percent focus on both data production and use. The remaining mostly focus on data production. Other economic opportunity solutions in the inventory include:

- Harmonization of labor force surveys and multitopic household surveys to ensure the consistency of measuring men and women’s work, as in the case of Sri Lanka (Discenza, et al. 2021)

- The role of partnerships in encouraging gender data collection and production on women’s work and employment (World Bank n.d.a)
- Oxfam’s Household Care Survey Toolkit to gather data on factors associated with unpaid care tasks (Oxfam 2020)
- The rapid assessment instrument of the UN Expert Group on Innovative and Effective Ways to Collect Time-Use Statistics’ (EG-TUS) to collect time use data during crises (UNSD n.d.)

WHAT WILL IT TAKE TO SCALE UP ECONOMIC OPPORTUNITY SOLUTIONS?

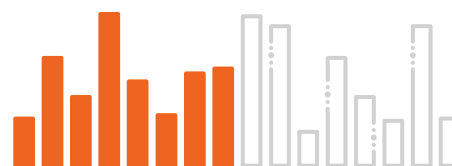
More targeted technical assistance for capacity building on household surveys and partnerships is key to scaling up solutions for better gender-relevant data on economic opportunities. The household modules on meaningful connectivity and on asset ownership will involve civil society groups (such as Alliance for Affordable Internet) and inter-governmental organizations (such as the Intersecretariat Working Group on Household Surveys) in providing technical assistance to national statistical offices to integrate these modules into existing household surveys. The integration of modules could come with risks, as too many modules could be a significant time burden for surveyors and interviewees. Therefore, national statistical offices should be selective in integrating household modules that reflect national needs and priorities.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

The solutions associated with economic opportunities increase production of gender data on economic empowerment, financial inclusion, information and communications technology, work including unpaid housework and care work, time use, and employment.

In the inventory, solutions that address asset ownership complement efforts to track Target 5.a of the SDGs on equal access to economic resources, including access to land. Solutions that address gender-equal access on information and communications technology address Target 9.c of the SDGs. The remaining solutions address SDG 8 (decent work and economic growth), particularly on Targets 8.10 (financial institutions), 8.5 (full and productive employment), 8.7 (child labor).

Beyond the SDGs, better gender data on economic opportunities, particularly on work and employment is essential to the International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work which recognizes “the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labor; the effective abolition of child labor; the elimination of discrimination in respect of employment and occupation” (ILO n.d.). Better gender data is essential to monitoring whether ratified member states are carefully following these fundamental principles.



53%

OF THE 38 SOLUTIONS FOCUSED ON ECONOMIC OPPORTUNITIES RELATED TO BOTH DATA PRODUCTION AND USE.

More targeted technical assistance for capacity building on household surveys and partnerships is key to scaling up solutions for better gender-relevant data on economic opportunities.

Education

STRENGTHENING EDUCATION MANAGEMENT INFORMATION SYSTEMS

Collecting reliable disaggregated data on school enrollment, participation, transition, and graduation is critical for evidence-based policymaking. However, an Open Data Watch and Data2X study of 25 countries shows that 42 percent of education data are missing (Wahabzada and Swanson 2021). Given capacity constraints, ministries of education often rely on paper-based administrative data systems. Yet, paper-based tools are resource-intensive and are a barrier to sourcing gender data and other statistics from administrative records (UNICEF 2020a).

Education management information systems (EMIS) overcome the limitations of paper-based data collection approaches. As a digital repository of education data, EMIS allow ministries of education to collect data on schools, along with age, sex, and other

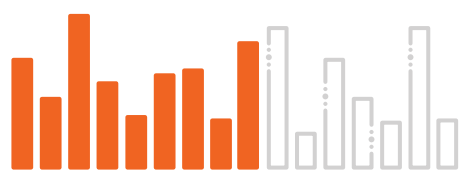
information about students and faculty. From a central location, data on enrollment, absence, test results, school facilities, and even teacher qualifications can be easily extracted and analyzed. Policymakers and development practitioners use these data to monitor gender equality and the progress of women in education. The implementation of EMIS in ministries of education is not a new concept; since the 1980s, there have been efforts underway to digitize education administration data along with efforts to develop more comprehensive management information systems (Inter-American Development Bank 2006). But despite these benefits and efforts to implement improvements, a review of 74 countries eligible for financing from the International Development Association (IDA) found that 37 have low- and 29 have medium-functioning EMIS (Data2X and Open Data Watch 2021b). More solutions for improving EMIS are needed given the state of these data systems.

Solution highlight: Using OpenEMIS for countries lacking an adequate EMIS

OpenEMIS is a potential replacement for outdated education systems that may be costly to update and a solution for countries that still lack electronic record keeping. Developed by UNESCO, OpenEMIS is a free, open source, customizable, and secure software (OpenEMIS n.d.a). It allows ministries of education to collect data on student attendance, behavior and progress, teacher qualifications and attendance, and on institutional resources and services. It also has the capacity to monitor and analyze data on gender equality, especially indicators pertaining to students and staff composition, student performance, and access to sanitation (OpenEMIS 2018). OpenEMIS eliminates the burden of paying software

Lack of sanitation facilities in schools poses barriers to gender-equal access to education, as the lack of these facilities can inhibit girls from attending or fully participating in school.

licensing fees and significantly improves data collection, monitoring, and analysis. Most importantly, OpenEMIS can be used as a tool for evidence-based policymaking to ensure gender parity. In Belize, the Ministry of Education, Youth and Sports' (MoEYS) strategy from 2011–2016 emphasized the need to address gender disparity across all levels of education, including primary and tertiary (Ministry of Education 2021).



42%

OF EDUCATION DATA ARE MISSING IN 25 COUNTRIES

MoEYS launched the OpenEMIS initiative in 2015 to address gaps in gender to support data collection, analysis, dissemination, and increase evidence-based planning in the education sector (OpenEMIS n.d.b).

Solution highlight: Integrating menstrual health and hygiene questionnaires into EMIS

Education management information systems can also be used to address special needs of women and girls in schools, particularly for menstrual health and hygiene. Lack of sanitation facilities in schools pose barriers to gender-equal access to education, as the lack of these facilities can inhibit girls from attending or fully participating in school (UNICEF n.d.). Developed by UNICEF, the “Guidance for Monitoring Menstrual Health and Hygiene” provides methods to use EMIS to monitor menstrual health and hygiene in

schools. It provides sample questionnaires on sanitation and changing facilities to be completed by schools and other institutions. These questionnaires can be administered through EMIS, allowing schools and other education administrations to complete and submit the questionnaires (UNICEF 2020b). As this is a recent guidance, there are no examples of countries implementing the sample questionnaire. However, countries such as Ghana have already integrated an indicator on menstrual hygiene in their EMIS (IRC 2021). Countries with menstrual hygiene measurements in place in their EMIS can implement more detailed questionnaires from UNICEF’s *Guidance for Monitoring Menstrual Health and Hygiene*. The incorporation of sanitation questionnaires through EMIS allows policymakers and development practitioners to understand the linkages between female-friendly sanitation facilities, accessibility of sanitary and menstrual products, and school enrollment and participation by girls. Policymakers can then translate these insights into improving facilities to elevate education outcomes for girls.



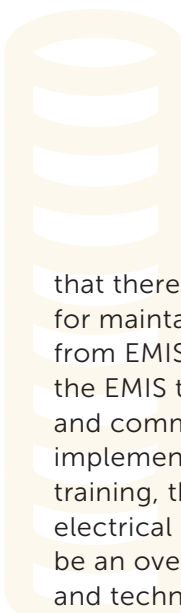
Other education solutions and findings

Education is a multifaceted topic and the two solutions highlighted above are only a sample of the contents of the inventory. Out of 142 solutions found in the inventory, there are 19 education-relevant solutions, where ten of the solutions solely focus on education and nine solutions have an education component. Nearly 70 percent of the solutions address both data production and data use. Other education solutions in the inventory include:

- The development of a gender-equitable school index to understand inhibiting factors towards an equitable secondary school attainment (Bergensfeld, Jackson and Yount 2020)
- The development of surveys to understand education and career decisions of girls and boys in secondary school (World Bank 2016)
- The supplementary use of geospatial data to understand access to education services (Sengeh and Game 2021)
- The role of open data in understanding education outcomes and government spending on education (Open Data Impact Map n.d.)

WHAT WILL IT TAKE TO SCALE UP EDUCATION SOLUTIONS?

Scaling up these solutions—along with other solutions in the education sector—requires a **multi-stakeholder effort**. Countries with weak or no education management information systems may require both capacity building and technical assistance from inter-governmental organizations such as UNESCO and UNICEF. Capacity building of the ministries of education will ensure



that there is a designated team responsible for maintaining, updating, and producing data from EMIS. Technical assistance will provide the EMIS team with up-to-date information and communications technology, software implementation, and other technological training, though the robustness of the electrical grid and internet infrastructure may be an overarching constraint. Both capacity and technical assistance can help guide ministries in implementing menstrual health and hygiene and other questionnaires in EMIS. Capacity building and technical assistance will require significant financial resources. The payoff is an increased ability to monitor inclusive education progress and identify gender barriers to school participation and attainment. The successful implementation of EMIS also rests on a clear and established data collection process between schools and ministries of education. Ministries of education will also have to work closely with national statistical offices (NSOs) to ensure that gender-relevant education data are regularly collected and disseminated, thereby enabling monitoring for national and international policies. Finally, to ensure that key data users and other stakeholders can synthesize gender insights from EMIS sources, ministries of education and national statistical offices should hold relevant workshops, courses, and additional trainings in partnership with technology providers as appropriate.

It is also important to note that EMIS do not capture all school-aged children. In many countries, girls out of school or outside of formal schooling systems may not be captured in EMIS. Nationally representative household surveys can complement EMIS in this case by sampling out-of-school populations and thereby obtaining a fuller picture of the educational attainment of women and girls.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

The solutions associated with education would help produce more gender data on school attendance, progress, retention, and access to menstrual hygiene facilities. In particular, the education solutions found in the inventory will close gaps in the data needed to monitor Sustainable Development Goal 4: Quality Education, including completing free, equitable, quality primary and secondary education (Target 1); ensuring quality technical, vocational, tertiary education (Target 3); increasing number of youth and adults with skills for employment (Target 4); achieving literacy and numeracy (Target 6); acquiring knowledge for sustainable development (Target 7); building and upgrading education facilities (Target a); and increasing education staff (Target c), all of which require sex-disaggregated data.

Beyond the SDGs, the education solutions found in the inventory will also address the African Union Commission's Agenda 2063, particularly its call for action to catalyze an "education and skills revolution and actively promote science, technology, research and innovation, to build knowledge, human capital, capabilities, and skills to drive innovations and for the African century" (Africa Union Commission 2015).

The successful implementation of EMIS also rests on a clear and established data collection process between schools and ministries of education.

CLOSE GAPS IN THE DATA

The education solutions found in the inventory will close gaps in the data needed to monitor Sustainable Development Goal 4: Quality Education, including:



Target 1

COMPLETING FREE, EQUITABLE, QUALITY PRIMARY AND SECONDARY EDUCATION



Target 3

ENSURING QUALITY TECHNICAL, VOCATIONAL, TERTIARY EDUCATION



Target 4

INCREASING NUMBER OF YOUTH AND ADULTS WITH SKILLS FOR EMPLOYMENT



Target 6

ACHIEVING LITERACY AND NUMERACY



Target 7

ACQUIRING KNOWLEDGE FOR SUSTAINABLE DEVELOPMENT



Target A

BUILDING AND UPGRADING EDUCATION FACILITIES



Target C

INCREASING EDUCATION STAFF

Environment

TOOLS TO TRACK GENDER PARITY IN THE ENVIRONMENT AND THE DISPLACEMENT OF PEOPLE AFTER NATURAL DISASTERS

As shown in *Gender Data Gaps: A Comparison of Three Regions* (Wahabzada and Swanson 2021) and in *Mapping Gender Data Gaps in Environment* (Grantham 2020), there is a dearth of gender data in the environmental sector. Without such information, policymakers, researchers, and development practitioners are unable to address how and where women and girls are differentially affected by a lack of access to water and sanitation, lack of rights to agricultural land, the impacts of natural disasters, or even how many women participate in environmental decision-making. Some of this information is difficult to obtain with sex disaggregation because the data are collected at the household or higher levels of aggregation. To fill these gaps and recognize the roles of women in managing the environment and responding to natural disasters, new sources and innovative methods of data collection are needed.

Solution highlight: Using the Gender Climate Tracker to understand the inclusion of women leaders pertaining to climate change policies

Understanding the role of women in leadership and policies pertaining to the environment is integral to crafting more gender-informed environmental policies. Women in leadership roles can pave the way for more gender-relevant objectives and targets in environmental strategies, and data are needed to set targets and monitor progress towards these plans. The Women's Environment and Development Organization's (WEDO) Gender Climate Tracker is a powerful tool to identify women leaders in decision-making processes and to track the inclusion of gender or gender mandates in national climate policies (WEDO n.d.). Users can filter national climate policies to see if there are references to gender equality, gender mainstreaming, gender balance, or the vulnerability of women; users can also browse for data on the participation of women in climate change policy; and users can access country profiles for summary findings on gender in policy or the role of women decision makers. Organizations such as CARE have applied the Gender Climate Tracker to further understand gender equality in national climate plans, where a "scorecard" approach was used to rank countries based on how they have integrated gender equality to their national climate plans (CARE 2020). The Gender Climate Tracker—essentially serving as a "watchdog"—can ignite efforts for greater gender parity in climate-related decision-making processes and the inclusion of gender in national policies. Developing stronger linkages of gender and climate change can pave the way for greater data collection efforts to monitor how women and girls are impacted by climate change.



Solution highlight: Using Facebook's Gender Disaggregated Displacement Maps

Smartphone technology can play a major role in sharing location information after a natural disaster with humanitarian practitioners so they know how many people are displaced, where they are, and the type of assistance needed. By enabling location services on a smartphone, Facebook Displacement Maps can gather information on users in the weeks and months after a natural disaster to assess displacement or resettlement of a population (Dow, et al. 2019). When mapped at the local level, data can show how natural disasters can impact displacement over time. Since Facebook already collects data on the gender of users, the data can also show how natural disasters can differentially impact men and women (Facebook Data For Good n.d.). It is important to acknowledge the potential biases in data as this relies on mobile phone ownership and usage, and there are existing gender gaps in ownership and usage of mobile phones (GSMA 2021). Additionally, other sampling biases can arise when economically vulnerable and other marginalized groups do not have adequate access to mobile phones and internet connectivity.

In the context of Saint Vincent and the Grenadines, Direct Relief used the Displacement Map tool to assess how the La Soufriere volcano eruption affected population displacement in April 2021. Furthermore, Direct Relief plans to use gender disaggregated data to understand the gender dynamics of internal displacement (Schroeder 2021).

Other environment solutions and findings

The two solutions highlighted here are examples of tools needed to assess and monitor the impact of climate change on gender equality. Out of 142 solutions in the inventory, 21 solutions are relevant to the environment, where 13 of those solutions solely focus on the environment and the remaining eight solutions over multiple themes where environment is a component. Of the 21 solutions, nine solutions focus on both data production and use; seven solutions focus solely on data production; and five solutions solely focus on data use. The effort to build the inventory did not yield many solutions on improving the availability of sex-disaggregated data on the built environment, such as measures of indoor air pollution and its effect on families, characteristics of the population living in informal settlements. Other environment solutions in the inventory include:

- Using a mixed-methods approach of quantitative and qualitative studies to develop a gender-analysis tool in disaster risk management (Sohrabizadeh, et al. 2020)
- Developing a gender-inclusive assessments to understand the needs and vulnerabilities of women and men for better disaster risk (Asian Development Bank 2014)
- Following guidelines set forth by 50x2030 on survey tools for monitoring SDG 5.a.1: measuring gender parity in ownership and tenure rights over agricultural land (50x2030 2021)

WHAT WILL IT TAKE TO SCALE UP ENVIRONMENT SOLUTIONS?

Better data governance and data sharing between new sources of data and existing official statistics in particular, is key to scaling up solutions for better data at the environment-gender nexus. Solutions such as the Gender Climate Tracker and Disaggregated Disaster Maps rely on sharing information between governments and watchdog organizations and private sector companies and researchers, respectively. Policymakers and international organizations are best placed to advocate for and implement better frameworks for facilitating data sharing and putting in place the incentives to be open and transparent with published data while preserving privacy. Due to the dearth of administrative data and the lag of responsiveness of surveys in times of crises, environment data are currently more likely to be sourced from new and alternative data sources, such as social media companies, geospatial databases, local governments, or other community-level initiatives. The goal of better data governance is therefore to include these relatively new sources of data into the routine generation of official statistics on women and girls and the environment.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

The solutions associated with the environment would help produce more gender data in the aftermath of disasters, for land rights and agriculture, and on leadership in government service. But solutions are sparse for improving data on the built environment of homes, including adequate WASH facilities, which affects women particularly when their health and livelihoods depend on their home.

In the inventory, the solutions that map the impact on women and girls in the aftermath of disasters will be crucial in the age of climate change and will also complement efforts to track Target 1.5 of the SDGs on improving resilience. The solutions to improve mapping of land to link to registries on landholdings are linked to stronger property rights for women which will help them be more economically secure. These data will also help monitor progress on SDG target 1.4 on equal access to economic resources, and SDG target 5.a on equal access to land. Furthermore, the solutions that address the built environment are covered under SDG targets 6.1 and 6.2 on safe and accessible water and sanitation hygiene. Though the need for better data on leadership is not confined to the environment, the solutions listed here can improve the availability of

The solutions associated with the environment would help produce more gender data in the aftermath of disasters, for land rights and agriculture, and on leadership in government service.

data on women involved in climate policies and thereby satisfy the goals of many countries in their national plans on gender equality and sustainable development. These data will also help monitor progress on SDG target 5.5 on equal participation in leadership positions.

Beyond the SDGs, better gender data on leadership in climate change negotiations will help monitor the Lima Work Programme on Gender (LWPG) (UNFCCC n.d.) which calls for better representation of women in climate negotiations and leadership positions. In addition, the SDG targets above are also linked in other monitoring frameworks, allowing for better monitoring of the Minimum Set of Gender Indicators in Africa and Africa Agenda 2063, for example.

The lack of solutions related to the built environment is particularly relevant to Goal 11 on building sustainable cities. The gaps demonstrate the importance of more innovation to capture these hard-to-measure but vital data on women's well-being in the home.



BOX ONE

A Call to Action: Prioritize addressing gender data gaps within the environment sector

Through this research we examined solutions for gender data gaps in the economy, education, environment, health, human security, and public participation. The environment sector exhibits the most acute data challenges. As global warming and climate disasters intensify, it will be increasingly important to have sex-disaggregated and gender-sensitive data that show how men and women are differently impacted in their daily lives, as well as when experiencing disasters. However, of the 142 solutions identified by this review, only 21 pertained to environment and gender, and most of these are concerned with disaster risk assessment rather than regular data collection. More investment in and attention to the gender-environment nexus is paramount. One recent effort to deliver on this call to action came during the Generation Equality Forum, when leaders of the Feminist Action for Climate Justice Action Coalition identified increasing the collection and use of gender-environment data as a top priority within the sector. To work toward this goal, a multi-stakeholder group of organizations led by WEDO and the IUCN committed to create a Gender and Environment Data Alliance focused on improved accessibility and application of gender data on climate and the environment. This solution will be operationalized in 2022 (Generation Equality Forum 2021).

Health

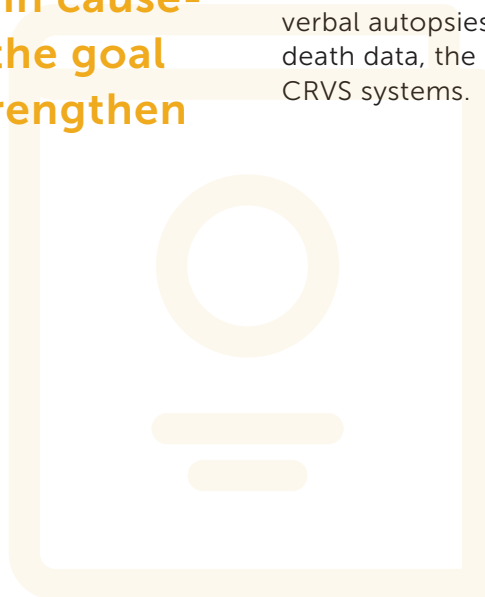
STRENGTHENING CAUSE-OF-DEATH DATA THROUGH CRVS REPORTING

Civil registration and vital statistics (CRVS) systems are responsible for registering births, deaths, marriages, and divorces, and for issuing birth, death, marriage, and divorce certificates. These are important documents to prove identity and provide individuals with access to social services and economic opportunities. Cause-of-death data typically rely on CRVS reporting. With a strong system, nearly all deaths are captured, including the cause of death. However, collecting cause-of-death data is intrinsically difficult as a medical certification of death is typically required, which relies on predictable access to medical facilities and personnel and functioning health management information systems (HMIS). When ministries of health cannot register all deaths and their underlying causes, policymakers and development practitioners are unable to effectively implement health policies and programs.

While verbal autopsies reduce the gap in cause-of-death data, the goal should be to strengthen CRVS systems.

Solution highlight: Integrating verbal autopsies into CRVS systems

A third of deaths worldwide lack cause-of-death information (de Savigny, et al. 2017). Verbal autopsies can fill in the gaps by collecting information on age, gender, name (or pseudonym) of the deceased along with a description of the cause of death reported by nonprofessional caregivers. In recent years, a few sub-Saharan African countries integrated verbal autopsies in their CRVS systems. The 2019 Verbal and Social Autopsy Study in Nigeria was used to estimate causes and factors of childhood deaths (USAID 2019a). As a result, USAID developed policy recommendations to reduce childhood deaths, including: improving newborn care and nutrition services; expanding routine and preventive health services; addressing community management of childhood conditions; addressing barriers and practice of health care services (USAID 2019b). While the study does not detail gender discrepancies of childhood deaths, the verbal autopsy could be used to conduct further gender analysis and inform policy recommendations to increase girls' access to health care and nutrition. Verbal autopsies should be designed to collect sex data, and the responsible data producers should disseminate sex-disaggregated findings. While verbal autopsies reduce the gap in cause-of-death data, the goal should be to strengthen CRVS systems.



Solution highlight: Standardizing femicide data

Standardizing femicide data improves the quality of cause-of-death data. The Latin America Open Data Initiative (ILDA) is leading a project to contextualize femicide and femicide data, while making a case for a common framework and definitions of this data in Latin America and the Caribbean (Fumega and Fallas n.d.). ILDA has assisted countries in standardizing femicide data at the national level. In Argentina, ILDA led a workshop for provincial and national governments to coordinate to produce better femicide data by: developing a framework for provinces to share femicide data, facilitating data reporting by courts, developing a tool to identify data collection and availability, exploring ways to share data at the national level in consideration of open data standards, and piloting methods to standardize reporting and collection of femicide data in both provincial and national levels (ILDA 2018). These efforts will improve understanding of gender-based violence in Argentina and prevent the misreporting of cause-of-death data.



Other health solutions and findings

Solutions for closing the gaps in cause-of-death data are not the only solutions needed in the health sector. Other health solutions in the inventory include:

- Using helpline data to understand gender-based violence during COVID-19 (UNODC 2020)
- Using gender-disaggregated, gridded population datasets to understand women's access to health facilities (Espey 2020)

- Training data journalists on CRVS and gender data use in health reporting (Dilip 2019)
- Using WHO's toolkit for strengthening population health systems to monitor the impact of the COVID-19 pandemic (WHO Regional Office for Europe 2021)

Out of 142 solutions found in the inventory, there are 51 solutions that are relevant to health, where 35 of those solutions are solely focused on health and the remaining 16 solutions focus on multiple themes, including health. Around 41 percent of the health solutions are focused on both data production and use; 33 percent of the solutions are focused on data production; and around a quarter of the solutions are focused on data use.

WHAT WILL IT TAKE TO SCALE UP SOLUTIONS ON HEALTH?

Capacity building and **technical assistance** are key to scaling up solutions for better gender-relevant data on health. In the case of verbal autopsies, actors such as bilateral agencies and inter-governmental organizations provide essential financial support and training to conduct the verbal autopsies. In the case of femicide data, civil society organizations are integral to working with national governments on standardizing femicide data at both the subnational and national levels. Both capacity building and technical assistance will need to be supported by strong **health data governance** frameworks to ensure quality and protect individuals. The development of these data governance frameworks require partnerships between government agencies, civil society organizations, and other stakeholders.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

The solutions associated with health would produce more data on cause-of-death, access to health care services, sexual and reproductive health and rights, child health, gender-based violence, and morbidity.

From the inventory, the solutions that address gender-based violence complement efforts to track Target 5.2 on eliminating violence against women and girls. The solutions that address child health and sexual and reproductive health and rights

cover Targets 3.1 (maternal mortality) and 3.2 (child and newborn mortality), and 3.7 (sexual and reproductive health care services). The solutions associated with healthcare services and facilities align with Target 3.8 (access to quality healthcare services). The solutions that overlap with cause-of-death and morbidity overlap with the above-mentioned targets, along with Targets 3.3 (ending the epidemics of communicable diseases) and 3.4 (reducing mortality of non-communicable diseases).

All in all, better CRVS reporting overlaps with the aforementioned SDG targets, and the incorporation of gender data solutions align with Target 3.d (strengthening country capacity to manage health crises).

Beyond the SDGs, better gender data on health will address the 67th resolution at the World Health Assembly (World Health Assembly 2014) on strengthening health systems for addressing gender-based violence, along with the World Health Organization's broader strategy on integrating gender analysis in its ongoing work (World Health Organization 2009).





Both capacity building and technical assistance will need to be supported by strong health data governance frameworks to ensure quality and protect individuals.



Human Security

USING HOUSEHOLD SURVEYS TO DEVELOP LINKAGES BETWEEN GENDER AND GOVERNANCE, PEACE, AND SECURITY

Political violence and conflict weaken government institutions. In particular, national statistical systems can lose capacity for regular and timely data collection. As a result, governments and humanitarian actors lack insights on how conflict or instability impact the livelihoods and physical safety of women and girls. Without such data, governments and humanitarian actors cannot make policies that address the needs of women and girls.

Solution highlight: Integrating governance and peace and security modules into household surveys

As part of the “Strategy for the Harmonization of Statistics in Africa,” the African Union developed governance, peace, and security modules that can easily be integrated in household surveys. These modules ask household members for their knowledge and perception of democracy, human rights, governance, and conflict. As of 2015, countries such as Cabo Verde, Côte d’Ivoire, Cameroon, Malawi, Burundi, and Senegal had integrated or begun integrating survey modules into their household surveys (African Union and UNDP 2015). In Côte d’Ivoire, a separate analytical report on governance, peace, and security was published in 2015 that provides sex-disaggregated findings on household members’ perception of democracy, human rights, discrimination, gender equality in politics, institutions and social services, corruption, and the security of individuals (Institut National de la Statistique 2015). Côte d’Ivoire’s integration of the module demonstrates the possibility of conducting gender-relevant data analysis using household surveys that already collect basic information, such as age and sex of household members. These analyses are crucial for evidence-based decision-making on the security of women and girls.

Governments and humanitarian actors lack insights on how conflict or instability impact the livelihoods and physical safety of women and girls.

Other human security solutions and findings

Governance, peace, and security modules to further understand the perception of women, girls, men, and boys are examples of many human security-related solutions found in the inventory. Other human security solutions in the inventory include:

- Using data from civil society organizations to understand how women are affected by political violence (Roudabeh, Pavlik and Matfess 2019)
- Using data from academia to understand the role of women in peace processes (Uppsala Conflict Data Program n.d.)
- Using IOM's Gender and Migration Data Guide to collect and disseminate gender-responsive migration data (IOM 2021)

Of the 142 solutions found in the inventory, there are 13 solutions relevant to human security, of which, seven solutions solely focus on human security and the remaining six solutions cover multiple themes. Seven of the human security solutions are focused on data production and use, and the remaining are focused on data production or on data use.

WHAT WILL IT TAKE TO SCALE UP SOLUTIONS ON HUMAN SECURITY?

Technical assistance is key for scaling up solutions for collecting gender-relevant data in human security. When it comes to the integration of governance, peace, and security modules into existing household surveys, inter-governmental organizations are especially essential in providing technical assistance and guidance to national statistical offices. Like the household module solutions highlighted in the economic opportunity sub-section, national statistical offices should be mindful of the additional time burden

surveyors and interviewees could face with additional modules, in addition to the need for specialized training to collect gender data under these modules.

Data literacy is important for solutions that are specifically focused on data use, such as accessing data from civil society organizations and academia to understand how women are impacted by political solutions and to understand the role of women in peace processes. Data literacy is especially important for development practitioners and decision makers. The **political will** to collect gender data on governance, peace, and security is another necessary ingredient, one that will vary depending on a country's context and how committed to transparency and equality decision makers are.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

The solutions associated with human security would help fill gender data gaps on political violence, and on governance, peace, and security. The solutions in the inventory address Targets 5.5 (women's participation in decision-making), 8.7 (human trafficking), 10.7 (safe migration), 16.1 (violence and deaths), 16.3 (rule of law), 16.5 (reducing corruption and bribery), 16.6 (transparent and accountable institutions).

Beyond the SDGs, human security is encapsulated in the fourth aspiration of Africa Union Commission's Agenda 2063, a peaceful and secure Africa, consisting of "an entrenched and flourishing culture of human rights, democracy, gender equality, inclusion and peace; prosperity, security and safety for all citizens; and mechanisms to promote and defend the continent's collective security and interests" (Africa Union Commission 2015).

Public Participation

CONDUCTING SELF-ASSESSMENTS OR AUDITS TO UNDERSTAND GENDER INCLUSION IN PARLIAMENTS WORLDWIDE

Women's leadership and participation in government are important for paving the way for more gender-inclusive governance and policies across all sectors. But the participation of women in decision-making depends on their safety in the political environment. Sexism and harassment of women in political spheres pose obstacles to greater public participation. We need more and better data to understand the safety of women decision makers and to take necessary steps to develop better protection for women.

Solution highlight: Using self-assessments to evaluate the gender sensitivity of parliaments

The Inter-Parliamentary Union (IPU) offers a self-assessment toolkit for evaluating the gender sensitivity of parliaments. The toolkit, which can be used as a self-assessment

or by an external audit, provides a set of questionnaires for parliamentary staff regarding the numbers and positions of women (including staff); the legal policy and framework; mainstreaming gender equality; the culture and environment of parliament; gender working dynamics; political parties (Inter-Parliamentary Union 2016). The use of this toolkit can lead to profound policy changes. In the case of Djibouti, self-assessment findings led to the establishment of a 25 percent quota of women in Parliament (Inter-Parliamentary Union 2019). In the United Kingdom, a gender sensitive audit found growing concerns of harassment, bullying, and sexual misconduct in the House of Commons. As a result, the House of Commons' Women and Equalities Committee launched an inquiry to further understand the experiences of parliamentarians and staff (UK Parliament 2019).

Other public participation solutions and findings

The use of gender-sensitive audits or self-assessments are not the only solutions found in the public participation domain. Other public participation solutions in the inventory include:

- The integration of civil registration and vital statistics (CRVS) and identification systems (Mitra 2019)
- Institutionalizing sex-disaggregated data collection on voter registration and turnout (UNDP and UN Women 2015)
- Using administrative systems to understand violence against women in politics (UN Women 2019)

Out of 142 solutions found in the inventory, there are 21 solutions that are relevant to public participation, of which eight focus solely on public participation and twelve



cover multiple themes including public participation. Eleven of the solutions focus on both data production and use; six focus only on data production; and the remaining four focus on data use.

WHAT WILL IT TAKE TO SCALE UP SOLUTIONS ON PUBLIC PARTICIPATION?

Technical assistance is key for scaling up solutions for collecting gender-relevant data in public participation. For example, inter-governmental organizations such as the Inter-Parliamentary organization can provide guidance in conducting self-assessments to understand gender sensitivity in parliament. Technical assistance also applies to relevant inter-governmental organizations providing expertise to analyzing and disseminating sex-disaggregated data from administrative systems on violence against women in politics and on voter registration and turnouts.

Inter-governmental organizations may also employ other forms of capacity, such as employing external auditors on assessing gender-sensitivity in parliament if self-assessments are beyond reach or could yield in biases.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

In the inventory, solutions associated with public participation would help fill in gender data gaps on women in government, civil registration and vital statistics, intra-household decision-making, and on voting. In particular, these solutions address Targets 5.4 (household responsibilities), 5.5 (women's participation in decision making), 16.6 (transparent and accountable institutions), 16.7 (representative decision making), and 16.9 (legal identity and birth registration).

Similar to the human security sub-section, public participation encapsulated in the fourth aspiration of Africa Union Commission's Agenda 2063, a peaceful and secure Africa, consisting of "an entrenched and flourishing culture of human rights, democracy, gender equality, inclusion and peace; prosperity, security and safety for all citizens; and mechanisms to promote and defend the continent's collective security and interests" (Africa Union Commission 2015).

Sexism and harassment of women in political spheres pose obstacles to greater public participation. We need more and better data to understand the safety of women decisionmakers and to take necessary steps to develop better protection for women.

Forming partnerships with data producers in the private sector is essential for use and to scale up big data or social media analyses to fill in gaps in thematic areas where data are most needed.



CROSS-DOMAIN SOLUTIONS

The solutions we have detailed in the previous sections focus on addressing data gaps in specific sectors. These solutions may be relevant to more than one sector, as noted by the “double counts” in Table 1. A survey on political participation may, for example, collect data on women’s health and education. The solutions in this section are cross-sectoral methods of data collection that are not sector-specific. They can be applied in many sectors to complement or replace other methods of data collection. In this section, we describe three examples of cross-domain solutions and detail the features of the Living Standards Measurement Study Program in Box 2 as an example of a cross-domain research program for better household surveys.

Complementing official statistics with big data or social media analyses

When understaffed or in times of crises, national statistical offices may need other sources of information. Big data or social media analyses can be used to detect household or gender-based violence, or to further identify women who hold executive roles in employment. For example, analyzing tweets and the language that surround tweets has been used to assess family violence during the COVID-19 pandemic (Xue, et al. 2020). Additionally, data on professional leadership and representation of women in the labor force can be collected from professional social media platforms such as LinkedIn (Murthy 2015). However, many big

data solutions depend on “digital exhaust”—the data collected from cell phones, credit card transactions, and Internet use. Therefore, care must be taken to avoid biased samples that leave out poor people, women, and other vulnerable groups. Forming **partnerships** with data producers in the private sector is essential for use and to scale up big data or social media analyses to fill in gaps in thematic areas where data are most needed. These partnerships are also necessary to bridge the skills gaps that prevent many from using big data. In addition, existing data sharing partnerships and governance frameworks may be insufficient to handle the speed and volume of this kind of data, which underscores the importance of revisiting partnerships and existing frameworks.

Using rapid gender assessments

In times of health, environmental, or humanitarian crises, national statistical systems may lack the resources, knowledge, and capacity to collect data. Rapid gender assessments are versatile tools that can be used by non-state actors, such as development practitioners, to provide a snapshot of where and how women and girls are impacted in times of crises. The data they provide are critical to forming gender-responsive policies and programs focused on mitigating losses and expediting recovery from emergency events. But rapid gender assessments often rely on telephone access that may be unavailable to more vulnerable groups.

CARE's Rapid Gender Analysis has been used during the COVID-19 pandemic, natural disasters, conflict, and other emergency contexts to understand the needs of women, men, boys, and girls (CARE Evaluations n.d.). For example, Rapid Gender Analysis has been used in Turkey to gather data on gender roles during the Syrian refugee crisis, along with data on access to health, education, social protection, and humanitarian services (CARE Turkey 2020). UN Women conducted rapid gender assessments to understand the socio-economic impacts on women of the COVID-19 pandemic. UN Women's rapid assessments have gathered data on employment and income, unpaid care work, access to basic goods and services, and safety and wellbeing from countries from East Asia to South America (UN Women n.d.). Forming **partnerships** with inter-governmental organizations and civil society organizations could enable NSOs to use rapid gender assessments from alternative sources in times of crises.

Employing female enumerators

For gender-sensitive modules in surveys, it is important to recruit and train female enumerators to establish trust with female members of the household. This allows for more accurate data collection as respondents can honestly and reliably explain their experiences on gender-sensitive issues such as their experience with violence, their livelihoods, and their sense of human agency and empowerment. Existing household surveys such as the Demographic and Health Survey and the Multiple Indicator Cluster Survey equip and train female enumerators (USAID 2019c) (MICS n.d.). In Gujarat, India, CGIAR and the Self-Employed Women's Association employed female enumerators to conduct phone call surveys to understand gendered impacts of COVID-19 on food security and household decision making (Alvi, et al. 2020). **Capacity building** is key to having enough enumerators with appropriate gender balance (e.g., if gender balance is unattainable, having enough female enumerators), and **technical assistance** is essential to ensure that enumerators are properly trained with the right knowledge, tools, and technology to conduct relevant surveys.

Forming partnerships with inter-governmental organizations and civil society organizations could enable NSOs to use rapid gender assessments from alternative sources in times of crises.

BOX TWO

The Multifaceted Features of the Living Standards Measurement Study Program

Since 1980, the World Bank Living Standards Measurement Study (LSMS) program has been a flagship program for strengthening household survey systems and improving the quality of microdata (World Bank n.d.b). LSMS household surveys capture data at the individual, household, and community level. They collect gender data information on household spending, education, health, labor, housing, nutrition, agriculture (Oseni, Huebler, et al. 2018, Oseni, Palacios-Lopez, et al. 2021) and women's agency (World Bank n.d.c). Two major work programs that illustrate the breadth of LSMS are the LSMS-Integrated Surveys on Agriculture (LSMS-ISA) and LSMS Plus (LSMS+) programs. LSMS-ISA focuses on innovation and efficiency in surveys to promote better agricultural data to enable improved livelihoods and poverty reduction (World Bank n.d.d). LSMS+ enhances the availability and quality of intra-household, self-reported, individual-disaggregated survey data collected in low- and middle-income countries on key dimensions of men's and women's economic opportunities and welfare (World Bank n.d.e).

LSMS survey reports highlight examples of solutions for gender data: Based on surveys in Cambodia, Ethiopia, Malawi, and Tanzania (Deininger, et al. 2021) (Hasanbasri, Kilic, et al. 2021a) (Hasanbasri, Kilic, et al. 2021b) (Hasanbasri, Kilic, et al. 2021c) (Kilic, Moylan and Koolwal 2021) (Kilic, Van den Broeck, et al. 2021), the guidance document, LSMS+

Program: "Overview and Recommendations for Improving Individual-Disaggregated Data on Asset Ownership and Labor Outcomes," emphasizes the need to minimize the use of proxy respondents. The guidance document also recognizes the difficulty in scaling this approach, noting that interviewing all household members will have time and budgetary implications (Hasanbasri, Kilic, et al. 2021d).

Previous work on individual-disaggregated data has catalyzed a new project entitled Strengthening Gender Statistics (SGS) (World Bank n.d.f). The SGS project aims to improve the availability, quality, and use of gender data on asset ownership, employment, and entrepreneurship produced by national statistical systems in a sustainable way. As with the LSMS+ program, the SGS project encourages NSOs to hire an equal number of male and female enumerators to allow for gender match-up in individual-level interviews.

Building on the strong foundation of its forty-year history, the LSMS program should remain a hub for further innovation and support for countries' survey programs through high-quality training to build technical capacity and the introduction of new survey methods, such as rapid mobile phone surveys during COVID-19 (World Bank n.d.g). Through these efforts, LSMS continues to support improved and expanded collection of gender data.

Review

This chapter provides an overview of gender data solutions that demonstrate new opportunities for data collection. The highlighted solutions show the importance of robust collaboration and coordination among stakeholders such as government bodies, international organizations, and other development actors, to ensure that solutions can be implemented effectively and are interoperable among sectors. The solutions demonstrate the need to supplement traditional data collection efforts with non-traditional sources and to create resilient systems that are durable during emergencies such as COVID-19. Existing household surveys can be enhanced with new modules at a lower cost than launching a new survey, but there are practical limits to the length and frequency of full-scale household surveys.

Hence, there is a need to implement new methods of mining big data or conducting rapid gender assessments. As these solutions build on foundational data systems, those systems must also be well-funded to support the technical capacity needed to integrate and use new collection methods.





SECTION FOUR

Solutions to create an enabling environment and improve data use

GOVERNANCE AND FINANCING

The previous chapter described solutions to produce and use more and better sector-specific gender data. It also included cross-domain solutions that can support gender data in multiple sectors. Successful implementation of the solutions requires an enabling environment: policies and technical capacity for data governance; sustainable financing; and political support. This chapter highlights innovations in these areas and elaborates on how gender data are used to produce impact.

Solutions for producing and using more and better gender data take a variety of forms. Some involve small, incremental changes to survey methodologies that have been tried,

tested, and shown to have an impact. Other solutions harness the power of technology and new partnerships to unlock new sources of data. Yet these solutions are only possible if there is a supportive, enabling environment, including data governance processes that establish the legal and strategic conditions for improved gender data and the financial resources to support innovative strategies and better governance. As described in the *State of Gender Data Financing 2021* (Data2X and Open Data Watch 2021b), statistical systems in most low- and lower-middle-income countries lack the resources needed to maintain their current gender data programs, let alone undertake new initiatives.

Successful implementation of the solutions requires an enabling environment: policies and technical capacity for data governance; sustainable financing; and political support.



Governance

IMPROVING DATA GOVERNANCE PROCESSES

Data governance refers to the guidelines, procedures, legal mandates, and strategies that prescribe and regulate the collection, dissemination, and use of gender data. Data governance solutions can include anything from foundational mandates of a national statistical agency, such as Ghana's Statistical Service Act, 2019 (Act 1003) (Ghana Statistical Services 2019), to regional data protection frameworks like the General Data Protection Regulation (GDPR) (European Union n.d.), to global frameworks like the Fundamental Principles of Official Statistics (UNSD 2014). Data governance solutions embrace partnerships, collaborative work, and citizen-generated data initiatives; improve access to global toolkits; adopt mandatory reporting and accountability frameworks; and build harmonized databases that publish global, comparative data. Improving data governance requires political will for actors at all levels

to commit to increased accountability and transparency about the ways data are procured, analyzed, and disseminated. The ambition is to change incentives and increase data stewardship skills while providing the needed resources.

Solutions Highlight: Inclusive Data Charter

The Inclusive Data Charter (GPSDD 2018a) is a network launched in 2018 by the Global Partnership for Sustainable Development (GPSDD) around the pledge to prioritize the collection and dissemination of inclusive data, including sex-disaggregated data. As the previous chapter has shown, many of the challenges to more and better gender data are technical in nature, however, the Inclusive Data Charter (IDC) recognizes that these challenges are also about political will and financing, including overcoming a tendency towards business as usual in NSOs as well as partners. Pledges around the production of data such as the Open Data Charter (Open Data Charter 2015) have been effective in committing governments to their principles and the IDC seeks to replicate these efforts.

To join the IDC, governments and organizations must get internal support, put in place a public statement of endorsement, develop an action plan, including an internal process to monitor and evolve the plan over time, and identify a main point of contact to follow up and sharing lessons with other champions. The secretariat of the IDC in turn provides connections between signatories and knowledge products (GPSDD 2018b).

From a network of ten members (four countries and six institutions), IDC has grown to just under 30 champions, including 12 government



partners and 15 institutional partners (GPSDD 2018a). The governments that have joined IDC include one low-income country (Sierra Leone) six lower-middle-income countries, three upper-middle income-countries, and one high-income country (United Kingdom). Signatories of the pledge have acted on their plans for more inclusive data: Kenya has developed an action plan for their social protection policies to better incorporate and produce disability data; Sierra Leone's education ministry has used data on pregnant girls to help overturn a law against pregnant girls attending school; and Colombia's statistical agency, DANE, used the IDC action plan to enact an inclusive data policy across all its operations (GPSDD 2021).

The IDC is scalable to all countries and relevant stakeholders. Prospective members must ensure enough resources to enact the action plan and monitor its outcomes, but the initial plans may be modest and evolve over time. This helps countries across the income spectrum join these efforts, which will be important if the membership of the IDC is itself to be inclusive. But there are limitations to a voluntary approach that fundamentally relies on positive peer pressure to incentivize improvements: other than reprimanding laggard members, no enforcement mechanisms are available.

Other data governance solutions and findings

A joint commitment for more inclusive data is not the only way in which governance of gender data can be improved. Other data governance solutions in the inventory include:

- OECD Toolkit for Mainstreaming and Implementing Gender Equality: Implements the recommendations of the 2015 Recommendation on Gender Equality in Public Life (OECD 2018)
- Linking National ID and CRVS Systems: An Imperative for Inclusive Development is a collection of case studies that demonstrate ways in which low- and middle-income countries can link National ID and CRVS systems to benefit gender equality (Mitra 2019)
- American Pandemic Preparedness: Transforming Our Capabilities is a directive prepared by the Biden Administration to improve data sharing across government. This is an example of policies affecting the wider government data ecosystems with implications for gender data (Lander and Sullivan 2021)

Improving data governance requires political will for actors at all levels to commit to increased accountability and transparency about the ways data are procured, analyzed, and disseminated.



- The work of the Inter-Secretariat Working Group on Household Surveys (IWGHS) (UNSD 2015), the Women's Work and Employment Partnership (WWEP) (World Bank; ILO; FAO 2014), and UNICEF and MICS (UNICEF 2017) contribute to improved instruments for gathering gender data through improved definitions and modules for data collection.

Just under half solutions in the inventory are relevant to data governance, close to half of which in turn are related to the health sector. Examples of such solutions include electronic immunization registries to enable data-driven decision-making and improve health coverage and eliminating sources of gender-bias in CRVS reporting that may disincentivize registration of marriages, divorces, and births.

Half of all governance solutions have the potential to be scaled and replicated across countries. Solutions for better data governance for gender data span the length of the data value chain. Examples include enabling more regular data collection by integrating sex-disaggregated data collection

into statistical agency mandates, ensuring that statistical publications feature sex-disaggregated data, incentivizing the use of gender data in gender equality policy documents, and helping to channel results of gender data into policymaking that makes a difference for women and girls. Governance solutions, while plentiful in the inventory, nevertheless demonstrate the difficulty of aligning political entities around conceptual frameworks; governance solutions are easy to draft, but difficult to implement and sustain.

WHAT WILL IT TAKE TO SCALE UP DATA GOVERNANCE SOLUTIONS?

Although half of recorded solutions relate to governance, data governance that either directly promotes or enables better gender data remains inadequate. Gender data is either siloed as an afterthought or not prioritized at all in data collection and dissemination. Therefore, what is needed is not necessarily more innovation and the creation of more separate systems, but more **rigorous testing and application of existing frameworks and approaches**. The inventory is intended to serve as a repository of information on what has already been tried and might work for others. While each country's context matters, trying out and adapting existing frameworks deserves attention before separate attempts are made.

Data governance also requires **champions of data governance** to implement and scale up solutions. Governments should empower champions of reform within government

(such as those that exist in Ministries of Gender, Social Development, or other relevant ministries) or allow effective partnerships with outside organizations, whether they are technical advisory groups, development partners, or civil society organizations. Champions need not be individuals or specific programs: a committed and diverse group of core partners helped launch and give momentum to the Inclusive Data Charter.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

The data governance solutions featured in the inventory will put in place commitments for more and better gender data and create accountability and monitoring systems for data production and use. Although commitment devices and pledges often suffer from a lack of enforcement mechanisms, communicating intentions allows citizens, NGOs, and international organizations to hold policymakers accountable.

These solutions also establish mechanisms for greater interoperability and mainstreaming of gender data that will further entrench the gender data production in routine operations and improve use. The international collaborations around improving gender data-relevant instruments might also contribute to more harmonized standards for data collection instruments, increasing the efficiency of data collection and use.

Data governance also requires champions to implement and scale up solutions.





Finance

FUNDING TO PRIORITIZE GENDER DATA

The solutions listed in chapter 4 have the potential to unlock more and better gender data, but implementation will take political commitment as well as financial commitment, from both domestic and international sources. Financing that supports gender data can come in two forms. On the one hand, there are efforts to create dedicated funding for gender-relevant data collection or uptake efforts, such as a special survey, training programs, or workshops on using data, for example data on unpaid care work by women. On the other hand, there is funding to strengthen statistical systems that will in turn improve the availability of disaggregated data, for example by financing better administrative

data systems for health and education or supporting censuses and household surveys. Thanks to efforts such as the Partner Report on Support to Statistics (PRESS) (PARIS21 n.d.), we now have more information than ever on how statistical systems are financed by donors, including philanthropic organizations. However, less is known about domestic support for gender data and how financing from the private sector can be leveraged for better gender data.

Solution Highlight: Gender-Responsive Budgeting

Gender-responsive budgeting (GRB) takes into account the needs of a diverse population by using an intersectional gender lens to respond to the different experiences of women, men, and gender-diverse groups (Akalbila, et al. 2020). By practicing GRB, governments and organizations ensure that spending is informed by the diversity of their citizens and delivers what they need. Though not a way to fund gender data directly, the adoption of GRB can encourage long-term domestic and external financing of gender data to monitor the impact of investments in gender equality.

Oxfam has released a guide for governments, NGOs, and other actors to facilitate greater data collection and use for GRB (Stephenson 2019). The guide lays out recommendations for the various actors to improve gender data available for GRB, while also providing background on data issues to consider depending on the data collection instrument and authority.

GRB is currently practiced in some form by over 80 countries (Stotsky 2020), including OECD countries (Downes, Trapp and Nicol 2017) and low- and middle-income countries such as Ghana and Rwanda (Akalbila, et al. 2020). Countries differ in their approach to partnering with civil society organizations or external financing partners for GRB, as well as whether GRB is mandated by law or is voluntarily implemented.

The impact of GRB is captured by greater awareness of gender equality in the budget process and improved gender equality outcomes when combined with complementary policies (Combaz 2013). The impact on gender data can be demonstrated through the integration of sex-disaggregated data collection into line ministries' performance plans (Zrinski, Raappana and Rame 2021).

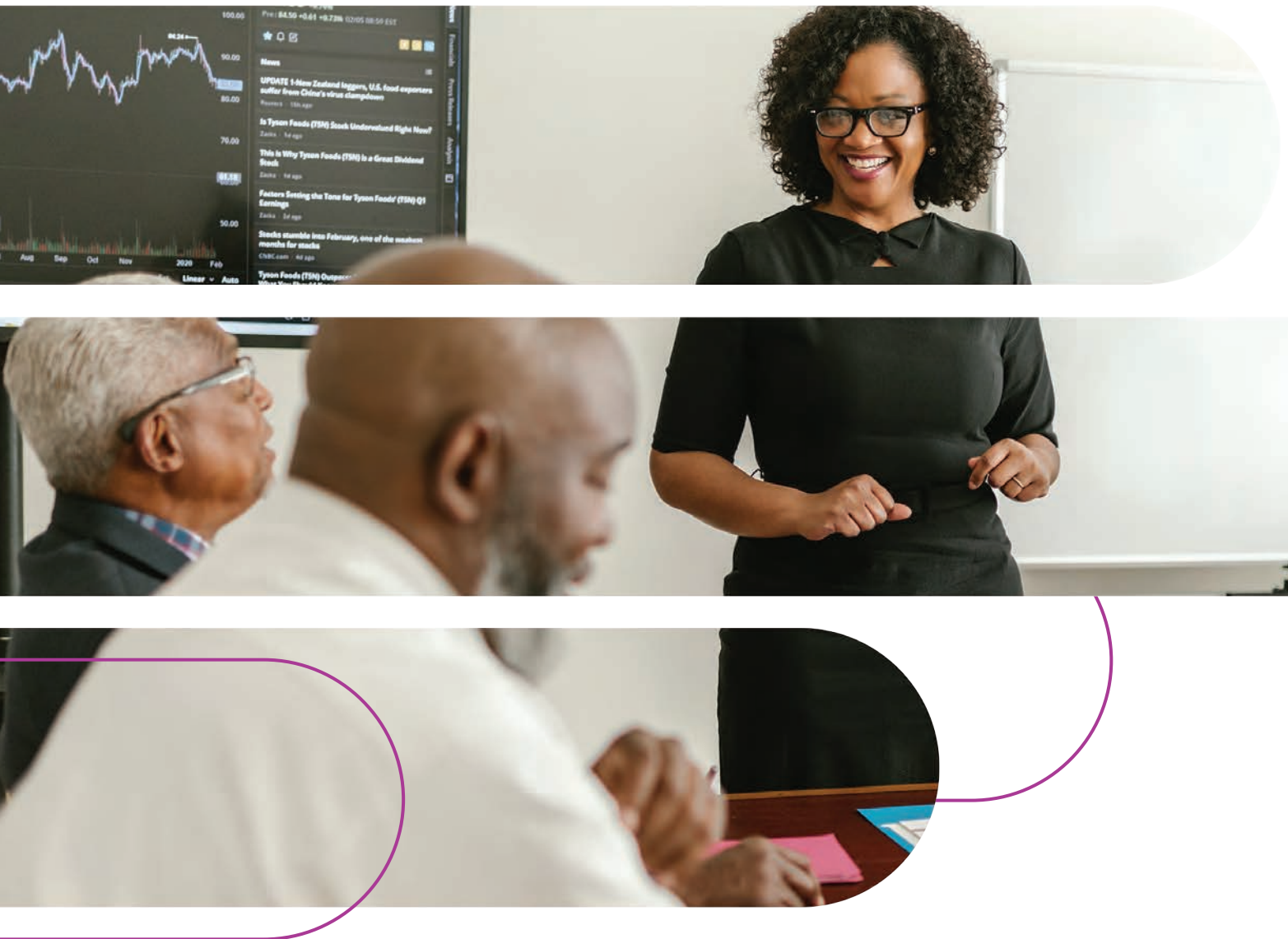
Implementation will take political commitment as well as financial commitment, from both domestic and international sources.

BOX THREE

Clearinghouse for Financing Development Data by The Bern Network on Financing Data for Development

Collating financing information is one of the ways gaps in aid and budgetary allocation can be illuminated and guide improvements in financing for gender data. The Clearinghouse for Financing Development Data by the Bern Network brings international data on financing flows for development data (including a special focus on gender data) together with data sources on domestic financing and statistical capacity (Bern Network on Financing Data for Development 2021). The platform was launched in October 2021, so it is too early to determine its impact, but the construction of the platform has produced an awareness among statistical organizations of the importance of harmonizing data about the financing of development data.

The Clearinghouse provides the knowledge base for funding mechanisms and works together with the newly-established Global Data Facility (GDF) (World Bank 2021). Partnerships allow platforms like the Clearinghouse to more effectively serve statistical capacity needs and build synergy through GDF with other large global programs such as IDA through its Data for Policy Initiative (Dabalén, Himelein and Rodríguez Castelan 2020). These partnerships will also allow the Clearinghouse to incorporate data and inform investments on new as well as traditional bilateral financing and domestic resource mobilization for statistics.



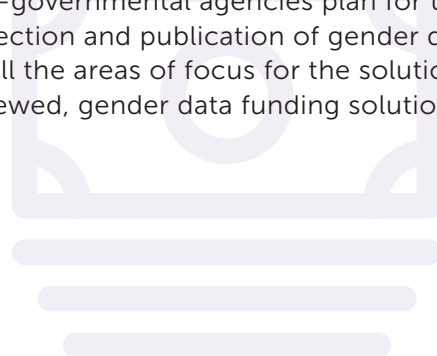
Other financing solutions and findings

Other financing solutions in the inventory include:

- Publish What You Fund’s Gender Financing project released detailed studies on where financing for gender is going and how aligned it is with the gender equality priorities of countries (Publish What You Fund n.d.). In addition, the project guides stakeholders on using the OECD DAC Gender Equality Policy Marker

(OECD n.d.), one of the main markers for tracking gender equality in global development financing.

A review of the inventory reveals a lack of solutions to encourage predictable funding, for example, financing targets or international compacts that would help governments and non-governmental agencies plan for the collection and publication of gender data. Of all the areas of focus for the solutions reviewed, gender data funding solutions



were least frequently found. Why is that the case? Our theory is because gender data is a cross-domain area, it may not always have a champion to make the case for the needed financing at the time of budget planning and allocation. This is true both at the national and donor levels. Some more recent innovations noted earlier in the report, such as the Clearinghouse and its focus on a gender channel, show potential for providing an information-rich platform to promote noteworthy gender data financing solutions. With better information, better solutions to financing capacity building for more and better gender data will likely emerge.

WHAT WILL IT TAKE TO SCALE UP FUNDING SOLUTIONS?

The few funding solutions included in the inventory can be scaled up with increased demand. Mechanisms like gender-responsive budgeting and knowledge platforms like the Clearinghouse for Financing Development Data will generate additional insights into financing for gender-relevant data as policymakers, researchers, journalists, and advocates use them. Knowledge platforms must be complemented by cross-domain financing mechanisms such as the Global Data Facility to leverage their insights for greater funding. However, even with these platforms and mechanisms in place, there is a need for more country and stakeholder education to facilitate their use, and champions should encourage interest in these platforms among relevant user communities to facilitate engagement and stimulate conversations around improved funding for gender data.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

If implemented and used at scale, the funding mechanisms would yield greater investments for gender data systems by facilitating better investment decisions and promoting investments in gender data as part of budgets that seek to promote gender equality. As shown by previous studies (Data2X and Open Data Watch 2021b), gender data systems face a gap of \$1 billion a year in support from domestic and external partners. The scale of this challenge is why these solutions are so important and why additional innovation is needed to crowdsource more funding.

Less is known about domestic support for gender data and how financing from the private sector can be leveraged for better gender data.



DATA USE AND UPTAKE

Improved production does not guarantee continued demand and use of data. To move up the data value chain (Data2X and Open Data Watch 2018), producers of official statistics and stakeholders like CSOs, the private sector, and academia should keep a special focus on what it takes to increase data use and impact and commit to vetting data, monitoring quality, and ensuring data are fit for purpose. In short, stakeholders must come together to create a culture of data use in decision-making and evidence-based policy formulation.

Stakeholders must come together to create a culture of data use in decision-making and evidence-based policy formulation.

Open Data

OPENING GENDER DATA FOR BETTER OUTCOMES

Open data is an important component of an enabling environment for gender data that values accountability and recognizes the value of data generated by its use. Open data is a way to make sure that the value of data is maximized through reuse, which sets data apart from non-renewable sources of value, like oil. Open data, as assessed by the Open Data Inventory (ODIN) is evaluated by the availability of official statistics in machine-readable and non-proprietary formats offered in a variety of download options with accompanying metadata and open terms of use (Open Data Watch 2020). While the openness of gender data has increased, work by Open Data Watch shows that relative to non-gender data, gender data are not as open, often because they lack historical data in machine-readable formats (Open Data Watch 2021). Although missing historical data can often not be recovered, current and future data can be made available in machine-readable formats.

Fewer than 20 percent of solutions in the inventory are related to openness, even as ODIN results show the relatively poor state of open gender data, illustrating the need for more solutions in this space. This section will showcase some of the solutions that make gender data more open.

Solution Highlight: Open data mapping by women for better land rights and resilience

The Open Data Mapping efforts by the Unique Mappers Network Nigeria (GODAN 2020) and Open Cities Africa (Gupta, Phillips and Deparday 2020) utilize geospatial mapping and digital skills to create data that improve land rights for women and increases their involvement in planning conversations around disaster resiliency, while improving their digital skills. Data on land rights are not commonly available, depriving rural women in particular of documentation needed to acquire loans and representation in local decision-making. Due to digital gender gaps and traditional expectations of women's roles in

decision-making, their access to mapping efforts is also curtailed.

Both efforts combine technical and social approaches to solving these problems. They use commonly available tools such as OpenStreetMap (Open Street Map n.d.) to access geospatial imagery of areas of interest for participants in workshops, combined with basic mapping by hand. These technical tools help improve the digital literacy of workshop participants. Almost as important is the way in which prior to the technical work, the Open Cities Africa team identifies barriers women may face when engaging with geospatial work (Gupta, Phillips and Deparday 2020). These barriers include traditional gender roles, concerns about safety, and the lack of role models. Recognizing these barriers allows the better design of workshops, and may result in gathering better data.

The work of Open Cities Africa has contributed to regular meetings between citizens and local government, informed resource allocation to city neighborhoods, and empowered women enumerators (Open Cities Africa 2020). Less information is available about the impact of Unique Mappers Network Nigeria, but the organization has made understanding the status of digital skills among women and how open data mapping can help one of its core activities (Humanitarian OpenStreetmap 2020).

Both initiatives are highly replicable because they depend only on commonly available datasets and help from local experts in mapping. They are also highly scalable, either by civil society—as in the case of Unique Mappers Network Nigeria—or through support from multilateral organizations, as with Open Cities Africa. Limitations of both include the need for local support to gather volunteers or to raise consistent funding to conduct regular mappings. The connection between citizen science efforts and official statistics is also not established in many contexts, which would further stabilize funding and support for efforts like this.

Other openness solutions and findings

Other open data solutions in the inventory include:

- An assessment by researchers from De La Salle University for the International Development Research Centre (IDRC) provides recommendations on the role of open government data for local governments in the sectors of maternal health and local business cooperatives (Ona, Hecita and Ulit 2014)
- District Health Information Software 2 (DHIS2) is an open source, web-based platform most commonly used as a health management information system (HMIS) in use by 73 low and middle-income countries (University of Oslo n.d.)
- The University of California San Diego Evidence-based Measures of Empowerment for Research on Gender Equality (EMERGE) is an initiative focused on measurement of gender equality and empowerment (EMERGE n.d.)
- The Center for Global Development (CGD) and Data2X has compiled a selection of Women's Economic Empowerment measurement tools (Buvinic, O'Donnell, et al. 2020)

WHAT WILL IT TAKE TO SCALE UP OPEN DATA SOLUTIONS?

Open data solutions can be scaled up by **increasing commitments to transparency** by national statistical offices and other parts of the national statistical system and by government authorities (for example through Access to Information laws) and leaders of international organizations. More open data systems often flow from pledges of transparency: creating an open data portal or making data open by default are logical next steps to implementing greater transparency. Whether targeting gender data or



the general statistical system, greater transparency will increase access to and use of gender data.

Open data initiatives will also benefit from the **use of technologies** that allow for centralized, digital databases of gender data and the easy exchange of gender data through APIs. Support for open data must therefore also consider the technical capacity of the implementing agency and ensure that the tools to disseminate open data are in place.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

Open data solutions for gender data will increase the use of gender data, improve its value, and generate demand for more and better gender data. The goal of open data is to create a virtuous data cycle where each element spurs greater demand for more gender data.

Open data solutions will in turn result in greater accountability for gender equality policies that governments or agencies have set for themselves. More open data on gender will allow advocates and governments to monitor progress on gender equality, building support for urgent efforts to improve conditions for women and girls.

Data Literacy

IMPROVING DATA LITERACY TO INCREASE GENDER DATA UPTAKE

Producing gender data and disseminating it in a way that targets the users at the appropriate level of data literacy is a powerful but overlooked way to ensure gender data are used. Certain users will always be able to acquire the data they need. However, removing barriers to uptake through better formatting or data presentation (in tables, graphics, takeaway messages) will encourage more users to engage with the data. Importantly, even when gender data are easily accessible it is critical to also ensure that the data are being disseminated.

Building gender data literacy is particularly important, as intersectional data, including those that are sex-disaggregated, quickly become overwhelming to users, by drastically increasing the amount of data that users must process. As always, the appropriate type of solution will depend on the intended audience. Yet in the spirit of producing gender data to leave no one behind, data producers should also strive to leave no one behind in the use of their data.

Solution Highlight: Tools to communicate gender data between statisticians and journalists and improve data literacy within humanitarian organizations

Various efforts have been launched to address the lack of resources for gender data literacy and to improve organization-wide data literacy. For example, PARIS21 and UN Women have designed video courses for statisticians and journalists to learn more about using gender data and how each party does their job. Courses offered by the PARIS21 Academy guide statisticians and journalists to use gender data more effectively, including through data visualizations (PARIS21 n.d.). The Data Playbook of the International Federation of Red Cross and Red Crescent Societies (IFRC) helps members of each organization become more familiar with data in their work, how they might improve the data they use and use data for better decision-making. The Data Playbook is a “recipe book or exercise book... to develop their literacy around data, including responsible data use and data protection” (Red Cross and Red Crescent Societies (IFRC) n.d.).

The PARIS21 Academy’s offerings are just over a year old, so data are not yet widely available on its results, but its replicability and scalability, requiring just an internet connection and an understanding of English, mean that it can be an effective tool for improved gender data literacy. IFRC’s Data Playbook has been used by its member societies since its inception in 2018 to stress the importance of data literacy, adapting the modular teachings to each local context. The IFRC is now developing a new version of the playbook using the lessons of the beta release (Slater and Leson 2021). As a toolkit used by a large network of societies around the world, the toolkit is replicable and scalable.



Limitations for both solutions include their reliance on English instructions for their courses, which will limit the audience using these tools. In addition, these tools must be used by a champion who can influence others to participate or recognize the time spent taking courses and participating in workshops.

Other data literacy solutions and findings

Other data literacy solutions in the inventory include:

- Data visualization literacy: A feminist starting point by Catherine D'Ignazio and Rahul Bhargava (D'Ignazio and Bhargava 2020)
- Fellowships for journalists to study gender data by EM2030 and Tableau (Equal Measures 2030 2020)

Though the solutions described above can give data producers and journalists a way to engage with gender data that will encourage continued use, these solutions are some of only a handful of solutions in the inventory. Though a low number of solutions may in other contexts relate to the perceived size of the problem, we know that the difficulty of measuring data use and literacy means that more solutions are needed to improve gender data literacy. Forthcoming work by IDRC and Open Data Watch finds that data use and impact are some of the dimensions least covered by existing data monitoring frameworks, such as the World Bank's Statistical Performance Indicators and OECD's OURdata index on Open Government Data.

WHAT WILL IT TAKE TO SCALE UP DATA LITERACY SOLUTIONS?

Data literacy solutions will require **more socialization and demystification of the importance of data use** for policymakers, the media, and CSOs for them to scale.

Three years after the data value chain for gender data was first published, a small circle of international agencies and NGOs recognized the importance of data use, but this has not translated into wider acceptance or support for data literacy efforts. More innovations that show measurable changes in data use and impact could help convince policymakers of the importance of data use and literacy.

HOW WILL APPLYING THESE SOLUTIONS IMPACT GENDER DATA?

Greater data literacy will increase the value derived from the use of data. Integrating gender data into private sector studies of the size of markets, for example, can create actual monetary value, while the ability to use official gender data enables citizens to hold their government to account and for the government to monitor itself, increasing the efficiency of the government and the value of its programs. Improved data literacy can also start a continuous cycle of demand for improved statistics. This supports government accountability but would also mobilize investment in better data, which in turn would improve the production of gender data and how gender data are disseminated.

Producing gender data and disseminating it in a way that targets the users at the appropriate level of data literacy is a powerful but overlooked way to ensure gender data are used.

Data-Policy Linkages

CREATING DATA-POLICY LINKAGES FOR DATA-INFORMED DECISION-MAKING

The link between gender equality policies and gender data systems is often tenuous at best. Coordinating between statistical agencies and gender ministries, as with other parts of the government, is difficult. Yet linking the production of gender data to the issues identified in gender equality strategies can be a mechanism through which financial and non-financial incentives for the production and continued use of gender data are created, not least of which is the government becoming a user of its own data to benchmark outcomes. A virtuous data cycle (Jutting and McDonnell n.d.) and the gender data value chain are both defined by continuous feedback that leads to further improvements of gender data systems. This virtuous data cycle also cannot be imposed from the outside: ensuring the gender targets and associated indicators are part of national development frameworks ensures they are included in national monitoring and evaluation systems and supported through financing by creating local demand for the data. If they are collected only for international reporting, there may be little motivation to mobilize domestic resources or be consistent in collecting these data. Though difficult, there are solutions to better linkages between policies and gender data systems.

Open data is a way to make sure that the value of data is maximized through reuse.

Solution highlight: A tool for policy-data integration

The UNESCAP Every Policy is Connected (EPIC) tool (UNESCAP n.d.) connects national and local policies to datasets required to monitor the effectiveness of policies. Policies meant to improve the conditions of women and girls are often designed and implemented by gender ministries or other government bodies without considering the data necessary to establish baselines and track progress over time. Tools such as EPIC help identify the information needs for each policy.

EPIC has been used throughout the Asia and Pacific region primarily through UNESCAP's Gender-Policy Integration Initiative (UNESCAP 2018). EPIC demonstrates the power of mapping information needs of national and local policies to national and international databases. By establishing this link between policies and the data needed to evaluate them, EPIC creates demand for gender data that helps the continued support of established sources of data and ensures that new sources of gender data correspond to a country's needs.

Limitations of this approach include the need for leadership to notice the disconnect between policies and data systems and to support their implementation and evaluation. In addition, the work of mapping takes time from NSOs and line ministries that may lack capacity.

Other data-policy linkage solutions and findings

Other data-policy linkage solutions in the inventory include:

- COVID-19 Global Gender Response Tracker by UNDP (UNDP n.d.)

- Laws on Violence against Women and Girls Index by researchers at Emory University (Yount, et al. 2020)
- Gender-sensitive parliament audit by the Interparliamentary Union (IPU) (UK Parliament 2019), also mentioned in Public Participation above
- A guide for evidence-based, gender-responsive migration governance by the International Organization for Migration (IOM) (Hennebry, KC and William 2021)

Data that are fit for purpose are crucial to get policymakers, most of whom are not data experts, to use them in monitoring outcomes in gender equality policies and other policies with an effect on women and girls. It therefore falls to gender task forces or dedicated focal points within NSOs and other data producers or their partners in technical advisory groups to ensure that data produced align with local and international demands. Tools that match data to policies can, therefore, play an important role in defining the indicators needed.

However, few solutions on linking data to policy were found in the inventory, illustrating the difficulty of conducting mapping exercises like this and the scarce resources countries must devote to it. In addition, this kind of exercise may fall through the cracks without clearly assigned responsibilities and leadership since data-policy linkage efforts require extensive coordination between disparate departments and actors.

WHAT WILL IT TAKE TO SCALE UP DATA-POLICY LINKAGE SOLUTIONS?

Data-policy linkage solutions can be scaled through **greater use** of instruments like EPIC

and continued **advocacy for the importance of data-policy linkages**. Tools such as EPIC are important for governments to become consumers of their own data by linking them to development outcomes such as gender equality. Using these tools, governments can improve their integration of gender data production into their policy process. NGOs and international organizations meanwhile can focus on continuing to advocate for the importance of data-policy linkages to improve uptake of tools such as EPIC.

WHAT WILL BE THE IMPACT OF DATA-POLICY LINKAGE SOLUTIONS FOR GENDER DATA?

Linkages of gender policies to data will improve the coherence of gender policies by basing them on real data produced by the country's national statistical system, which will in turn increase buy-in for monitoring efforts and accountability exercises. The interoperability of gender data across the national statistical system will also improve if they are used to regularly monitor the status of gender equality policies.



Review

Data governance and financing both contribute to an enabling environment for gender data by establishing the rules and financing capacity that allow gender data to be collected, disseminated, and used. Data governance was part of nearly half of all gender data solutions collected for this report, compared to financing, which had the lowest number of solutions. This finding is also not unique to gender data. Significant work has been done to establish rules for official statistics from local governments to the highest level (for example the Fundamental Principles of Official Statistics), but such energy has not translated to financing. According to PARIS21, financing for development data has been stuck at half of what is required to meet the ambition of the SDGs for the last ten years, (PARIS21 2020) while statistical agencies are left to piece together financing for gender data.

Gaps in solutions for gender data use and uptake take the form of a lack of modular and scalable trainings to promote gender data literacy and improved data use within NSOs. Initial efforts to socialize the importance of gender data use within ministries are taking place through initiatives such as the Gender Data Network (PARIS21 2021), but more work is needed to increase country ownership and match it with support by international organizations and academia. These efforts must be more holistic in their approach to engaging users. Models for mobilizing political will, whether through incentives or a change in culture, are another area for further research and solutions to increase the reach of data literacy and user engagement efforts. Further linkages between open data and IT systems would improve the operationalization of many plans for greater data sharing and utilization for better service delivery, including on gender data. All this points to a need for creating a user-centric data strategy including training, building a culture of data use, and improving data governance to ensure quality and trust for data.





SECTION FIVE

The Way Forward

To catalyze progress on global gender data collection and use, advocates and investors need to focus their energies on scaling up innovations and institutional remedies that have been tried, tested, and reviewed. Reliable funding, increased technical assistance, and capacity building, with multiple actors working together in partnership, are important foundations for scaling up any solution. Building on extensive background research and the compilation of our inventory, this report highlights interventions and investments for those working to advance the availability of gender data within countries and internationally. Drawing on all the solutions reviewed, this chapter examines ten priority actions that governments and the international community should take to help catalyze urgent progress on gender data gaps.



ACTION ONE

Increase smart investments in gender data systems

To encourage greater investment in gender data production and use, current investments should be more transparent. PARIS21's PRESS statistics help to monitor international contributions to data and statistics, while the Bern Clearinghouse for Financing Development Data increases the coordination and effectiveness of flows. Ensuring a strong focus on investment in gender data and working with donors to track gender data flows will help make the case for more international investment and direct resources to the most underserved issues. Nationally, similar effort is needed to identify where resources are being allocated to gender projects, programs, and data compilation. One way to do this is through gender-responsive budgeting (GRB). Although not a way to fund gender data directly, the adoption of GRB can help to raise the profile of gendered issues across government and in turn contribute to better systems to monitor the state of gender nationally.



ACTION TWO

Expand collaborative efforts to champion gender data collection, analysis, and use

Our research has revealed the importance of international collaboration and political championing of gender data to successfully close gender data gaps. The Inclusive Data Charter provides a strong example. Although it relies purely on national commitment and peer pressure, it has attracted 30 international members since its inception, from companies to member states, each using the Charter to encourage national advances in inequality data or better internal policy frameworks. Further expansion of the Charter network and similar international efforts on other aspects of gender data could raise the profile of under-reported issues and encourage national commitment to resolving acute gender data gaps. Such international collaborations can also help to coordinate and target programs and investments.

We have also noted the importance of national partnerships between governments and non-governmental actors, working together to pool their capacities and expertise. For example, in Thailand, University partners from MUT brought analytical and computer processing capacity to help the government create an anti-trafficking database. Likewise, citizens groups and NGOs can supplement official statistics with citizen-generated data and community-based surveys. For example, they may conduct disaster mapping, urban safety mapping, or use cellphone data on sensitive issues such as GBV, where community surveys (used alongside technological approaches such as WhatsApp channels) can help to encourage increased reporting.

Partnerships with the private sector, such as social media companies and earth observation data providers, are important for leveraging big data and satellite information in conjunction with sex-disaggregated household survey data. Each of the examples have demonstrated the importance of government outreach and an open, collaborative data-production environment in which the NSO provides a quality assurance framework and function to ensure the maintenance of high-quality official statistics and government data.

ACTION THREE
Expand and align household surveys to increase their utility and quality

Many solutions identified in this review seek to complement or augment household surveys, demonstrating the ongoing importance of these surveys for the collection of socio-economic data, particularly in countries with limited administrative data collection systems. To ensure their utility for gender data collection and to reduce the survey burden, countries should work to align their household surveys so that data generated by one are comparable to another. Particularly, they should align gender data collection and reporting across labor force and household surveys to ensure consistency in measuring men and women's work. Where possible, countries should also consider adding modules to annual surveys on important, underserved gender issues such as connectivity, asset ownership, and governance, peace, and security. Another important practice to improve the data collected through household surveys is to expand national cadres of female enumerators with proactive outreach and training. These changes will not only increase the data that are collected through household surveys but improve the comparability of that data over time while working to reduce bias within the process.

ACTION FOUR
Strengthen core administrative data systems to create permanent infrastructure to generate regular, disaggregated demographic data

A strong recurring theme across all projects reviewed is the need to strengthen and invest in core administrative data systems such as CRVS, HMIS, and EMIS. Doing so will ensure there is strong permanent data infrastructure to generate regular, standardized, demographic data, including sex-disaggregated data, and potentially move away from resource-intensive household surveys in the medium- to long-term. To ensure administrative data systems are gender-sensitive, some organizations have developed internal audit methods, such as the IPU toolkit on parliamentary gender sensitivity. Donors can support long-term gender data production capacity by investing in core administrative data layers while urging countries to conduct internal gender audits. Furthermore, large-scale CRVS initiatives funded by multilateral institutions or philanthropic organizations (such as WHO, Bloomberg Philanthropies, and the Gates Foundation) should emphasize and encourage a focus on the gendered aspects of CRVS systems and the benefits of having a robust catalog of seminal life events.

ACTION FIVE

Deploy rapid data collection methods to better monitor underreported issues

Common to many sectors within our review was the increased use of rapid surveys to monitor understudied issues and help fill gaps between national household survey rounds. UN Women, the PMA 2020 Partnership, Oxfam, CARE, and a range of national governments have used such surveys to monitor COVID-19 effects, GBV, the care economy, sexual and reproductive health, and much more. Where these rapid surveys have been trialed in multiple countries, ideally in partnership with the national government, and have clear published methodologies, the international community should encourage their expansion and uptake. This can be done by trying to attract core institutional financing from multilateral development banks and not solely relying on piecemeal funding from NGOs. Further, the international community can encourage the survey developers to do rigorous testing of their work and publish their results so that the methods can be appropriately vetted. Finally, where possible, partnerships should be encouraged with large international survey programs, such as LSMS, DHS and the MICS, to enable the integration of core survey questions into these recurrent programs. Other rapid methodologies that show promise and potential for expansion include the use of verbal autopsies to help increase causes of death data and fill gaps in CRVS systems, and the use of gridded population estimates to measure access to services and other population dynamics and demands not accurately captured by surveys and administrative data.

ACTION SIX

Document and expand the use of international methodologies to improve quality and impact of gender data

Over the course of this research and that conducted by Grantham (Grantham 2020), we have found international datasets that did not come up in our mapping of innovations. This suggests that either they are not being used at the national level or they may be used but their utility and impact has not been documented and systematically reviewed—for example, the Global Barometer Surveys (Global Barometer Surveys n.d.) and various global datasets on education inequality. To ensure greater confidence in and uptake of these international datasets, international agencies and research organizations need to better document their impact and utility for national policy and planning, either through publication in academic literature or third-party auditing. They must also prioritize working with countries to encourage uptake, understanding, and integration of these datasets with national data. Such efforts should be encouraged by the World Bank and other large-scale international funders who can condition that there be a strong focus for all international survey programs and data collection exercises to ensure country-level use and integration into national data systems.

ACTION SEVEN**Use experimental methods to collect data in crisis situations**

Related to the above, while there has been much excitement about the potential offered by big data and social media analysis, most of these methods are still small-scale and piecemeal, unable to contribute large-scale datasets to complement official statistics. Nevertheless, in emergency settings they have great potential to provide timely and alternative sources of data and information. Facebook, for example, is using internet access data to track wellbeing during crises, while gender-disaggregated smartphone data can be a useful tool to follow population movement patterns. In other instances, governments and their partners have turned to community methodologies and citizen-generated data to better understand gendered responses to crises (for example, academics in Iran have developed community methodologies for subnational gendered crisis monitoring (Sohrabizadeh, et al. 2020)). All these examples suggest that while most innovative methodologies are still small-scale, they can play a vital role in complementing official statistics during periods of instability or when there is limited capacity.

ACTION EIGHT**Increase geotagging and geospatial data use to discern gender-differentiated risks and opportunities**

Over recent years there has been a surge in geotagging and the use of GIS in household surveys. Mapping the location of households and facilities offers the potential for unlimited additional geographic analyses such as proximity to services, land conditions, disaster risk, and so forth. When coupled with sex-disaggregated data from household surveys there is the potential to identify gender-differentiated risks and experiences, with profound implications for policy and practice. Many countries are now geotagging household surveys, whilst others are experimenting with using geographic information to further map access to services and facilities, as per the countries working with the GRID3 consortium (listed in the inventory). Third-party actors such as Facebook are also using geographic data to help map men and women's movements and differentiated experiences following disasters. Such efforts should be financially and technically supported by donors and private actors, and then promoted and scaled through public-private partnerships, particularly to countries with limited in-house GIS and remote sensing capacity. They should be encouraged as a standard practice within global SDG monitoring efforts. Yet this effort to promote greater geospatial gender data must also be balanced with an emphasis on data privacy, for example, by developing protocols and methods to maximize dissemination and use while minimizing the risk of disclosure. To ensure global comparability and facilitate data exchange, global institutions supported by donor financing and country perspectives may be best placed to develop these public goods.

ACTION NINE

Ensure gender data are open and easily accessible to increase their value through use and reuse

Throughout our review, open data was a common theme, with governments and academics alike discussing the potential open data offers for additional analytical insights by government and non-government actors. Yet work by Open Data Watch shows that relative to non-gender data, gendered data are not as open, often because they lack historical and machine-readable data. This report has identified important efforts underway to open up data, such as OpenStreetMap and the work of the Unique Mappers Network in Nigeria. These initiatives are highly replicable with increased, recurrent funding and local volunteers. Also important is to open up core administrative data sets like EMIS. In a recent article Rossiter exposed the inadequacy and lack of openness of current administrative data on education and the knock-on effects this has for a global understanding of the impacts of COVID-19 on schooling (Rossiter 2020). To overcome this, we need a shift towards open education data, making available EMIS data, alongside other administrative datasets related to public exams, national assessments, school inspection, and teacher payrolls. With such an opening there is the potential to study the impacts of policy interventions in aggregate and across different groups of individuals. More open data also help increase the value of data through more and better reuse by the government, citizens, and other stakeholders.

ACTION TEN

Invest in data training and data literacy to build capacity

A range of innovative and impactful solutions were identified related to working with journalists and public reporters to support better use of open data and better reporting of data facts and stories. As noted by the Dart Center for Journalism and Trauma; “the media—printed, visual, and electronic—is a major source of awareness-raising about social issues such as gender violence and femicide (Kouta, et al. 2018).” Working with journalists and other public commentators to ensure they understand gender data, have access to experts to get help, and become literate and smart data users can encourage greater reporting of issues and in turn, better public awareness. Data literacy is important across all of society; for the public, understanding sex-disaggregated data published by the government and third parties provides them with the tools to monitor progress and hold officials to account. Data producers and statisticians should extend their data expertise in production to increasing data use, train to become strong data intermediaries, and make the data they produce easily understandable with interesting narratives, stories, and data visualizations. Investing in data literacy at schools and through community centers and other forms of adult training will make a crucial contribution to ensuring sex-disaggregated data can be understood and used to drive policy change.



SECTION SIX

Conclusion

This report, and its accompanying inventory, has identified a wide range of innovations and new practices to improve gender data collection. Unsurprisingly, few of these are technological innovations or use big data and AI-based analytic approaches. The innovations identified in this review were mostly found to be small-scale, in their infancy, or exploratory studies that are not ready for cross-country scale-up or wider deployment. However, at the national level there is a lot of exciting collaboration with the private sector to employ new big data methods. For example, the UNICEF, Telefonica, and GovLab project that looks at gendered experiences of urban mobility in Santiago, Chile (UNICEF 2020c). But the key to success in such initiatives appears to be the layering of multiple datasets and the inclusion of a broad range of actors, including UN agencies and academic partners who can help complement, vet, and analyze private-data insights. These are not magic bullet approaches that can be rapidly scaled across countries without first negotiating complex private collaborations (including the legal frameworks for operation) and establishing multi-stakeholder partnerships. The most promising approaches for cross-country scale up appear to be where there have been advancements and modernizations of existing practice, for example, introducing interim rapid surveys to complement periodic country household surveys or geotagging existing census and survey

data. Opening up administrative records and other governmental data assets also offers the potential for non-governmental actors to do their own analysis and support the government with discerning additional insights. In addition, community-based surveys and citizen generated data have proven to be useful in emergencies and times of crisis such as during the ongoing COVID-19 pandemic. Governments should actively invite these partners to collaborate, giving them opportunities to share their insights across the statistical system and with other relevant departments. The role of the NSS will, of course, be quality control, but with the appropriate provisos, there is no reason governments shouldn't be able to draw upon these insights for quick, reactive policy development.

While the paucity of global gender data remains concerning, this report offers some hope that there are many activities and many actors working worldwide to try and produce more gender data and derive more insights from what we already have. Supporting gender data advocates by highlighting promising existing initiatives, helping them disseminate their findings, and working with them to attract more investment offers the potential to exponentially increase the amount of gender data in circulation and to bolster governments' commitments to use these data to ensure no one is left behind.

While the paucity of global gender data remains concerning, this report offers some hope that there are many activities and many actors working worldwide to try and produce more gender data and derive more insights from what we already have.



SECTION SEVEN

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data2x^o

Data2X

United Nations Foundation
1750 Pennsylvania Avenue NW, Suite 300
Washington, D.C. 20006
USA

data2x.org

+ 1 202.887.9040

info@data2x.org



Open Data Watch

1100 13th St NW (Suite 800)
Washington, DC 20005
USA

opendatawatch.com

+1 301.320.3020

info@opendatawatch.com