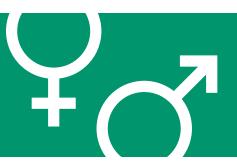
CENTRE OF EXCELLENCE for CRVS Systems



Knowledge Brief Series on **Gender** and **CRVS**

LE CENTRE D'EXCELLENCE

sur les systèmes ESEC



Brief 1, February 2019

Why CRVS Systems Matter for Women and Girls



Photos: Dominic Chavez/World Bank



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PROGRAM INFORMATION

About the Centre of Excellence

Housed at the International Development Research Centre (IDRC), the **Centre of Excellence** for Civil Registration and Vital Statistics (CRVS) Systems is a global knowledge and resource hub that actively supports national efforts to develop, strengthen, and scale-up CRVS systems. It collaborates with organizations and experts to broker access to information and expertise, including global standards, tools, research evidence, and relevant good practice.

The Centre of Excellence was established with funding from Global Affairs Canada and IDRC, and contributes directly to the work of the Global Financing Facility, a key financing platform of the UN Secretary General's Global Strategy for Women's, Children's, and Adolescents' Health.

About IDRC

Part of Canada's foreign affairs and development efforts, the IDRC invests in knowledge, innovation and solutions to improve the lives of people in the developing world. IDRC works with many stakeholders including civil society organizations, think tanks, regional organizations and government departments in the developing world to promote growth, reduce poverty, and drive large-scale positive change.

Contact

International Development Research Centre PO Box 8500, Ottawa, ON Canada K1G 3H9 Tel: (+1) 613-236-6163 Email: crvs@idrc.ca www.crvssystems.ca **CENTRE OF EXCELLENCE** for CRVS Systems



Knowledge Briefs on **Gender** and **CRVS**

Brief 1, Paper 1

Making the Invisible Visible: How Strong CRVS Systems Can Empower Women and Girls

Photo: Dominic Chavez/World Bank

KEY MESSAGES

- Civil registration is critical for protecting the fundamental rights and freedoms of women, girls, and other vulnerable groups. Legal identity, proof of age, and civil status facilitate access to key rights and services, including social protection, voting rights, health, education, and financial services.
- Vital statistics generated from civil registration provide valuable data needed to monitor progress towards gender equality, including Sustainable Development Goal (SDG) targets such as those related to maternal and infant mortality, education, and access to services.

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- Globally, women and girls still face many cultural, financial, and legal barriers to experiencing the full benefits and protections of civil registration.
- To make sure all women and girls can be counted, protected, and provided for, it will be crucial to address the legal, financial, or social norms around civil registration and vital statistics (CRVS) systems that exclude women and increase their vulnerability.
- This Knowledge Brief Series, produced by the Centre of Excellence for CRVS Systems in partnership with Open Data Watch, aims to inform the evidence base that can help drive the institutional and societal changes needed to build stronger, more inclusive CRVS systems.

The Sustainable Development Goals (SDGs) seek to eliminate poverty and create better life conditions for everyone. A cornerstone of the sustainable development agenda is a bold commitment to achieve gender equality and empower all women and girls (enshrined in SDG 5), including ending all forms of discrimination against women. Governments of countries including Canada, Sweden, and Iceland have recently adopted explicitly feminist international aid policies (IDRC 2018). This heightened commitment to gender equality couldn't be timelier. While important milestones have been made towards gender parity across education, health, economic, and political systems in many countries, much remains to be done (World Economic Forum 2018).

Importantly, there is insufficient data to measure and mitigate the challenges that continue to plague women and girls. Relevant, reliable, and timely gender statistics are critical to understanding the differences among men. women, and other vulnerable groups in any society (United Nations 2015). This kind of sexdisaggregated data, covering basic indicators such as population, health, education, and work, is a "must have" for measuring and furthering progress towards true equality. Yet, national-level statistics are not sufficiently nuanced and local enough for us to know who is really left behind and why (Mullinax, Hart and Vargas Garcia 2018). Without the right data, disaggregated by the right variables, the most vulnerable may be left even further behind.

Civil registration and vital statistics (CRVS) systems are an indispensable part of the data ecosystem required to measure progress towards gender equality. As government administrative systems, they are unparalleled in their ability to provide real-time, reliable data disaggregated at the lowest level by sex, geography, and other relevant characteristics. CRVS systems are essential to monitoring progress towards the SDGs; 67 indicators covering 12 of the 17 SDGs can be measured most effectively using data derived from wellfunctioning CRVS systems (Mills et al 2017). Improving CRVS systems is a target under Goal 16: Peace Justice, and Strong Institutions. CRVS systems are a crucial data source for many gender-related SDG indicators, are necessary for monitoring maternal and infant mortality and informing indicators on education and access to social services (SDSN TReNDS and Open Data Watch 2018). Strong CRVS systems equip countries with the evidence to design and implement public policies addressing the unique needs of women, girls, and other vulnerable groups.

Further, civil registration itself - the continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events (births, marriages, and deaths) - protects the fundamental rights and freedoms of women and girls. Proof of age and identity ensure that women, girls, and other vulnerable groups can access social services, seek employment, open bank accounts, access credit and loans, own businesses, and exercise their right to vote. Having a birth certificate has a positive effect on early childhood growth and development outcomes (Jeong, Bhatia and Fink 2018). Marriage and death registration are effective tools for women's empowerment and for facilitating access to social benefits and protections (Pryor 2016). These are needed to access property rights, pension benefits, child support, or inheritance when a marriage ends or a spouse or parent dies.

CRVS systems are thus foundational for inclusive development because they simultaneously provide real-time data to guide planning for service provision and facilitate access to those services or benefits. This is particularly important for meeting the needs of vulnerable and hardto-reach populations, the overwhelming majority of which are women and children.

The Centre of Excellence for CRVS Systems at the International Development Research

Centre (IDRC) has set out to inspire a global commitment to integrating gender analysis across activities to strengthen CRVS systems by discussing the status of the field, evaluating opportunities and challenges, and identifying priority areas of research and action to improve vital event registration for women and girls. As part of that commitment, the Centre of Excellence is proud to launch this Knowledge Brief Series on CRVS and Gender. The series will publish three briefs throughout 2019 each consisting of four papers. Created in partnership with Open Data Watch, the series will synthesize and disseminate key messages, innovative case studies, and emerging findings across a multitude of CRVS dimensions, including birth, marriage/divorce, and death registration. It will also address issues such as capacity, innovation, and resource mobilization.

The Knowledge Brief Series will also articulate the importance of CRVS systems for achieving better living standards for all, protecting the rights of women and girls, and monitoring progress towards global gender equality commitments. This introductory paper sets the scene for why the Centre for Excellence is taking on this initiative, provides a preview of the other three papers of the brief, and explores the themes of future knowledge briefs.

ADVANCING CRVS SYSTEMS, PROTECTING WOMEN AND GIRLS

This Knowledge Brief Series is a part of the Centre of Excellence's larger strategy to contribute to and lead the global conversation on gender and CRVS systems. Despite the many benefits CRVS systems confer to governments and individuals, they are chronically weak in low- and middle-income countries, and the gender dimensions are often overlooked. More than 100 developing countries still do not have



PHoto: Mohamad Al-Arief/The World Bank

functioning CRVS systems that can support the complete registration of births, marriages, divorces, and deaths (**World Bank 2018**). Only 46 countries were able to provide reliable statistics on deaths disaggregated by sex (as reported by civil registration systems) at least once for the period 2011 to 2014 (**United Nations 2015**).

Globally, women and girls still face many financial, cultural, and legal barriers to experiencing the benefits and protections of civil registration, including the cost of registration, requirements of a husband's presence for a child's birth registration or a marriage registration, the system's failure to recognize customary marriages, burial practices, and inheritance laws. In some countries, such as Syria, Nepal, Bhutan, and Nicaragua, children cannot be registered permanently without their father's or grandfather's signature (UNICEF 2013). While the births of boys and girls are generally registered equally around the world, birth registration is significantly lower among girls than boys in Sudan, Niger, Namibia, Guinea Bissau, Tajikistan, Costa Rica, Armenia, and Thailand (Bhatia et al. 2017). Marriage below the age of 18 is permitted in seven countries and allowed with parental consent in another 22 countries (UNICEF 2017). As of 2016, at least

10 sub-Saharan African countries lack any legal obligation to register a marriage (Hanmer and Elefante 2016). In Morocco, male deaths are twice as likely to be registered than female deaths (Silva 2016). Taken together, poorly functioning, gender-blind systems make it difficult for governments to create policies and programs aimed at protecting and supporting women and girls throughout their lives.

The Centre for Excellence supports, advances, and advocates for efforts to strengthen CRVS systems that include and count all women, girls, and other vulnerable populations. It has a system-strengthening mandate to contribute to global initiatives to increase the number of low- and middle-income countries with comprehensive CRVS systems that provide reliable and up-to-date records of births, marriages, deaths, and other vital events. Specifically, it works towards improving CRVS Systems to track progress on women's, newborns', children's, and adolescents' health in countries eligible for support through the Global Financing Facility (GFF). Gender analysis is a key thematic and cornerstone of the Centre of Excellence's work at both global and country levels.

One objective of the Centre of Excellence is specifically to increase the availability of guides, tools and documented evidence for the development and/or implementation of effective CRVS systems. As an initiative that brings together research from experts, this Knowledge Brief Series will contribute to the currently limited knowledge base on gender dimensions of CRVS systems.

The Centre for Excellence is already making progress on another of its aims: contributing to improving the mechanisms of coordination and collaboration among stakeholders involved in strengthening CRVS systems, a goal which is already underway. On February 26, 2018, the Centre of Excellence and its partners hosted a high-level panel and technical consultation sessions on CRVS and gender through an event entitled "Making the Invisible Visible: CRVS as a Basis to Meeting the 2030 Gender Agenda". The meeting was the first of its kind to focus solely on the gender dimensions of CRVS systems and the barriers women and girls face when registering vital life events. It brought together different stakeholder groups, such as civil registrars, statisticians, UN colleagues, public health experts, and gender experts, to discuss challenges, opportunities, and initiatives in addressing the barriers to vital event registration. The meeting generated high interest and helped shape the dialogue on gender in the global CRVS agenda. It affirmed the critical role that CRVS systems play in achieving the SDGs, closing gender data gaps, and truly leaving no one behind.

Following up on this meeting, a side event was held during the UN World Data Forum in Dubai, United Arab Emirates in October 2018. The event, "Civil Registration as a Tool for Women's Empowerment," provided an opportunity to introduce the series, hear from the authors of Brief #1, and collect feedback and input on what should be covered in future briefs.

MOTIVATIONS AND OBJECTIVES

This Knowledge Brief Series builds on the results of the previous technical meetings, integrates current research on the topic, and represents a strong commitment to advancing CRVS systems that count all women and girls. It aims to further inform and galvanize efforts to close gender data gaps and ensure that no one is left behind. It will serve as a tool to stimulate conversation and promote the adoption of good practices. By evolving the dialogue on the importance of CRVS systems for the global gender agenda, it will help build momentum and ensure that emerging insights are shared and used. Specifically, the series aims to meet the following urgent needs¹:

- Prioritization: CRVS systems need to be prioritized under national development plans, statistical plans, and global agendas.
- Balance: All components of CRVS systems need to be equally strengthened with balanced investment in identity management (ID) systems and CRVS systems.
- Partnership: Building strong CRVS systems requires collaboration among all sections of government and the private sector.
- Research: More knowledge is needed to understand the barriers women and girls face and how to better incentivize and promote registration to close related data gaps.
- Innovation: An exploration of the current state of and use of innovation in CRVS for women and girls in developed and developing economies is needed to understand how technology can have a positive multiplier effect.
- Capacity-building: A documentation of successful capacity-building approaches to support a forward-looking agenda is needed.
- Funding: The economic, political, and social value of CRVS data need to be better communicated to increase funding for current initiatives and ongoing efforts that will yield effective results in a relatively short amount of time.

CLOSING THE GAPS IN UNDERSTANDING

More understanding is needed to overcome the barriers facing women and girls, specifically how to do so within a country's unique political and cultural context. This is especially important for advancing CRVS systems in low- and middleincome countries. Unfortunately, there is a dearth of strong case studies that explore the successes or failures of these interventions. As such, there remains a knowledge gap on the proximate constraints and underlying factors that may influence the registration of different vital events for women and girls. And while there has been a growing recognition over the last several years of the importance of strong CRVS systems, there is little evidence around gendered barriers and inequalities. Unanswered questions remain, prompting the following approach:

- Examine barriers and hidden biases: What gender biases exist in the legal systems that govern civil registration? How do the current legal frameworks discourage or prohibit women from registering vital life events, such as their child's birth or their own marriage? What cultural, economic, or social barriers may prevent women and girls from registering their vital events?
- Uncover the gaps: Where are the registration data gaps? Where are women least likely to be counted, registered, or recognized? How can we increase demand for registration among these vulnerable populations? How can we better engage men to ensure that vital events pertaining to their daughters and wives are legally recorded?

¹ These were identified through consultation at the February 26, 2018 meeting, "Making the Invisible Visible: CRVS as a Basis to Meeting the 2030 Gender Agenda."

- Develop a strategy: How should countries register deaths, divorces, and different types of marriages, especially those that are least likely to be registered or recognized? How can we develop evidence-based strategies or design programs that facilitate registration of vital events for women and girls?
- Build capacity, share knowledge, and increase data use and impact: How can countries strengthen their technical and administrative capacities? On the local level, how can registration authorities more efficiently register marriages and divorces? How can we increase data use and promote evidenced-based policymaking?

EXPLORING THE KNOWLEDGE BRIEF SERIES

The issues identified above provide a glimpse into the motivations for the Knowledge Brief Series and a snapshot of topics that will be explored in each paper. The impetus behind the Knowledge Brief Series is to create a compendium that identifies current problems and challenges, offers opportunities and solutions, and proposes a call to action among relevant stakeholders within their specific topic.



Photo: Dominic Chavez/World Bank

Through the publication of this series, genderand CRVS-related research will be disseminated to make a case for further investments that will improve CRVS systems and promote gender equality.

This research will provide crucial support to stakeholders including government agencies, funding agencies, the UN Statistical Commission and standard-setting bodies, academics, and gender data advocates. Among these stakeholders, the series will increase awareness of emerging issues and promote the adoption of good practices.

As the first knowledge brief of the series, this collection of papers sets the stage for a series of discussions within the topic of CRVS for women. The series begins with this paper – an overview of the motivations and objectives of the Knowledge Brief Series. The following papers serve to then provide a detailed introduction to CRVS for women and its role in the sustainable development agenda specifically, before delving into more detailed topics within the space such as financing and capacity-building.

Below we provide short descriptions of each paper in this first brief.

Paper #2: Leave No One Behind: CRVS, Gender and the SDGs

The second paper of this Knowledge Brief is "Leave No One Behind: CRVS, Gender and the SDGs," by Mayra Buvinic and Eleanor Carey of Data2X. The paper provides a broad overview of the importance of CRVS for women and girls and explores the research gaps in understanding such dimensions. It examines the existing evidence on the interplay between gender and CRVS and details the benefits of this interplay for women and CRVS systems, then summarizes major themes that emerge in the empirical evidence. These themes help inform a gender lens approach. It concludes with recommendations for policy and research.

Paper #3: Harnessing CRVS Systems for the Gender-Related SDGs – Opportunities and Challenges

The third paper, "Harnessing CRVS Systems for the Gender-Related SDGs – Opportunities and Challenges," by Shaida Badiee and Deirdre Appel of Open Data Watch, situates CRVS and gender more deeply within the sustainable development agenda. Specifically, it examines the genderrelevant indicators within the SDGs and links their measurement to the data provided by CRVS systems. Previous papers on CRVS and the SDGs have documented the centrality of CRVS within the sustainable development agenda, but none have done so through a gender lens. This paper does that, amplifying the relevance of CRVS systems for global commitments to gender equality. The paper explores open data and interoperability of systems as potential pathways for progress.

Paper #4: The Costs and Benefits of CRVS as a Tool for Women's Empowerment

The last paper of the series, "The Costs and Benefits of CRVS as a Tool for Women's Empowerment," authored by Jessica Espey at the UN Sustainable Development Solutions Network, takes a step back from examining CRVS systems themselves to explore the financials behind them. The previous papers in the series unpack the benefits of robust CRVS systems for gender empowerment, enabling us to better understand societal dynamics, gendered experiences and opportunities, provide gender- and sex-specific services, and ensure no one is left behind, as mandated by the 2030 Agenda for Sustainable Development. This paper complements this contextual analysis by focusing on some of the practical barriers to the expansion of CRVS systems, namely the costs, current levels of investment, and the shortfall, but also highlighting the immense investment opportunity.

Upcoming Papers and Briefs

Two additional briefs will be published in 2019. Potential themes and topics to be covered in the future briefs include, but are not limited to: current efforts and future capacity development plans for improving CRVS systems; best policies and practices that incentivize registration for women and girls; improving registration of the deaths of women and girls; the role of national statistics offices in advancing CRVS systems and gender data; the intersection of CRVS and legal identity through a gender perspective; legal frameworks and legislation; and the economic costs and value of investments in CRVS. Similar to the first Knowledge Brief, the additional briefs will be authored by experts in the field. Each paper and brief will build on the themes before it with the aim to conclude the initiative with a collection of papers that are greater than the sum of individual parts.

FROM PAPER TO PRACTICE: MOVING THE CRVS AGENDA FORWARD

Improving CRVS systems for women and girls will take more than just documenting the benefits and publishing research or policy papers. It will require sustained investment, commitment, and collaboration, as well as broader institutional and systemic change. Substantive equality requires fundamental transformation of economic and social institutions, including the beliefs, norms, and attitudes that shape them (UN Women 2016). It is critical to address the underlying norms and systems that continue to shape gender-based inequalities and vulnerabilities (IDRC 2018). For CRVS, this means it will not be enough to simply increase awareness of gender gaps or improve women's access to civil registration services. It will be essential to address the legal, financial, cultural, or societal norms and systems that exclude women and increase their vulnerability.

By publishing high-quality research and policy papers, this Knowledge Brief Series aims to inform the evidence base that can help drive the requisite institutional change, recognizing that this kind of change is often a long-term, incremental process. The knowledge housed within this series must be translated from paper to practice. With this information, international organizations can better provide funding for research and technical assistance; research organizations can improve evaluation of interventions and understand factors impacting access; and civil society can better help to illuminate the ways in which CRVS impacts men, women, and children's lives.

It is the aim of the Centre of Excellence and its partners to bring such stakeholders together to improve CRVS systems and move closer to achieving the SDGs. All women and girls, regardless of geography, race, wealth, nationality or other factors, need to be counted so that they can be protected, provided for, and empowered.



This paper was authored by Irina Dincu and Nomthandazo Malambo of the Centre of Excellence. It is part of the Knowledge Brief Series on Gender and CRVS, developed by the Centre of Excellence for Civil Registration and Vital Statistics (CRVS) Systems, in partnership with Open Data Watch.

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Knowledge Briefs on **Gender** and **CRVS**

Leaving No One Behind:

CRVS, Gender and the SDGs

Photo: Dominic Chavez/World Bank

Brief 1, Paper 2

KEY MESSAGES

Civil registration and vital statistics (CRVS) and ID systems matter (more) for women. Gender inequalities contribute to the exclusion of the most disadvantaged women and girls from civil registration and national ID systems, exacerbating these inequalities. Civil registration and identity documents help to redress them by helping protect women and girls against child marriage, securing inheritance rights and fair divorce, and facilitating access to political participation and modern financial services. These benefits enhance the value of CRVS and ID for women when compared to men.

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- A gender lens should inform the development, implementation, and monitoring of vital statistics and identity documentation. A gender lens is required because gender inequalities shape supply-side and demand-side constraints to civil registration and to ID documentation (including affecting registration of births by mothers), thus determining many of the gaps and challenges in vital statistics.
- Women are uniquely poised to be agents of change for universal civil registration and ID systems that "leave no one behind." Women's first-hand knowledge of vital events in the family and their preference to invest in family wellbeing makes them ideally suited for this role.
- Disaggregated data show gender inequalities in CRVS and ID coverage. Sex-disaggregated data shows that gender inequalities in registration rates can be masked by global and national averages; that unrecorded marriages and teen and unwed motherhood lead to unregistered births and intergenerational costs; and that women's deaths may be systematically under-registered.

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A CRVS and ID data, research, and action agenda informed by a gender

Lens includes improving data on marriage registration and certification; improving death registration and recording with a gender lens; investigating inequalities in coverage of vital events within countries; investigating gender related supply-side barriers to registration, including legal restrictions; testing costeffective interventions to increase coverage and reduce gender gaps; and designing programs with a human-centered design approach that seeks to benefit women and girls.

THE ROLE OF CRVS IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

Civil registration is "the continuous, permanent, compulsory and universal recording" of vital events, including birth, death, marriage, and divorce (UN Statistics Division n.d.). Fully functional universal civil registration systems provide vital statistics, which allow permanent and continuous real-time disaggregated data that are largely free of sampling errors and contain relatively few response errors. They add value to statistical systems by providing reliable, timely and granular data at relatively low cost, and can help close gender data gaps. Civil registration is also critical for social protection and inclusive development. It provides foundational identification through birth certificates and national IDs that individuals need to exert citizen rights and responsibilities and transact in the modern economy.

Further, a fully functional, universal CRVS system is a main requirement to achieve "leaving no one behind," the goal of inclusive development and a crosscutting objective of the Sustainable Development Goals (SDGs). The SDGs commit countries to track progress towards 17 goals and 169 targets through 232 measurable indicators. CRVS systems contribute to achieving SDG targets and monitoring progress by providing the numerator or denominator for 67 of the indicators, spread across 12 goals (Mills, et al. 2017). Demonstrating CRVS' centrality to the SDGs, "legal identity for all, including birth registration," has been enshrined as Target 16.9. Other targets, such as reducing child marriage (5.3) imply the need for the improvement of CRVS systems (Mills, et al. 2017). CRVS data is the best source for the denominator of all population-based targets and indicators, such as those for SDG 1, which seeks to reduce extreme poverty, and populates the numerator of a majority of indicators under Goal 3 on health and wellbeing. In addition, Indicator 17.19.2 includes a specific aim to achieve 100% birth registration and 80% death registration by 2030.

THE STATE OF CRVS

Despite the importance of CRVS for governments and individuals, more than 100 low and middleincome countries lack functional CRVS systems and under-record or completely fail to record vital events of specific populations (World Bank 2018). The following are known gaps in the recording of these events:

 Birth registration is far from complete. Though it is central to any country's vital statistics, globally there are an estimated 650 million unregistered births of children between 0 and 16 years of age (Gelb & Metz 2018). Using data from 197 countries, UNICEF (2017) calculates that 29% of the global population of children under 5 years old are unregistered (UNICEF 2017). As of 2013, one in seven registered children did not possess a birth certificate, but this proportion differed significantly across regions and countries (UNICEF 2013).

- Legal ID is crucial, but coverage is low, particularly in low-income countries. A birth certificate is a "foundational document" and helps to establish legal ID which, in turn, enables access to financial services, social services and protection, and political participation (Dahan & Hanmer 2016). Despite the importance of such identification, survey data for 99 countries shows that close to 40% of the eligible population in low-income countries does not have one. In middleincome countries coverage gaps are smaller with fewer than 10% of the population lacking an ID, but they still exist (World Bank 2018).
- Half of all deaths are not properly documented globally, and accurate data on causes of death in low-income countries are largely unavailable (International Development Research Centre 2018). The task of registering deaths and recording causes of death accurately is challenging because most deaths take place outside of medical facilities and because health practitioners often have limited information to correctly identify the cause (WHO 2010), or lack the training to do so. Household surveys are not well placed to collect information on causes of death and therefore should not be relied upon as an alternative to a wellfunctioning civil registration system.
- Of all the vital events, the recording of marriage and divorce registration is the most unreliable and unavailable, especially in low-income countries, and has the lowest priority globally in terms of improvement. Registration of these events is especially problematic where marriage ceremonies are largely customary and where poorly functioning judicial systems are a major barrier to divorce. Another obstacle is the lack of a harmonized definition of marriage in international conventions.



Photo: Rama George-Alleyne/World Bank

CRVS, GENDER AND SOCIAL EXCLUSION

Civil registration should have universal coverage by definition; it should accurately capture the entire population of a country and follow this population through its life cycle, from birth to death. Yet in practice, as the data above shows, there is substantial exclusion across countries and across peoples within countries. This exclusion is not random. It unduly affects the most disadvantaged and distorts the measurement of their progress. Gender inequalities are reflected in the registration of vital events. A substantial number of women and girls affected by poverty and exclusion are left out of the administrative system; unable to be protected by the State, and unable exercise their rights or fulfill their obligations.

The gender inequalities affecting especially women and girls of disadvantaged groups in the registration of events are consequently reflected in vital statistics when compiled, contributing to entrenchment of these inequalities. These inequalities on their own and in interaction with other determinants of exclusion, such as income, geographical location, race, and ethnicity, help to explain why certain groups are not counted in vital statistics. For CRVS to be truly universal, leave no one behind, and accurately measure progress, a gender lens should be incorporated into the legal framework, business process, and training related to the registration of vital events, the collection and compilation of vital statistics and the provision of legal identity, as well as in monitoring the universal execution of vital statistics and ID.

This paper examines the existing evidence on the interplay between gender and CRVS. It first details the benefits of this interplay for both women and CRVS systems, and then summarizes major themes that emerge in the empirical evidence. These themes help inform a gender lens approach. It concludes with recommendations for research and policy.

WHY CRVS MATTERS (MORE) FOR WOMEN

Civil registration and identity documentation, while often seen as separate, are both integral parts of a life-long trajectory from birth registration to service delivery and national ID, marriage registration and citizens' rights, and death registration. Although CRVS and identity documentation coverage are vitally important for both men and women, both are arguably more important for women. Fully functional CRVS systems can help redress pre-existing gender inequalities between women and men, enhancing their value for women. Conversely, the negative consequences of being left outside of registration and identity systems are worse for women than for men as they reinforce gender inequalities. The potential to redress or reinforce gender inequalities manifests in the following ways:

 Birth registration protects against child marriage. Birth registration and birth certificates, in addition to their link to IDs, help to ensure children's access to health care (e.g. immunizations) and education and can help protect women from early marriage, a risk that uniquely impacts girls. The incidence of child marriage is still shockingly high, with an estimated 15 million girls married before age 18 every year (Hanmer & Elefante 2016). While gender inequalities in birth registration are small at national levels and girls have made substantial strides in closing gender gaps in health and schooling, the lack of birth registration for girls is linked to child marriage, with long-term detrimental consequences for women and their children. A study using data from 106 countries, including countries where child marriage is prohibited by law, shows a strong correlation between lower incidence of child marriage and higher birth registration rates (Hanmer & Elefante 2016).

- Women are less likely than men to have national ID, reinforcing women's exclusion. In low-income countries, on average, 45% of women do not have an ID versus 30% of men (World Bank 2018). The World Bank's Women, Business and the Law report found that married women cannot get an ID card in the same way as married men in 11 economies (World Bank 2018). In Afghanistan, almost twice as many men as women have an ID (World Bank 2018). In Pakistan, women aged 18 to 40 are 6% less likely than men to have an ID card, after adjusting for gender differences in education and marital status. This gap is widest in the poorer quintiles (between 8 and 11%) versus the richest (2%) (Knowles 2016).
- ID can act as a gateway to improving women's political voice and agency, both of which lag severely behind men's. Increasing women's access to individual IDs is a necessary first step to increasing their political participation, including their representation in parliaments: globally just 24% of seats in both upper and lower houses are held by women (Inter-Parliamentary Union 2018). A qualitative

study of an income support program in Pakistan showed that national IDs given to poor women to register with the program established their right to vote and boosted their social standing and political freedom (Yan & Kemal 2015).

- Access to ID can also reduce gender gaps in the economy. The Global Findex survey, in its third iteration over a seven-year period (2011 to 2017), shows that women constitute an unchanging majority (57%) of the 1.7 billion adults globally that lack access to a bank account, and that lack of ID is a main reason for this exclusion from modern financial services (World Bank 2018). In India, men were 20% more likely to have a bank account than women as of 2015. Thanks to a nationwide biometric ID initiative, today this gender gap has shrunk to 6% (World Bank 2018). In Rajasthan, India, this initiative increased women's access to bank accounts, from 34% before the advent of biometric IDs to close to 100% after (Gelb, et al. 2017).
- Death certificates are required to assert widowhood rights. The under-registration of deaths is a global problem, and nonpossession of a death certificate is more of a problem for women, who outlive men globally. Without a death certificate, women may not be able to assert widowhood rights and claim inheritance. This is particularly onerous for widows in low-income countries given their greater economic vulnerability, and even more damaging for widows in conflictaffected countries, where the high incidence of widowhood among women is a predictable consequence of war (Gupta, et al. 2013; Milazzo & van de Walle 2018).
- Marriage registration can prevent child marriage, ensure inheritance rights, and enable paternity recognition, fair divorce, and benefits linked to marriage.

Marriage registration and certification add to the benefits of birth registration, providing a legal backing against and helping to prevent child marriage in countries where laws are effectively enacted. Marriage certificates are also required, alongside death certificates, for inheritance rights and social benefits in the case of widowhood. In Nepal, widows are only entitled to a widowhood pension if they can provide proof of the marriage, as well as the death and citizenship certificates of their deceased husband (Asian Development Bank 2007). A marriage certificate also helps with paternity recognition and the child's birth registration. Motherhood outside a legally recognized and registered marriage often triggers the intergenerational transmission of poverty between mothers and their children (see below under "Major Gender Themes in the Empirical Evidence"). In the event of dissolution of a union, filing for legal divorce (and the attendant splitting of assets and paying of alimony, where applicable) is not possible without a marriage certificate. Moreover, where tax regimes or social protection benefits are preferential for married couples, those in unregistered marriages are unlikely to benefit.

Vital statistics are the basic building blocks of good gender data, and both the lack of data and biased or "bad" data is more of a problem for girls and women than for boys and men (Buvinic & Levine 2016). Gender data is critical for monitoring progress towards gender-related indicators in the SDGs. When complete and accurate, vital statistics help inform policies that seek to target and monitor girls and women in the most disadvantaged and hardest to reach groups, helping to ensure that they do not continue to be "left behind," Harbitz and Tamargo, for instance, have shown a strong correlation between poverty, ethnicity, rural location, and gender in Latin America, and

how these combined features lead to the non-registration of births and lack of legal ID that reinforce the social exclusion of these "left behind" populations (Harbitz & Tamargo 2009). In their most recent analysis of birth registration, UNICEF underscores that reaching the most disadvantaged of unregistered children will require taking an equity approach specifically targeting excluded populations (UNICEF 2016).

Complete CRVS data can be used to track and make visible those women and girls left farthest behind (UN Statistics Division n.d.). Sample sizes in surveys are typically not large enough to allow analysis of specific sub-groups disaggregated by sex unless they are targeted for oversampling. Good CRVS data can be used alone or in combination with other sources of administrative data (including national ID information) to construct national population registers (Muñoz n.d.; WHO 2012).

Given the mechanisms through which CRVS systems may either redress or entrench gender inequalities, the push towards full coverage, particularly of birth certification but also marriage, divorce, and death registration, is disproportionately important to guarantee the wellbeing of women and their families (Knowles & Koolwal 2017).



Photo: Curt Carnemark/World Bank

WHY WOMEN MATTER FOR CRVS

To be universal, CRVS systems need to focus on and include women. First, because gender inequalities determine many of the gaps and challenges in vital statistics, building a universal CRVS system requires a focus on capturing the life events of women and girls and a gender lens in the design of solutions and tracking of progress.

Second, women are uniquely positioned to be agents of change. A growing body of research shows that women singularly invest in the wellbeing of their children. For instance, their greater control over the household budget can result in a change of spending patterns that benefits children, making them ideal agents for CRVS action and advocacy (World Bank 2012; Knowles & Koolwal 2017). This means that women can be key, powerful partners in building more inclusive CRVS systems. Women's organizations and grassroots groups also have an important advocacy role to play in strengthening overall CRVS systems at national and sub-national levels.

And third, women have first-hand knowledge of vital events in the family, including births and deaths, so including women as change agents in CRVS systems could improve child birth registration. In Latin America, mothers are commonly expected to register their children. Brito, et al. document that in the Dominican Republic having a mother without legal ID increases the chances of children not being registered by 32%; further, mother's secondary schooling is associated with an 8% lower probability of non-registration of births in Bolivia and 12% in the Dominican Republic (Brito, et al. 2013). In addition, more reliance on women's knowledge of family events may contribute to more accurate recording of deaths.

MAJOR GENDER THEMES IN THE EMPIRICAL EVIDENCE

At least five main themes emerge when reviewing the empirical evidence on access and coverage of civil registration or identity documentation for women and girls. These themes are common across countries and cultures; they help define main features of a gender lens in CRVS and ID.

Averages mask gender inequalities in birth registration and access to legal ID

Globally, there is no gender gap in birth registration and national level gaps in birth registration between girls and boys are small. Only 8 of 94 countries show lower coverage for girls than for boys (**Bhatia, et al. 2017**). However, averages can mask inequalities by gender, income, and other characteristics of excluded groups, and these inequalities can leave these children further behind even in countries such as Peru, with model civil registration and national ID systems. It is therefore important to measure and address inequalities in coverage by subgroups within countries, including by gender (**Bhatia, et al. 2017**).

In sub-Saharan Africa, while the aggregate national level data does not reveal gender gaps in birth registration, analysis of data at subnational level shows under-registration of girls in particular settings (Koolwal 2017). In five (Burundi as of 2010, Guinea as of 2012, Kenya as of 2009, Rwanda as of 2010, and Namibia as of 2013) out of the 26 African countries analyzed by Koolwal, girls are less likely to be registered than boys when they belong to polygamous households (Koolwal 2017). In these countries, polygamy widens the gender gap in registration after controlling for other variables, suggesting that cultural factors trump economic forces in explaining observed gender gaps in registration. A study of India's birth registration at district level also found large differences in registration rates

in favor of boys (**Dahan & Hanmer 2016**). Gender gaps in birth registration may also be effectively masked by sex selective abortion, present in geographical sub-regions in countries in Asia, including China, India, Pakistan, and Vietnam (**Knowles & Koolwal 2017**).

Global gender inequality in ID coverage is small (less than 2%), but here inequalities already emerge at a national level for low-income countries and even larger inequalities, including by wealth groups and gender, emerge among excluded population subgroups within countries. This gap is particularly large in countries like Afghanistan, Benin, and Pakistan, where legal barriers exist to women's access to identity documents. In Indonesia, only half of all women in poor households have an ID card (Sumner & Kusumaningrum 2014).

Unrecorded marriages and teen and unwed motherhood have intergenerational costs

Recognition of paternity in many countries around the world is linked legally or de facto to legal marriage. Shame or stigma from not having a marriage certificate can prevent mothers from registering their children, even if there are no laws on the books preventing this (Fisher 2015). Women in religious or customary marriages as well as teen and unwed mothers often don't register the births of their children, both male and female, transmitting disadvantage between generations.

In Indonesia, half of all married couples in the poorest regions do not register their religious marriages, while paternity requires a legal document. As result, between half and three-quarters of children do not have a birth certificate, partly because of the stigma associated with having a certificate only in the mother's name (**Fisher 2015**). In response, the current government has established integrated service centers that help with legalizing marriages and producing birth certificates (Hanmer & Elefante 2016). However, this does not seem to be the case in Southern African countries where, in some cases, 50% of the births are registered without the name of the father, primarily due to the fact that these births are outside of marriage. For example, in Botswana 76% of mothers who registered births in 2012 were single (Statistics Botswana 2015). It is therefore important to examine whether the stigma of single motherhood may be impeding registration in particular countries or communities.

Analysis of Demographic and Health Surveys (circa 2000) showed that children of teen mothers were significantly more likely to be unregistered in three out of five countries in Latin America. The probability of a birth being unregistered increased by 7% in Bolivia, 5% in Colombia, and 10% in Peru when mothers were in their teens (**Duryea, et al. 2006**). In this region, teen motherhood is strongly linked to the transmission of poverty between mothers and children and this transmission often begins with not registering the child's birth.

In countries in Middle East and North Africa (MENA), laws, civil registration requirements, penalties for adultery, and societal attitudes prevent unwed parents from registering their children's births. Most countries convey nationality by default through the father, and mothers can only pass nationality to the child when the father is unknown. Stigma and fear of discrimination are behind not registering these children's births.

Gender inequalities in death registration can be large and further entrench these inequalities

Maternal mortality and maternal morbidity are a principal cause of women's death and disability in low-income countries. Every day, approximately 830 women die globally from preventable causes related to pregnancy and childbirth (globally, the maternal mortality ratio stood at 216 per 100,000 live births in 2015, the most recent year for which data has been compiled), with 99% of all maternal deaths occurring in developing countries (WHO, et al. 2015). However, vital registries in these countries fail to accurately capture the number of maternal deaths. The failure to record causes of death is even more severe. Poor data and bad health go together, and poor data on maternal deaths and disability contribute to the high rates of maternal mortality and disability observed in low income countries.

There is little information on the extent of gender inequalities in death registration, but the little data we have suggests that gender gaps can be large. Countries where vital statistics show "missing girls" are likely to under-record women's deaths more than men's deaths. "Missing girls" is a phenomenon in which there is a lower proportion of infant girls in the population than would be expected from average survival rates of boys and girls, the consequence of a marked societal preference for boys and the neglect of infant girls. Registration data from China and from the Indian state of Rajasthan, two regions with "missing girls," indicate that women's deaths are less likely to be registered than men's deaths (Chalapati, et al. 2005; Abouzahr, et al. 2014).

A study that estimated deaths by sex in MENA countries found possible systematic underregistration of women's deaths relative to men's in all four countries studied (Bahrain, Egypt, Kuwait, and Morocco). Some of the possible causes include a patrilineal inheritance tradition and a burial permit process that incentivizes more accurate registration of male versus female deaths (Silva 2016).

Gender intensifies constraints to civil registration and national ID

Gender interacts with supply-side and demandside constraints to civil registration and national ID, shaping and intensifying these constraints as follows:

- Discrimination against women is an important supply-side constraint to **CRVS and adult identity documentation** coverage and can lead to the underregistration of both male and female children (Asian Development Bank 2007; Cody 2009; Plan Ltd. 2015). It is sometimes enshrined in law and often targeted at vulnerable groups of women, such as widows, divorced women, single mothers, migrants, and women from minority ethnic or religious groups. In Burundi, children must be registered within 15 days of birth, must be witnessed by two witnesses, and identification of both the mother and father must be offered (UNICEF n.d.). Where registration centers are far from the place of birth and/or a father's identification cannot be proven, this represents a significant barrier to women to register their children. In Cameroon, a married woman must present her marriage certificate when applying for an ID card, a requirement that is not applied to married men (Hanmer & Elefante 2016). In Indonesia, married couples without a marriage certificate must first obtain one (a process involving three separate steps) to then obtain a birth certificate for their child that includes both parents' names. Possession of a birth certificate with only the mother's name is stigmatizing. In Bhutan and Nepal, if the father is unknown the child cannot be registered, while in Nicaragua, women in consensual unions need the father's signature on the birth record (UNICEF 2013). Similarly, only fathers can register a child in Barbados, Iran, Swaziland, and Syria, effectively preventing mothers from recording their children's births (Hanmer & Elefante 2016).
- Physical access to registration sites (including the time required) is also more of a barrier for women than for men. Women have many more demands on their time and, in some settings, cannot travel freely outside their village. This was acknowledged to be a reason for the under-registration of women for ID cards in Pakistan, where 73% of women were accompanied when traveling to obtain an ID card compared to only 31% of men (International Foundation for Electoral Systems 2013). Special measures were adopted to make registration more accessible for women, including mobile registration services staffed exclusively by women (including female drivers) and reserving Fridays at all registration sites as days when services were available only for women. However, these measures were only partially successful, in part because 65% of women were unaware of the special services available to them (International Foundation for Electoral Systems 2013).
- Analysis of demand for civil registration documents finds that economic status and parents' education (mother's education, in particular) are almost always positively related to birth registration of both female and male children in countries with less than complete coverage (Knowles & Koolwal 2017; Bhatia, et al. 2017; UNICEF 2016; Brito, et al. 2013). These strong and consistent relationships suggest that lowering cost barriers and ensuring that parents, especially mothers, have adequate information and knowledge about the benefits of registration would be effective methods for tackling demand-side constraints. They also highlight the potential role of women as agents of change.

Financial incentives help close gender gaps in CRVS and ID coverage

Two documented ways of overcoming demandside constraints to families' registration of vital events are: 1) increasing parents' knowledge of the benefits of registering their children and how to register, and 2) removing the costs of birth registration. In recent years, financial incentives have been added as a third potentially powerful strategy to encourage parents, and especially mothers, to register their children and obtain national IDs. Most of these initiatives are linked to the widespread implementation of governmentled conditional cash transfers to protect vulnerable populations and have, by design, linked cash payments to mothers' role as agents in promoting child welfare. Emerging evidence shows that financial incentives are an especially promising strategy for closing birth registration and ID gaps and helping overcome gender inequalities when they exist. Financial incentives have reduced gender gaps in birth registration in both India and Nepal and helped close most gaps in birth registration in Latin America.

In the Majoni scheme in Assam, India, all girls born after a certain date received a fixed deposit (Rs 5,000) into a bank account under some conditions, including registering the child's birth. During the year prior to the scheme, birth certificates were requested for 24.5% of between



Photo: Rama George-Alleyne/World Bank

6,000 and 7,000 hospital births, with a femaleto-male ratio of 1.06. In the year following implementation of the scheme, formal requests were received for 39.1% of a similar number of hospital births, with a female-to-male ratio of 1.34 (**Baruah, et al. 2013**).

The Nepal cash grant program was intended to cover the entire country, but fiscal constraints limited its implementation to targeted subpopulations. A survey conducted in 2012-2013 indicated that the program covered a total of 551,916 children, or about one in five children under five years of age. Children needed a birth certificate to enroll. As a direct result of the program, birth registration coverage increased quickly and dramatically in the targeted population, compared to the rest of the population. A significant pre-program gender gap in birth registration was eliminated in the targeted population, while it persisted in the rest of the population (Knowles 2016).

In Latin America, the expansion of cash-based social protection programs in the past two decades has substantially increased the supply of and demand for birth registration, benefiting most children (Hunter & Sugiyama 2018). Having achieved majority coverage, financial incentives now need fine tuning to reach "those left behind," and their design should seek to empower women in these "left behind groups" to become agents for registering their children. Initially in response to political conflict, the government of Peru undertook a vast program integrating civil registration with national ID, including performance-based financing, a gender focus, and granting IDs to children. It then used ID to give access to the government's conditional cash transfer program ("Juntos"). This approach expanded Juntos coverage to children with ID outside the program, but also may have compounded exclusion risks, since marginalized, undocumented, and vulnerable populations (indigenous peoples, migrants, and rural girls)

could be excluded from the cash transfer program if they did not have access to ID. A proposed solution is to rely on mother's ID as the gateway to identifying the child rather than using the child's ID (**Reuben & Carbonari 2017**). For this gateway to work, however, mothers themselves should be empowered to overcome their own exclusion.

Suggestions have also been made about the improvement of mortality and cause of death registration, such as the Countrywide Mortality Surveillance for Action program in Mozambique and Sierra Leone. This program incentivizes improved cause of death recording by health practitioners to avoid misclassification and encourages family registration of deaths (International Development Research Centre 2018).

WAYS FORWARD: SUGGESTIONS FOR DATA, RESEARCH, AND ACTION

Universal, fully functional CRVS and ID management systems will require coordinated data production work, research, and action, internationally, nationally, and locally, and at different levels. Below are highlighted a set of suggestions based on the empirical evidence summarized above. These suggestions utilize a gender lens and mostly are directed to women and girls. Alongside them, a clear advocacy and communications strategy is required to ensure that a gender lens is introduced in CRVS system development and assessment.

Investigate inequalities in coverage of birth registration and other vital events by subgroups within countries. Research that breaks down national level averages in registration of vital events by sex, wealth, urban/rural differences, race and ethnicity and other features that result in social exclusion is urgently needed to more accurately identify excluded groups, as the basis for the design of more effective measures to include all.

- Explore in-depth, gender-related, demand-side and supply-side barriers to **CRVS and ID coverage.** The above research should pay special attention to supply-side barriers these excluded groups face, including implicit and explicit gender biases and discrimination in access to civil registration and ID, with a view to reducing these barriers through improved supply-side design. This should include using technology and data linkage to reduce the burden of reporting on individuals and easing physical access to registration sites as much as possible in a human-centered design approach to system-building (International Development Research Centre 2018).
- Document legal restrictions to registration for women. The World Bank's "Women, Business and the Law" has launched a pioneer effort to document legal restrictions to the registration of births and access to ID based on gender. This effort should be expanded to include the full range of vital events and be paired with actively encouraging governments to enact legal reforms to overcome these gender constraints and complement their enacting with public information campaigns.
- More generally, take advantage of opportunities to improve CRVS data and interoperability with ID management systems. Transitioning from manual to digital CRVS systems can offer opportunities to improve data collection and coverage. Birth registration and the issuance of identity documentation should be part of a common process, rather than occurring as separate, distinct events. The process of building National ID systems can also surface shortcomings in CRVS systems, and both can be reinforced when their interoperability is pursued with due regard to data protection.

- Ask about marriage registration and certification in regular household survey instruments (e.g. Demographic and Health Surveys, Multiple Indicator Cluster Surveys). Knowledge about what happens within households is very scant and unreliable, starting with crucial information on marriage and marital status. Accurate recording and certification of these live events are urgently needed.
- Improve death registration and recording of causes of death with a gender lens. This includes identifying and combating social or cultural reasons for the under-registration of female deaths, as well as recognizing and relying on women's first-hand knowledge to more accurately report on deaths and probable causes of death within households. It also entails encouraging the uptake of WHO's verbal autopsy protocol for asserting causes of death, with a special focus on better capturing causes of maternal death (WHO n.d.).
- Produce hard evidence on cost-effective interventions to increase coverage of vital events and inclusion of "left-behind" women and girls. There are significant opportunities to build and conduct natural experiments alongside actions designed to strengthen CRVS systems and increase ID coverage, including to further test the efficacy of financial incentives for increasing coverage and reducing gender gaps through social protection schemes.
- Programs to expand coverage of CRVS should take a human-centered design approach to deal with constraints to registration that particularly impact women, such as examining distance and routes to registration sites. For example, mobile registration programs may be helpful, particularly to reach remote communities. Simplifying procedures, removing cost barriers, and using information and communications technology (ICT), where appropriate, to allow for online registration would also be helpful. Digitization of CRVS systems (transitioning from manual processes to ICT-based systems) may also offer an opportunity for overall improvement and should particularly focus on highlighting and closing gender gaps (International Development Research Centre 2018).
- Lastly, programs seeking to improve CRVS systems should ensure that benefits accrue to women and girls (access to services, voice, resources). Improvements to CRVS systems cannot be expected without corresponding improvements to government transparency, accountability, and service provision (International Development Research Centre 2018). This would create a virtuous cycle in which women, families and communities understand the importance of and seek out registration.



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CENTRE OF EXCELLENCE for CRVS Systems

C R VS

Knowledge Briefs on **Gender** and **CRVS**

Brief 1, Paper 3

Photo: Dominic Chavez/World Bank

KEY MESSAGES

Civil Registration and Vital Statistics (CRVS) systems play a crucial role in helping countries measure and achieve the Sustainable Development Goals (SDGs), with particular importance for gender-related SDGs. 28% of the SDG indicators depend directly or indirectly on CRVS data or would be improved through the use of CRVS-derived data, while 34 out of the 54 gender-related SDG indicators identified by UN Women benefit from data provided by CRVS systems.

Harnessing CRVS Systems for the Gender-Related SDGs –

Opportunities and Challenges

LE CENTRE D'EXCELLENCE

sur les systèmes ESEC

- The increased demand for CRVS data created by the SDGs should lead to increased political and financial support for data systems, which, in turn, will make higher quality data available for use. This process presents an opportunity for transformative improvement to genderspecific data, which would allow gender to catch up to more advanced data sectors such as macroeconomics and health.
- Well-functioning CRVS systems are not merely inputs for measuring SDGs but are goals within the 2030 Agenda themselves. SDG target 16.9 calls on countries to provide legal identity for all, including birth registration, while SDG target 17.19 includes a commitment to support statistical capacity building in developing countries.
- Well-functioning CRVS systems have disproportionately positive benefits for women and girls because vital statistics provide sex-disaggregated demographic data on key issues like population distribution and maternal mortality. Civil registration also ensures that women and girls can prove their own identities to access crucial public services such as health, education, social protection and political representation.

While long-term development of CRVS systems should continue, national statistical offices should take immediate steps to improve CRVS data availability, increase demand and expand the base of users by adhering to open data practices and data interoperability guidelines. These CRVS improvements benefit the state by strengthening administrative systems within a country and helping to meet the legally binding obligation to register vital life events.

INTRODUCTION

The Sustainable Development Goals (SDGs) set by the 2030 Agenda for Sustainable Development place unprecedented statistical demands on national and international statistical agencies. The task of measuring the indicators identified by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) falls on the global statistical community, stretching the community's resources and requiring greater capacity to manage the increased demand for data and statistics. The IAEG-SDGs identified a set of 232 indicators monitoring 169 targets among 17 goals – a massive increase from the previous Millennium Development Goals



Photo: Graham Crouch/World Bank

(IAEG-SDGs 2018). As a result, national and international statistical systems face enormous data demands if they are to effectively monitor SDG indicators.

The SDGs encompass a range of sustainable development issues and identify important areas of focus, including gender equality. The 2030 Agenda aims to realize the human rights of all and empower all women and girls. While the prominent inclusion of gender equality within the SDGs is a welcome step forward, it also offers another set of measurement challenges to overcome. Many of the gender-related indicators require new or updated standards and methodologies. This paper outlines the critical role that Civil Registration and Vital Statistics (CRVS) systems play in measuring the genderrelated SDG indicators and achieving gender equality.

Civil Registration is defined as "the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country" (UN 2001). Vital events comprise live birth, death, fetal death, marriage, divorce, annulment of marriage, judicial separation of marriage, adoption, legitimation and recognition. CRVS systems provide governments with up-todate statistics on population size, growth and distribution. These data, alongside birth, marriage, divorce and death data, are critical tools for designing and implementing evidencebased policies needed to help achieve the SDGs (SDSN Trends and Open Data Watch 2018).

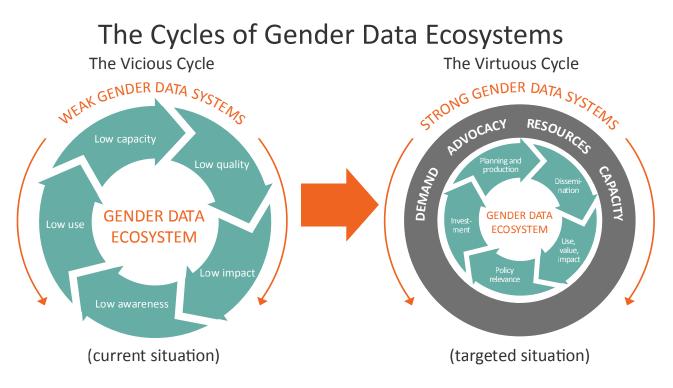
While previous studies have examined the role that CRVS plays in the SDGs, few have explored the impact CRVS plays for the gender-specific indicators and, in turn, overlooked the extent to which CRVS can improve our understanding on development progress for women and girls. This paper describes how CRVS data is not only critical for reporting on the SDGs, but for guiding and implementing policies necessary to achieve them. Doing so is contingent on the usability, openness and interoperability of data, which CRVS systems help produce. It is this symbiotic relationship between data and gender-related SDGs that underscores how well-functioning CRVS systems are needed for the international development community to achieve the SDGs by 2030.

In order for the gender data ecosystem to effectively contribute to meeting the goals of Agenda 2030, a vicious cycle that affects it must be reversed. Figure 1 describes what leads to weak gender data systems and how

specific interventions can help reverse that negative, vicious cycle. In the current situation, gender data systems suffer from low demand and use, which leads to low political support and resource allocation, which in turn leads to low capacity and ineffective systems. However, more advanced data ecosystems like macroeconomics and health prove that the cycle also turns in the opposite direction, creating a virtuous cycle where the use of data leads to increased political and financial support for data systems, which in turn makes higher quality data available. This paper outlines what must be done to reverse the vicious cycle affecting the gender data ecosystem and create systems that are strong enough to achieve the gender-related goals of the 2030 Agenda.

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Figure 1: Moving from a vicious cycle of gender-data to a virtuous cycle



Source: Open Data Watch

THE ROLE OF CRVS SYSTEMS IN MEETING THE SDGs

The SDGs have not only expanded the breadth but also the depth of measuring development progress. The targets and indicators span a full spectrum of development issues and incorporate new challenges to measurement such as institutional coordination and resource mobilization. In addition to the rage of issues it tackles, the 2030 Agenda is underpinned by the ambition to Leave No One Behind. (United Nations Statistics Division 2016). From a statistical perspective, this requires a wealth of new disaggregations, or data that emphasizes the specificities of different sub-populations.

In addition to recording geographic location and sex of subjects, it is increasingly important to record insights into age, indigenous status, disability, migrant status and other characteristics relevant to country context. The challenge is to "sufficiently improve the granularity of data to satisfy this new political ambition, but in a way that prioritizes the measurement of the poorest and most vulnerable and does not divert scarce resources into generating fruitless levels of disaggregation." (MacFeely 2018). There is an urgent need to take steps to improve the quality, coverage and availability of disaggregated data to ensure that no one is left behind (United Nations Statistics Division 2016). The complexities of producing the necessary data are compounded by uneven levels of statistical capacity around the world. Many data gaps in the SDGs can be linked to a lack of timely household survey collection and weak administrative systems. According to the World Bank Statistical Capacity Indicator database, only 50% of the countries have met the recommended standard of three years or less for health-related surveys such

as Demographic Health Survey; 46% have not conducted a poverty-related survey at the recommended frequency; and only 31% of countries record more than 90% of live births and deaths (World Bank 2017).

To close data gaps, international data organizations, United Nations agencies and sector experts must set methodologies and standards for indicators that are not widely available or produced while country-level actors receive a boost in capacity to produce the data relevant to the new indicators. The Agenda calls on the designated custodian agencies to provide the methodologies for data collection and, where needed, to assist countries in producing the indicators. While it is critical to explore new methods to fill gaps, it is important not to overlook how to improve existing data systems and strengthen their role in contributing to SDG monitoring and building a continuous data stream.

There has been excitement over big data and its potential for compiling official statistics and filling data for SDG indicators, but relatively little attention has been paid to the importance of existing administrative data, specifically CRVS, which are a rich source of continuous, useful data. In the context of the SDGs, survey data will not be sufficient and compilation will require the use and integration of administrative data (MacFeely 2018). A 2017 World Bank report notes that as of March 2017, 67 indicators, or 28% of all indicators covering 12 of the 17 SDGs can be measured effectively by using data derived from well-functioning CRVS systems (Mills et al 2017).

The 2030 Agenda, SDG indicators and wellfunctioning CRVS systems have a close and interconnected relationship. SDG target 16.9 calls for the legal identity for all, including birth registration by 2030. Indicator 17.19.2 refers to the proportion of countries that have conducted at least one population and housing census in the last 10 years and have achieved 100 percent birth registration and 80 percent death registration. CRVS systems not only provide inputs but are goals on their own. Table 1 shows the specific SDG targets and indicators related to CRVS. CRVS plays a critical role in monitoring and achieving, both directly and indirectly, the SDGs. While the indicators in Table 1 relate directly to improving CRVS systems, there are a handful of SDG indicators that require CRVS indirectly. For example, complete and well-functioning CRVS systems provide population level estimates, often needed for the indicators requiring per capita or per 1,000 population counts, as well as birth and mortality figures.

Table 1: SDG targets and indicators directly related to Civil Registration and Vital Statistics systems

SDG Target	SDG Indicator for Monitoring Progress
16.9 By 2030, provide legal identity for all, including birth registration	16.19.1 Proportion of children under 5 years whose births have been registered with a civil authority, by age
17.18 By 2020 increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics
17.19 By 2030 support statistical capacity building in countries	17.19.2 Proportion of countries that have conducted at least one population and housing census in the last 10 years and have achieved 100 percent birth registration and 80 percent death registration

Source: Mills, S. et al., 2017. Civil Registration and Vital Statistics (CRVS) for Monitoring the Sustainable Development Goals (SDGs), s.l.: World Bank.

ROLE OF CRVS IN MONITORING GENDER EQUALITY IN SDGs

It is clear that the SDGs present enormous data demands across all development sectors, but the statistical complexities noted above become more nuanced as each issue is viewed on its own. This section of the paper focuses specifically on the statistical challenges associated with gender-related indicators in the SDGs and what well-functioning CRVS systems can do to help.

A well-functioning CRVS system can have disproportionately positive benefits for women and girls (SDSN TRENDS and Open Data Watch 2018). CRVS systems are particularly beneficial to women and girls for two reasons: first, vital statistics provide sex-disaggregated demographic data on key issues such as population distribution and maternal mortality; and second, civil registration ensures that women and girls can prove their own identities to access crucial public services such as health, education, social protection and political representation.



Photo: Dominic Chavez/World Bank

UN Women has identified a list of 54 genderspecific indicators within the SDG framework that are targeted at women and girls explicitly and call for disaggregation by sex or refer to gender equality as the underlying objective (UN Women 2018). The highest concentration of genderspecific indicators (14) are, not surprisingly, found in SDG5, while the remaining 40 are found among other goals. Put another way, 23% of the global indicator framework depends on genderdisaggregated data. Despite this, the complete data dedicated to understanding gender equality is not readily available.

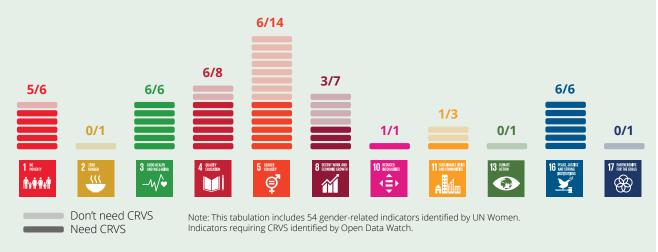
For 13 of the 54 gender-related indicators, internationally established methodology and standards do not exist. For 29 of those indicators, methodology and data at the country level exists, but coverage is low and uneven. Only 12 of the 54 indicators are considered Tier 1, meaning international established methodology and standards are in place and they have wide coverage. Within SDG5, 5 out of the 14 indicators are infrequently collected or do not have recognized standards and definitions (IAEG-SDGs 2018). A recently released brief from UNICEF notes that two thirds of the SDG indicators related to young girls have limited data availability or non-existent data (UNICEF 2016).

While it is a positive development to see gender-equality embedded across all the SDGs, the lack of data available to measure them risks these issues being overlooked. Fortunately, programs like the Centre of Excellence for CRVS Systems at the International Development Research Centre (IDRC) and civil society actors like Data2X are working to identify pathways that will help fill gender data gaps (**Centre of Excellence 2018**). Improving CRVS systems is one important pathway to do just that. According to an assessment conducted by Open Data Watch, 34 of the 54 gender-related indicators benefit from data provided by CRVS systems. While none of the indicators are directly related to the improvement of CRVS systems themselves, data produced by CRVS systems including population, cause-of-death and others serve as direct inputs for monitoring indicators related to women and girls. These include obvious indicators like maternal mortality ratios or adolescent birth rates and less expected indicators such as unemployment rate, age

and persons with disabilities, which are all specified by the SDGs to be disaggregated by sex. Furthermore, 6 Tier III indicators from the list of 54 can benefit from the use of CRVS data. CRVS should be used as an important input for measuring gender equality within SDGs as the methodologies and standards are established. Figure 2 shows a breakdown of the number of gender-related indicators in SDGs that need CRVS systems and Table 2 provides a full list of the 34 indicators that require data provided by CRVS systems.

Figure 2: CRVS systems are crucial for gender-related SDGs

Excluding repeated indicators, there are 54 explicitly gender-related indicators as identified by UN Women. Of these indicators, 34 indicators benefit from CRVS data. It is clear that CRVS systems and data are crucial to monitoring progress and achieving gender equality.



Gender-related SDG indicators that need CRVS

Source: Open Data Watch

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	Indicator	Relevance to CRVS
1 ^{no} ₱vverty ħ☆₳₳ ₽	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	Denominator (population)
1 ^{no} ₱vverty ħ¥₳₳ ₽	1.2.1 Proportion of population living below the national poverty line, by sex and age	Denominator (population)
1 poverty ∱*## ##	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Denominator (population)
1 ND ₽₽₽₽₽₽ ₩¥₩₩₩₩	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	Denominator (population)
1 poverty ∕ Ř¥ŘŘŘŤ	1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure	Denominator (total adult population)
3 GOOD HEALTH AND WELL-BEING	3.1.1 Maternal mortality ratio	Numerator (deaths by cause) & Denominator (live births)
3 GOOD HEALTH AND WELL-BEING	3.1.2 Proportion of births attended by skilled health personnel	Numerator & Denominator (live births)
3 GOOD HEALTH AND WELLBEING 	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	Denominator (population)
3 GOOD HEALTH AND WELL-BEING	3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	Denominator (population 15-49)
3 GOOD HEALTH AND WELL-BEING	3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	Numerator (births by cause) & Denominator (female

population aged 10–19)

Table 2: SDG gender indicators that require data provided by CRVS systems



Table 2: SDG gender indicators that require data provided by CRVS systems (continued)

	Indicator	Relevance to CRVS
3 GOOD HEALTH AND WELL-BEING	3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access among the general and the most disadvantaged population)	Denominator (population)
4 QUALITY EDUCATION	 4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex 	Denominator (population)
4 EDUCATION	4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	Denominator (population <5)
4 QUALITY EDUCATION	4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex	Denominator (population)
4 QUALITY EDUCATION	4.3.1 Participation rate of youth and adults in formal and non- formal education and training in the previous 12 months, by sex	Denominator (population aged 15 and above)
4 education	4.5.1 Parity indices (female/male, rural/urban, bottom/ top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated	Denominator (population)
4 QUALITY EDUCATION	4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	Denominator (population)
5 GENDER EQUALITY	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	Denominator (female population 15+)
5 GENDER EQUALITY	5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence	Denominator (female population 15+)

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Table 2: SDG gender indicators that require data provided by CRVS systems (continued)

	Indicator	Relevance to CRVS
5 GENDER EQUALITY	5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18	Numerator (marriage)
5 GENDER EQUALITY	5.3.2 Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age	Denominator (women population 15-49)
5 GENDER EQUALITY	5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	Denominator (women population 15-49)
5 GENDER EQUALITY	5.b.1 Proportion of individuals who own a mobile telephone, by sex	Denominator (population)
8 DECENT WORK AND ECONOMIC GROWTH	8.3.1 Proportion of informal employment in nonagriculture employment, by sex	Denominator (employed population)
8 DECENT WORK AND ECONOMIC GROWTH	8.5.2 Unemployment rate, by sex, age and persons with disabilities	Denominator (employed population)
8 DECENT WORK AND ECONOMIC GROWTH	8.7.1 Proportion and number of children aged 517 years engaged in child labour, by sex and age	Denominator (population aged 5-17)
10 REDUCED INEQUALITIES	10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities	Denominator (population)
11 SUSTAINABLE CITIES	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Denominator (population)
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age	Denominator (population)

	Indicator	Relevance to CRVS
ACE, JUSTICE AD STRONG STITUTIONS	16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause	Denominator (population)
ACE. JUSTICE D STRONG STITUTIONS	16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	Denominator (population)
CE, JUSTICE I STRONG ITUTIONS	16.2.3 Proportion of young women and men aged 1829 years who experienced sexual violence by age 18	Denominator (population 18-29)
CE, JUSTICE) STRONG ITUTIONS	16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions	Denominator (population)
ICE. JUSTICE D STRONG TITUTIONS	16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group	Denominator (population)

Source: Authors' own compilations

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16 🖁

16 %

16 %

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ACCELERATING PROGRESS TO **ESTABLISH WELL-FUNCTIONING CRVS SYSTEMS**

The SDGs present a unique opportunity to raise the profile of CRVS systems and underscore their importance to measuring and monitoring gender equality within the SDGs. While the analysis above demonstrates a significant need to harness the sex-disaggregated data produced by CRVS systems, it does not cover the current state of affairs with CRVS systems around the world and what needs to be done to put their data effectively to use. Having the data available for SDG reporting is one thing, creating demand for the systems and using the data is another. Unfortunately, many challenges still remain when it comes to the availability, usability and openness of the data. This section of the paper explores these issues.

Despite the recognized consensus of the importance and benefits of CRVS systems, there are significant gaps in the availability of vital statistics and uneven levels of country capacity. According to the World Bank, over 110 low- and middle-income countries have deficient CRVS systems (World Bank 2018). A comparison of capacity across social and economic statistics found the coverage of vital registration systems to be the weakest (OECD 2017b). As shown in Figure 3, there are fewer countries meeting CRVS systems standards compared to other statistical systems. This is not merely a function of the overall poor performance of statistical systems but also a funtion of underperformance. Certain low-income countries are able to deliver fundamental statistics in other systems such as agricultural censuses or poverty surveys but fall short in vital registration system coverage.

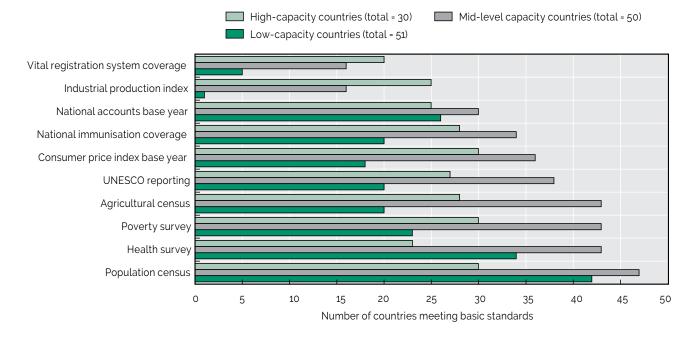


Figure 3: Number of countries with capacity to deliver fundamental statistics, 2016

Source: OECD , 2017b, "The role of national statistical systems in the data revolution", in *Development Co-operation Report 2017: Data for Development*, OECD Publishing, Paris

It is increasingly clear that in order to achieve the SDGs, CRVS systems must improve in many countries around the world. Fortunately, development stakeholders and national governments have shown a commitment to improving CRVS systems by making long-term investments and building infrastructure and statistical capacity in countries. South Africa and Bangladesh are strong country examples of progress through long-term investment projects. In addition, the United Nations Economic Commission to Africa and United Nations Economic and Social Commission to Asia Pacific highlight the important role of regional platforms in providing necessary political will and support to support CRVS systems. It is equally important to recognize the United Nations Statistics Division and their critical work in setting standards, offering operating principles and providing methodological guidelines for CRVS systems (UNDESA 2014).

This is welcome progress, but the expectations remain clear: SDG target 16.9 calls on all countries to provide legal identity for all, including birth registration, with progress to be measured by the proportion of children under 5 years of age whose births have been registered with a civil authority. Target 17.19, which includes a commitment to support statistical capacity building in developing countries, measures progress in part by the proportion of countries that have achieved 100 percent birth registration and 80 percent death registration. According to a study by the World Bank Group and World Health Organization, significant progress is still needed to attain these SDG targets. To achieve success, the under-five birth registration must increase by 33% and death registration must rise by 77%, which is an annual average increase of over 5% through 2030 (WBG and WHO 2014).

The long-term approach from development stakeholder and some national governments is the right way to approach such a systemic challenge, but more can and should be done in the short-term to provide support to country level CRVS systems. With 2030 around the corner, focusing exclusively on long-term challenges may be too much of a luxury. More must be done to sustain political will for immediate capacity building and allocating the resources needed to achieve universal registration as expected in SDG target 17.19.

Identifying demand for CRVS data

As noted earlier in the paper, low demand and use of data leads to low political support and resource allocation, creating a vicious cycle of low capacity and ineffective systems. These shortcomings, in turn, translate into low-quality data which reinforce the starting point of lack of demand (OECD 2017). In more advanced data sectors such as macroeconomics and health, the cycle is reversed. Demand for and use of data leads to increased political and financial support for data systems, which makes higher quality data available for use. It follows that increasing demand for and use of data derived from CRVS systems can be a transformative improvement, turning the vicious cycle affecting CRVS systems into a virtuous one. This section of the paper identifies what can be done to accelerate demand for CRVS data.

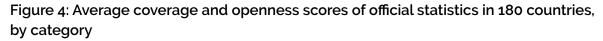
According to a recent study by AidData, Open Data Watch and PARIS21 that surveyed National Statistical Offices (NSOs) and data users in 140 low- and middle-income countries. demographic statistics were the most sought after data set after macroeconomic statistics (Sethi and Prakash 2018). A complementary study, Measuring Data Use: An Analysis of Data Portal Web Traffic, was undertaken to help NSOs and their partners better understand the benefits of web analytics tools and assist them in implementing web analytics on their websites or data portals (Open Data Watch 2018). Open Data Watch, in partnership with PARIS21, invited seven NSOs in low- or middle-income countries to participate in a study analyzing web traffic

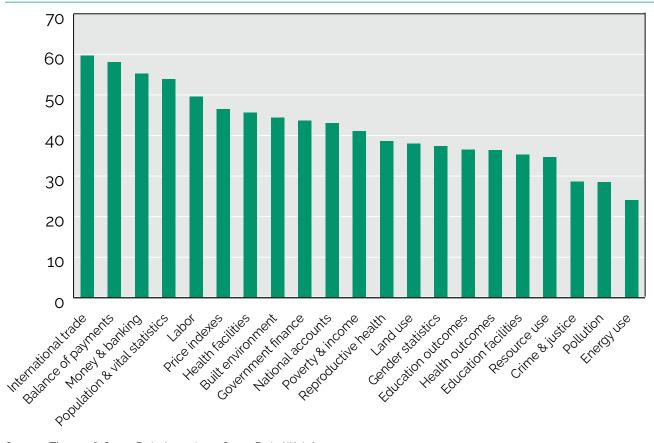
on their principal websites or data portals using Google Analytics to better understand the use and demand of data on their websites. According to the study, the most popular pages providing access to data were those with population or other demographic statistics and economic statistics on inflation, national accounts and employment.

The two studies demonstrate real demand for these data. The increasing demand for data to monitor the SDGs coupled with the increased political attention to gender data suggests that the demand for CRVS and gender-specific data will rise in the coming years. The next step is harnessing that demand to create more political, financial and statistical support to improve CRVS systems and to ensure that data is accessible and openly available to users.

HOW OPEN DATA DRIVES DEMAND

While specific data on CRVS data use and openness is not available, some proxy indicators can be used to better understand where countries stand on disseminating data they produce. The Open Data Inventory by Open Data Watch is a global assessment of coverage and openness of official statistics in 180 countries. According to the 2018 results seen in Figure 4, population and vital statistics was the fourth highest scoring data category. However, the population and vital statistics category alone does not tell the whole story. CRVS data are an input to several other categories such as gender statistics, health outcomes, and crime and justice that have much lower scores (Open Data Watch 2018). Low levels of availability suggest that national statistical offices lack the data or the resources to produce the necessary indicators. Low levels of openness show that data are not being made available in useful or usable formats. Thus CRVS-based and gender-related data are under resourced and under utilized, leading to a shortfall in the demand for CRVS data.





Source: The 2018 Open Data Inventory, Open Data Watch

Across the seven social data categories, the poorest coverage and openness occur in crime and justice category with gender statistics, including violence against women and health outcomes not far behind. However, in low-income countries health outcomes and reproductive health are ranked highest, reflecting the support for data collection through Demographic Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).

This uncovers an important reality about relying too heavily on surveys to provide data that fully functioning CRVS systems could (and should) produce. For many countries, particularly those with higher levels of mortality, administrative and centralized statistical collection capacity is weak. As a result, household surveys may serve as the principal vehicle for data collection of vital statistics and other demographic indicators. Data obtained through complete and accurate civil registration processes are not subject to sampling errors and contain relatively few response errors, which are more common in household surveys (Mills et al 2017). In addition to safeguarding against possible statistical errors, CRVS systems that provide reliable, continuous and up-to-date population figures offer more insights into population movements, demographic changes and health threats than less timely surveys. Accurate, complete and timely statistics for how many women live in a country, the leading causes of their death, fertility rates and life expectancy are provided by recording every life event, which is a core function of a strong CRVS system.



Figure 5: World Health Organization's rapid assessment of national civil registration and vital statistics systems

Improve production, use and dissemination of vital statistics

"The contribution of vital statistics to evidence-based decision-making is dependent upon timely dissemination to and appropriate uptake by the relevant decision-makers. Data quality, access and use are critical components of any statistical system but are often neglected. The result is that the information on births and deaths collected at great expense is not used as well as it could be, and those collecting the data are not fully rewarded for their efforts."

Guidelines for CRVS Rapid Assessment Tool

Source: World Health Organization, 2010.

The data value chain is defined by a close connection between data collection, analysis, dissemination and the impact of data on decision making (**Open Data Watch and Data2X 2017**). A critical link on that value chain is for NSOs to ensure that CRVS and gender-specific data are open, accessible and available in a timely manner. In fact, a prominent CRVS rapid assessment tool from the World Health Organization (Figure 5) emphasizes data dissemination and use as one of the essential steps for building an effective system. (WHO 2010).

Do countries that make CRVS data more available and open do better in terms of capacity and domestic support? Cases such as the Philippines Statistics Authority (PSA) suggest that they do. The PSA makes CRVS data and gender-specific data more easily accessible than many other countries, which has led to increased awareness of the importance of these data and services (**PSA 2019**). In this case, CRVS and national statistics are fully funded by the government budget, suggesting that the availability of data fulfilling a demand is closely related to the country's higher level of budgetary support from domestic resources. The PSA is an example that other countries could follow to reverse the vicious cycle of data and achieve a virtuous one.

SHORT-TERM ACTIONS TO BOOST DISSEMINATION AND USE OF CRVS DATA

The SDGs present the development statistics community with an opportunity to make important changes that will help meet the demand for gender-relevant data derived from CRVS. If the 2030 Agenda is to be successful, CRVS systems must be improved to produce and disseminate the gender-specific data on which so many indicators depend. While continuing to support the long-term development of wellfunctioning CRVS systems, NSOs can take a number of actions in the short and medium term to boost the interest in CRVS-based data and gender data. Important moments to showcase progress, such as the presentation of Voluntary National Reviews at the United Nations High-Level Political Forum, will increase data use and demonstrate the impact of data on policies and results. Actions like this will improve political and public understanding and support for CRVSbased data and greater financial support for their

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long-term development. Below are additional short- and medium-term actions to improve dissemination and use of CRVS based data with emphasis on gender data.

- Plan for open and interoperable data dissemination: NSOs should adhere to open data practices and data interoperability guidelines to increase data availability and data use while soliciting feedback from prominent users and building an end-user support group. The importance of this has recently been identified by the UN Statistical Commission as a priority (United Nations Social and Economic Council 2018). Countries in the process of updating National Strategy for the Development of Statistics should consider integrating CRVS-gender data improvement with a focus on data dissemination and promotion of data use into these plans.
- Build technical capacity: Data producers need to increase their internal staff skills and management capacity beyond data production for data analysis. Expertise and capacity should include usability and dissemination of CRVS-based data and, in particular, gender data to support use. This will make data more usable and improve data quality and interoperability.
- Promote data use: Many potential users are not aware of the importance of CRVSbased data. Showcasing examples of their use to support decisions in areas of gender equality, social, economic and health policy and monitoring progress towards SDG goals can help to demonstrate their importance. Promotion efforts should include ways to provide summary data tabulations, visualization of data for ease of use in policy briefs and ways to alert users of release of new data through emails and data release calendars.

Close the gap between production and use: There is no one-size-fits-all approach, but with the advances in data dissemination and open data technology, countries should plan to use innovative approaches to increase use and raise the value of the data they produce. These include innovative approaches in analysis and publication of vital statistics derived from civil registration and gender specific data. NSOs can also increase use through open and interoperable data practices, measuring the use of their data, making their data websites more appealing to users and using social media to promote published data.

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Knowledge Briefs on **Gender** and **CRVS**

Brief 1, Paper 4

The Costs and Benefits of CRVS as a Tool for Women's Empowerment

Dominic Chavez/World Bank

KEY MESSAGES

Civil registration and vital statistics (CRVS) system coverage around the world is very poor, particularly in Africa, Southern Asia, and Eastern Asia. Lack of vital event registration affects people differently, with the most profound effects on women and girls who are more likely to experience economic disempowerment, political disengagement, limited access to services, and life opportunities.

LE CENTRE D'EXCELLENCE

sur les systèmes ESEC

- The cost of improving these critical systems is relatively modest. Only US\$1.5 billion in development assistance, matched by an equal level of domestic funding, is needed between now and 2030 to build the requisite systems in 77 of the most in-need countries. That is only 1% of current official development assistance (ODA) (Gurría 2018).
- In spite of a series of generous initiatives launched since 2014, there is still more than an 85% shortfall in the funding needed for CRVS investments. Fortunately, there is a compelling investment case. Better identification through CRVS systems results in increased access to banking and economic services (producing high economic returns) and supports more targeted and effective social programs and investments to produce cost savings for governments.
- Improved birth registration and identification systems also have indirect positive effects for women's social and political participation.
- Before embarking on programs to upgrade a CRVS system or implement a national ID system, careful country-level analysis is required to assess readiness and capacity.



1. INTRODUCTION

Civil registration is the system through which governments record vital events in a person's life, including birth, death, marriage, divorce and so on. A civil register gives residents of a country legal identity which can be used to access services and support. A civil registration and vital statistics (CRVS) system is a crucial source of demographic and population data. Furthermore, death registration, including cause of death, is an important source of public health information (SDSN 2015). CRVS is the only source of continuous, complete, and reliable data on vital events down to small administrative units. As such, it is a critical input for effective national and sub-national planning and policymaking (Knowles and Koolwal 2017). For example, continuously available local area data on mortality by cause is vital for formulating effective policies to address specific health issues. However, "half of all low- to middleincome countries lack functioning systems to register births and other life events. [...] In South Asia and sub-Saharan Africa respectively, only 39% and 44% of children have births registered" (World Bank 2016).



Graham Crouch / World Bank

CRVS systems are particularly crucial for our understanding of and attention to societal gender dynamics. By recording women and girls, men and boys, and non-binary persons' access to services, education, health, and legal representation, these systems can help us understand societal divisions and inequalities. CRVS is particularly beneficial to women and girls, "because of additional constraints they face from gender discrimination, increased risk of early marriage and sexual trafficking, and increased vulnerability from widowhood or divorce. The absence of a birth, death, marriage or divorce certificate or of adult identity documentation can have catastrophic effects for vulnerable groups of women and their children, including in particular young single mothers, widows, migrants, refugees and members of minority ethnic or religious groups" (Knowles and Koolwal 2017).

The other two papers in this series, "Leave No One Behind: CRVS, Gender and the SDGs" by Mayra Buvinic and Eleanor Carey of Data2X and "Harnessing CRVS Data for the Gender-Related SDGs: Opportunities and Challenges" by Shaida Badiee and Deirdre Appel of Open Data Watch, unpack the benefits of robust CRVS systems for gender empowerment. These papers detail how CRVS can enable better understanding of societal dynamics, gendered experiences, and opportunities to provide gender and sex-specific services that ensure no one is left behind (as mandated by the 2030 Agenda for Sustainable Development) (United Nations 2015). This paper complements the others' contextual analysis by focusing on some of the practical barriers to the expansion of CRVS systems, namely costs, current levels of investment, and shortfall, while also highlighting the immense investment opportunity.

The costs of building and maintaining robust CRVS systems in countries around the world vary considerably. A conservative estimate covering the 77 recipient and blend countries getting assistance from the World Bank's International Development Association (IDA) finds that at minimum, US\$3.3 billion is needed. Approximately 50% of that is expected to be national government contributions, and 5% is expected to come from the international community between now and 2024 (SDSN 2015). Fortunately, as this paper demonstrates, there is a compelling investment case, with high economic returns resulting from better identification systems, including increased access to banking and economic services and government cost savings through more targeted and effective taxation and social programs. For governments, there is also a political incentive to act due to the positive effects of identification on political engagement and voter turnout.

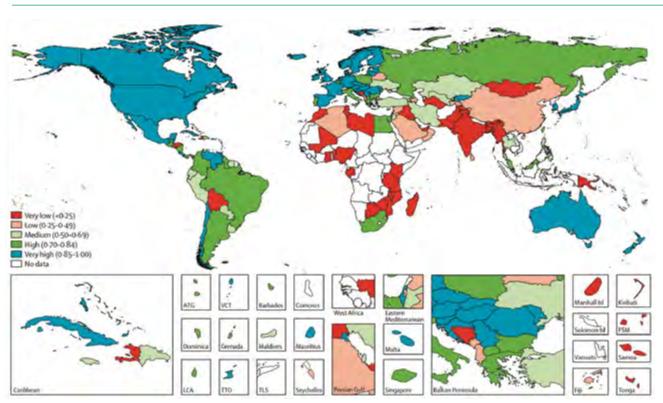
2. CRVS COVERAGE

In spite of the importance of CRVS systems for functional governance and our understanding of individual experiences, these systems are woefully inadequate around the world. They levy discriminatory effects upon both women and girls and men and boys (See "Leave No One Behind: CRVS, Gender and the SDGs" by Mayra Buvinic and Eleanor Carey of Data2X from this knowledge brief series).

In 2015, the Lancet published a study of global CRVS system coverage that included a vital statistics performance index (VSPI). The VSPI assesses CRVS performance through use of mortality data, ascertained from the Global Burden of Disease dataset. Mortality data is treated as "a proxy for the quality and utility of all of the vital statistics produced by the civil registration system" (Mikkelsen et al. 2015). The authors justify this on the basis that birth registration levels are generally higher than those of death registration, so death registration is a better proxy for the full functionality of the system (Mikkelsen et al. 2015).

The index, which covered 148 countries and territories, scored each country based on the best available year between 2005 and 2012 and grouped them in five distinct performance categories, from "rudimentary" to "satisfactory" (Mikkelsen et al. 2015). They concluded that "globally, only modest progress has been made since 2000, with the percentage of deaths registered increasing from 36% to 38%, and the percentage of children aged under 5 years whose birth has been registered increasing from 58% to 65%" (Mikkelsen et al. 2015). That means that close to two-thirds of the global population's deaths are unrecorded, and 35% of children never receive a birth certificate (Mikkelsen et al. 2015). Setel and colleagues (2007) refer to this as the "scandal of invisibility" arising from the stagnation of civil registration systems (Setel et al. 2007).

Figure 1 illustrates the quality of global CRVS systems through the above-mentioned scale. The white and red coloring represents nonexistent or very poor-quality systems, which are predominantly located in Africa and Southern and Eastern Asia. Figure 1: CRVS system coverage on the basis of VSPI scores for best available year between 2005 and 2012



Source: Mikkelsen et al. 2015; reprinted with permission.

3. CRVS COSTS AND THE FUNDING GAP

Improving the coverage of CRVS systems around the world will require considerable investment. However, calculating the cost of such improvements is difficult. There is large variation in national estimates based on existing capacity, the level of digital infrastructure available across government, the type of registration system in use or planned, and whether it will be coupled with a more technologically advanced identity system (such as smart cards or biometric data collection).

By way of example, in 2014 the World Health Organization (WHO) and the World Bank attempted to estimate the cost of CRVS expansion in 73 priority countries for the Commission on Information and Accountability for Women's and Children's Health (CoIA) (World Bank and WHO 2014). They examined CRVS investment plans and found cost estimates ranging from US\$30 million to US\$365 million over a five-year planning period. (The latter figure came from Ethiopia, which had only just established a National Vital Events Registration Agency in October 2013 - see Figure 2.) "Placing the investment in a population context, the country costs translate into a range of under US\$1 per capita in countries such as the Philippines and Bangladesh, to between US\$1 and US\$4 in Mozambique and Ethiopia. The cost per vital event (births and deaths) ranges from under US\$2 to over US\$13" (World Bank and WHO 2014).

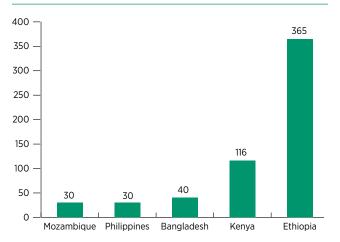


Figure 2: Total CRVS development cost per five-year country plan (US\$ million)^a

Source: National CRVS Investment Plans, WHO 2014. ^a The total for Bangladesh excludes biometric costs.

More recent studies also show large variations. In 2015, the University of Botswana and Botswana's Ministry of Labour and Home Affairs examined that country's CRVS system and found that, with a recurring annual budget of just US\$5.6 million (US\$2.50 per capita), the government had substantively improved its CRVS system. For example, it reached a birth registration level of 83% (Botswana Ministry of Labour and Home Affairs and University of Botswana 2015). At the other end of the spectrum, a World Bank study in Nigeria estimated that US\$4.3 billion (US\$23.70 per capita) would be needed to implement the country's national ID program, including an upgrade of its CRVS system (World Bank 2017).

In spite of the differences between investigated countries, the 2014 World Bank and WHO study managed to develop a methodology for estimating costs for other countries worldwide, adjusting for existing capacities and population. It estimated that US\$3.8 billion would be needed to expand CRVS coverage by 2024 in 73 CoIA countries, excluding China and India (World Bank and WHO 2014). It included four essential elements of a functional CRVS system in its costing: "(a) development costs (incremental costs or additional funds for establishing and strengthening CRVS systems); (b) incremental recurrent costs for maintaining CRVS systems; (c) international support to CRVS, including sharing knowledge and strengthening the evidence base; and (d) monitoring and evaluation" (World Bank and WHO 2014). The costs in each plan were disaggregated into fixed/start-up/capital costs and variable/ operating costs.

In 2015, SDSN et al. expanded this analysis in a needs assessment study, "Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development," covering 77 IDA-recipient countries (SDSN 2015). These 77 are a subset of the 100 countries worldwide that still do not have functioning CRVS systems (World Bank and WHO 2014), but were chosen as a reasonable proxy for the total number of countries that were likely to need international assistance. Of the initial CoIA countries, 55 were IDA-eligible; the SDSN-led consortium extrapolated to the other 22. Estimates of CRVS system costs in these countries were calculated from the CoIA unit costs after adjusting for population size and completeness of birth registration. Lacking other information on the status of country implementation plans, it was assumed that each of the additional countries would also carry out a comprehensive assessment or need revisions to their plans at an average cost of US\$100,000. The report concluded that the estimated total cost for CRVS systems improvements and operations in the IDA and blend countries over a 10-year period (2015 to 2024) would be US\$2.75 billion with annual average costs US\$275 million. A more policy-relevant estimate might be the 15-year period of the Sustainable Development Goals (SDGs), for which the total cost of CRVS system improvements would be US\$3.3 billion with annual costs of US\$220 million (see Figure 3).

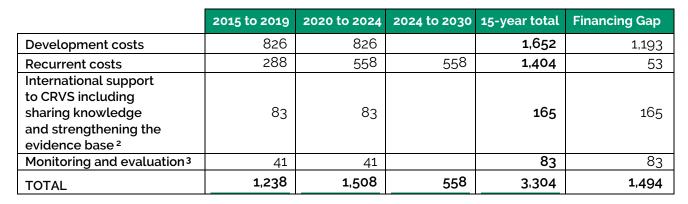


Figure 3: Estimated financing gap (in USD millions) for improvements to CRVS systems between 2015 and 2030, based on Scaling Up Investment Plan

Source: SDSN 2015; reprinted with permission.

Figure 3 shows the financing gap based on the initial 10-year cost of U\$S2.75 billion and additional recurrent costs incurred between 2025 and 2030, estimated to be about US\$500 million, of which 96% is financed through domestic resources (SDSN 2015). The CoIA report estimates the financing gap, or the amount of external assistance needed, to be 52% of the total, extending through 2024. When extrapolating the scaling-up investment estimates to 2030, the authors of "Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development" assumed that initial start costs funded by international development would cease and recurrent expenditures would be funded exclusively by domestic resources. Using this logic: Of the US\$3.3 billion required for CRVS system improvements across 77 countries, US\$1.5 billion will be required from the international community between 2015 and 2030.

In recent years there have been a number of efforts to increase investment in CRVS systems. In 2014, the UN Secretary-General convened the Every Woman Every Child Summit in Toronto, Canada to draw attention to the urgent issue of maternal, newborn, and child health. The summit was followed by a commitment from the Government of Canada, the Government of Norway, the United States Agency for International Development (USAID), and various other entities to establish the Global Financing Facility (GFF) to support the health of women and children. Canada made commitments of US\$200 million to the GFF, of which US\$100 million was committed to improving CRVS systems (Government of Canada 2015).

In 2017, Bloomberg Philanthropies' Data for Health Initiative committed US\$100 million to 20 low- and middle-income countries over four years. The aim of this initiative is to strengthen the quality of health data and data use, including increasing birth and death registration and improving the quality of causeof-death data, which is critical to understanding maternal mortality. Public health organization Vital Strategies, co-funded by Bloomberg Philanthropies and the Australian Government, is the implementing partner. It serves as an interesting implementation partnership as it includes the funders as well as other expert groups such as the CDC Foundation, Johns Hopkins Bloomberg School of Public Health, the University of Melbourne and the WHO (Vital Strategies 2018).

These are generous initiatives; however, both focus on just a handful of countries, leaving more than 85% of current needs unmet. As such, it is crucial that a compelling case is made to increase investment in global CRVS systems. Section 4 highlights some of the evidence of the powerful economic, political, and social impacts of a robust CRVS system and explains why it is a judicious long-term investment for the public sector, as well as an area of substantive economic return for private investors.

4. MAKING THE CASE FOR INVESTMENT

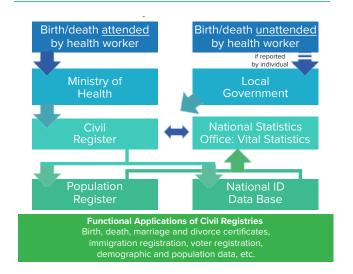
The need to scale up investment in CRVS systems is clear. With a shortfall of over 85% of the required funding, innovative partnerships and fundraising models will be required. In particular, it is imperative to show national governments the centrality of functional CRVS systems for effective governance and administration and for economic growth; to show the international community the ripple effects of investing in CRVS for other social and economic outcomes; and to show private investors the opportunities for business development in various technologies related to identification. The following section considers the economic, political, and governance benefits that can be derived from building strong CRVS systems, with particularly positive effects for women's empowerment and for national economies and societies as a whole.

A. Economic returns

The first and most fundamental contribution of a CRVS system is that it can help provide a detailed record of the whole national population, complementing the national census. It provides a thorough picture of individual circumstances, such as whether individuals are married, divorced, or have children. This information is essential for a robust and efficient national taxation system, which can be adjusted to take into account personal circumstances including number of dependents. Aggregate statistics compiled from CRVS records can also complement the census by providing total population numbers, disaggregated by age, gender, and other factors.

With a functional CRVS system, governments can also build robust ID data bases, including birth registration number, voter IDs, and passport information. These have the potential to improve the quality of government services for individuals (see Figure 4). ID databases can take many forms, from simply a number linked to a birth certificate or a permanent tax record, to an interlinked biometric system (as in India or the Philippines), which includes information on voter ID, driving licenses, addresses, passport information, immigration status, and other identifying information.¹

Figure 4: The Flow of Information within a Functional CRVS System



Source: Compiled by author.

¹ This paper does not consider the merits or demerits of any such approach, but for a good summary of the pros and cons of national ID systems, see Jacob 2018.

Getting CRVS systems right (and, for example, using them to build ID databases) can have huge impacts on tax revenues while generating savings through improved efficiency. For example, a new national identification system in the Philippines is expected to generate cost savings of up to 2% of the country's GDP over a 5-year period due to more efficient allocations. This equates to US\$6.09 billion based on 2016 GDP estimates from the World Bank (Mayhew 2016). The biometric system will consolidate and eventually replace all of the information gathered from 33 different identification card systems managed by a variety of different agencies. The new system will collect a person's common reference number and basic information, including biometrics, voter status, passport number, taxpayer identification number, and health insurance number (Espey 2018).

For the private sector, the expansion of CRVS and subsequent ID systems is a huge business opportunity. The private sector has a major role to play in providing new solutions responding to the information needs of CRVS systems. For example, the information and communications technology (ICT) sector can expand mobile coverage to the entirety of sub-Saharan Africa while coupling this coverage with other services like local smart health services. In more than 60 countries in the world, including India and the Philippines, biometric technology for irisscanning, fingerprinting, and photographs are being employed for national ID programs (Gelb and Clark 2013, Gelb and Metz 2018), and 59 countries (some of which are included in the 60 above) are also deploying "smart cards" (Pala 2018) that will cover approximately 3.5 billion citizens by the end of 2021, according to digital security company Gemalto (Gemalto 2018).

Finally, CRVS systems have beneficial individual economic effects. Of the 1.7 billion of unbanked adults globally, 56% are women (according to the World Bank) and in developing economies, women remain 9% more likely to be unbanked than men (Sahay and Cihak 2018). Nearly one in six unbanked female adults lack documentation and cite this as the primary reason that they do not have a bank account (Hanmer and Dahan 2015). That is approximately 158 million people around the world without access to financial services, purely because of a missing birth certificate or equivalent form of personal identification.

As an example, the garment industry in Bangladesh accounts for 80% of the country's exports, and 85% of the workers there are young women. The majority of these women do not hold birth registrations or other forms of ID, and less than 20% of these workers have access to bank accounts. This means that they receive payment in cash, making it difficult to track and contest payments. This allows factory owners to exploit these women, both with regards to their hours and their pay (Cairns and Iskenderian 2015).

Giving these missing women access to identification and resultant financial services could have huge impacts upon their economic productivity and wellbeing, as well as that of the global economy. The relationship between gender equality and economic growth is well documented (World Economic Forum 2015). According to one estimate, 27% of GDP growth is wasted due to gendered economic inequality (Cairns and Iskenderian 2015). There have been a variety of studies looking at the effects of women's financial inclusion upon economic growth. For example, in 2005 the World Bank estimated that unequal education and employment opportunities were limiting Sub-Saharan Africa's economic growth by 0.8 percent per year between 1960 and 1992. They applied these calculations just to Uganda to suggest that the country could gain as much as 2 percentage points of GDP growth a year by eliminating gender equality within the education system and in access to jobs (World Bank 2005).

B. Political participation

In addition to the economic incentives for expanding CRVS and identity systems, there are clear political incentives. Aside from the fundamental human rights arguments, denying people identification limits their political engagement and their ability to vote. In the USA, the National Democratic Institute (NDI) discovered the gap in birth registration and ID documents make women less likely to register as voters or candidates, leaving women out of political decision-making and leadership roles (Hanmer and Dahan 2015). In contrast, when women have access to identification they report increased political engagement, actively exercising their right to vote, and enjoy the legal protection of being registered as a citizen. This was the case in Pakistan after the expansion of the country's Computerized National Identify Card scheme (Hanmer and Dahan 2015). CRVS systems are also crucial for an accurate voter record, as identity registers are the basis upon which the electoral roles and voter lists are often developed (Nielsen et al. 2014).

C. Efficient government

For governments, the benefits of a robust CRVS system not only for gender equality but also for efficient governance are clear. Along with the census, CRVS and identification systems provide accurate, disaggregated population counts that serve as both numerator and denominator for many national indicators. Putting in place strong CRVS systems can help build a digital reporting system across government and improve administrative record quality. As CRVS systems monitor births, deaths, and marriages, they can also complement other official statistics to help define and target services, such as child support and government pensions. But perhaps most fundamentally of all, CRVS systems are the backbone of an effective health system.

Cause of death is a vital measure for an effective health service to assess preventable diseases and conditions. When deaths are registered with accurate cause of death information, they can reveal diseases for which women or men bear a disproportionate burden, helping policymakers develop targeted public health interventions.

"Health systems worldwide depend on reliable information about causes of mortality to be able to respond effectively to changing epidemiological circumstances. Such responses depend critically on accurate data to guide decision-making. Within a health information system, accurate and timely data on the cause of death are fundamental for programme and policy development and for measuring change in the magnitude and distribution of ill-health and disease in populations" (Rampatige et al. 2014).



Dominic Chavez/World Bank

However, less than half of all deaths in the world are registered. Data from China and Rajasthan, India indicate that female deaths are less likely to be registered than male deaths (Knowles and Koolwal, 2017). This can hide considerable health service inequalities, such as the quality of maternal healthcare. A major challenge is that much global data on maternal mortality is estimated based on surveys or models, as CRVS systems are weak or lack coverage (for example, in Indonesia) (Joint Committee on **Reducing Maternal and Neonatal Mortality in** Indonesia 2013). Estimating maternal mortality from surveys is difficult and expensive. Complete registration of deaths, including maternal deaths, provides more accurate information on the health status of mothers and their children (Appel and Wahabzada 2016). Without this information, governments cannot design targeted health services and investments, thereby preventing them from using limited public resources most efficiently and effectively.



Mohammad Al-Arief/The World Bank

5. CONCLUSION AND RECOMMENDATIONS

Scaling up CRVS and identification systems worldwide is an urgent imperative for economic growth, political engagement, and perhaps most importantly gender equality and women's empowerment. The cost of this scaling is relatively modest; between 2015 and 2030, only US\$1.5 billion is needed from donors, with an equal investment of domestic resources to build the requisite systems in 77 of the most in-need countries. That is 1% of current ODA (Gurría 2018). Entities like Bloomberg Philanthropies and the Government of Canada have shown strong political leadership, investing US\$200 million dollars in CRVS expansion programs in a series of priority countries. But there is still a long way to go to ensure identification for all people worldwide, as well as effective vital statistics systems.

Fortunately, there is a compelling case for investment. For example, identification could lead to upwards of 158 million women being able to access bank accounts and financial services. Meanwhile, CRVS systems can underpin ID databases, and together these can support more sophisticated taxation systems. These systems have huge cost saving potential, such as in the Philippines (expecting cost savings of 3% of the country's GDP over 5 years through the implementation of its own national ID system). Robust CRVS systems can enable more judicious use of limited resources on public services, such as healthcare and child support, and can motivate higher voter registration. For companies, there are huge opportunities in a functional CRVS system leading to more advanced ID systems technology, as demonstrated by the 60-plus countries worldwide now moving to biometric ID systems or employing smart cards. For the international community, investing in building

effective CRVS systems ensures not only that we count the uncounted, but also that we empower more women and girls around the world. With CRVS, we can institute the building blocks for effective social and economic policies to leave no one behind.

Recommendations:

- More documented examples like those above are needed. The economic case for investing in CRVS systems should be sufficiently strong to ensure that governments make the required investment and that international partners mobilize sufficient expertise and short-term investments to get **CRVS** systems on track to a sustainable future (World Bank and WHO 2014). Lowand middle-income countries have the opportunity to benefit from the data revolution and move more quickly from paper-based systems to new ICT systems that are much less costly to maintain. New technologies create the potential to move from old, highcost, inefficient systems to new, low-cost, highly efficient systems. Such a change will require capital investment and the development of adequate new capacity, but first a stronger understanding of the costs and returns on these investments are needed.
- Political support is essential to ensure investing in CRVS systems is seen as an essential long-term solution and not an afterthought. Strongly documented economic benefits and costing can help promote political support. Several options are being considered to assist governments in priority countries to fill the financing gap for strengthening CRVS systems (World Bank and WHO 2014). However, no matter what model is chosen for the international financing and governance arrangements, the key to success will be country-level political commitment and leadership.

Countries should begin their process with an assessment of the readiness for investment. Similar to the Open Data Readiness Assessment, it is a starting point to ensure investments are aligned with national priorities, address the weaknesses in the system, capitalize on its strengths, and are based on a clear institutional framework and functioning coordination mechanism. Investments need not be limited to domestic and international funding, but rather should include private sector partnerships (World Bank, n.d.). 59

There is an opportunity to build the political and economic case for CRVS by strengthening links between CRVS and current global data financing agendas. Relevant stakeholders should take advantage of the momentum in the development data revolution to prioritize domestic and international resources for CRVS in plans for modernization of international statistics systems and national development and statistical plans. The need for better financing for data is reflected in global agendas such as the UN Cape Town Global Action Plan and the recent UN World Data Forum Dubai Declaration (UN High-level Group for Partnership Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development 2017; UN World Data Forum 2018).

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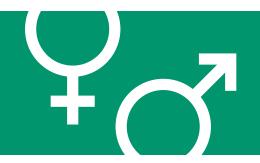
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