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Data2X

About Data2X:

- Goal: Improved gender data collection and use to guide policy and inform global development agendas (post-2015)
- Named for the power women have to multiply progress in their societies
- Coordinated by the United Nations Foundation with support and collaboration from the Hewlett Foundation and the Office of Hillary Clinton
- Launched in 2012 by Secretary of State Hillary Rodham Clinton
- Better data for women, better data for all



Types of Gaps

• Four types of gender data gaps:

- Lacking coverage across countries and/or regular country production
- Lacking international standards to allow comparability
- Lacking complexity (information across domains)
- Lacking granularity (sizeable and detailed datasets allowing disaggregation by demographic and other characteristics)

The 28 data gaps identified suffer from one or more of these types of gaps.



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More serious than routine data gaps

We all know data are limited and of poor quality in developing countries, but gaps in information about girls and women result from intrinsic biases in measurement and attention. Results: bad data and no data

- Bad data due to bias in definition of core statistics concepts, "convenience" of considering the household as a unit and reluctance to look inside the household
- No data due to the reality that some aspects of women's lives are not valued by society and therefore, not counted

And additional costs of disaggregating data by sex (or age)

Requires increasing sample sizes, having female survey enumerators



Costly Consequences of Gender Data Gaps

From biased, bad data:

Agriculture:

- Male bias in agricultural research and services partly from "blind spots" regarding women's work in agriculture.
- Cost: Average 20 to 30% lower yields for female-managed farms. Misplaced interventions.

Entrepreneurship & informal workers:

- Lack of data on women-owned SMEs, undercounting of informal economic activity (subsistence level enterprises, informal jobs) resulting in underinvestment in women entrepreneurs.
- Cost: value-added per worker is between 6% and 35% lower in female-owned than male-owned firms.



Costly Consequences of Gender Data Gaps

From reluctance/difficulty in probing inside the household:

Poverty:

- Lack of poverty metrics disaggregated by sex has led historically to antipoverty programs directed to male heads.
- Costs: poverty perpetuation?

Health:

- Lack of data for female health conditions, of sex-disaggregation in many health statistics, and problem extrapolating the male standard to in health to females.
- Cost: health services only partially address women's needs; impact on service efficiency and women's well-being



Size of measurement errors can be large:

Discrepancies in LFP rates with different survey questions (Uganda 1992/93)

LFPRs	Percentage in Labor Force	Number
Main activity only	78.3	6,470,667
Including secondary activity	86.6	7,172,816
Difference*	8.3	702,149

*Most of the 'extra' workers are women.

Source: Fox, L. and O. Pimhidzai. "Different Dreams, Same Bed." PRWP #6436 World Bank, May 2013.



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Size of measurement errors can be large:

Undercounting of Rural Female Headed Households in Central America





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Source: IICA/IDB study on Women Food Producers (1995-96).

What's Been Achieved, Where We Can Go

Recent notable progress in gender data

Major opportunities

- Gender data initiatives: IAEG-GS, EDGE, No Ceilings
- New work and employment definitions (ICLS), ILO, WIEGO
- World Bank (LSMS time use)
- Post-2015

Data Revolution: establish the priority of capturing data about girls and women, and principles about gender-sensitive data collection

Continuing challenges: data quality, data analysis capacity (data often not sexdisaggregated), data demand and usability, data openness



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Data2X Actionable Gender Data Gaps

- From 28 identified gaps, narrowed selection to "actionable data gaps" based on:
 - International awareness/momentum
 - Population coverage (the number of girls and women potentially affected by closing the gap)
 - Relative ease of filling the gap
- Identified and encouraged partnerships to address data gaps
- Filters: data quality, openness and accessibility, usability



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Data2X Partnerships

- Civil registration and vital statistics (CRVS) with UNECA; UNESCAP; INEGI, Mexico
- Implementing new definitions of work and employment with ILO, FAO, World Bank
- Big data with UN Global Pulse and academics

Partnerships in Progress:

- Women's access to financial services with GBAW and others
- Gender data for country decision-making with USG
- Violence against women



Civil Registration and Vital Statistics (CRVS)

Civil registration (CR) is the continuous, permanent, compulsory and universal recording of vital events. A vital statistics (VS) system processes these vital event data.

- Women's disadvantage
 - In many countries single mothers and women in consensual unions who are not legally married are unable to register their children without the signature of the father.
 - Poor, less educated women register their children significantly less.
 - Marriage and divorce information is often left out of a complete CRVS system.
- CRVS can have disproportionate benefits for girls and women
 - Having good marriage and divorce documents can contribute to women's ability to inherit property, among other benefits.
 - Registering girls at birth and recording their marriages provides a legal backing against early and forced marriage.
 - Strengthened CRVS allows for actual rather than estimated health statistics, including on maternal mortality and death due to diseases for which women bear a disproportionate disease burden.
 - Having an ID provides access to programs, services, rights and responsibilities



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Data2X and CRVS

- Data2X is partnering with UN, regional leaders in Africa and Asia, and the government of Mexico to strengthen the gender dimensions of CRVS. These partnerships cover over 100 countries, including Mexico, and will:
 - Analyze the gender constraints and opportunities for CRVS strengthening
 - Commission select country-level action plans, including identifying lead agencies
 - Explore innovative approaches, using new technologies and information systems, to improve the reliability of CRVS systems
- Data2X will articulate and disseminate ways to incorporate marriage and divorce information as an essential part of CRVS strengthening.
- Data2X will assist with advocacy to highlight the importance of gender constraints and opportunities, including at the global/regional levels and through women's organizations.



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Data2X and ICLS Implementation

- On October 1-2, 2014, Data2X and ILO held a joint Roundtable discussion in Geneva which brought together representatives from country statistical offices, key international and regional organizations, donors, NGOs, and users.
- Focus was on filling gender data gaps to monitor the status of women in informal employment, unpaid work and work in rural areas and agriculture.
- To do this, operationalizing the 19th International Conference of Labor Statisticians (ICLS) Resolution on work statistics is a priority.
 - 19th ICLS Resolution was adopted in 2013, updated from 1982. Brought about changes to definitions of work and employment.
- Requires technical and financial resources, data harmonization, piloting to compare implementation approaches, and advocacy/communication.

• Next steps:

- Extending partnership to the World Bank
- Identifying country-level pilots for technical assistance around implementation
- Resource mobilization



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Types Of Big Data and Pilot Projects For Gender Data

Data exhaust: digital traces of human activity

- Cell phone records*, financial transactions, etc.
 - Cell phone use and recharge patterns women's socioeconomic welfare, social network structure, mobility patterns

Online activity

- Google searches*, Twitter*, website mining (news headlines, prices)
 - "Sentiment analysis" of Twitter women's mental health, cultural gender attitudes, women's political engagement

Sensing technologies

- Satellite data*, personal sensors
 - High spatial resolution, continuous satellite data → epidemic risk, agricultural productivity, physical access to clinics and schools

Crowdsourcing

- Humanitarian reporting*, active soliciting of feedback through participation apps
 - Women's views on chosen development topics



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Big Data and Gender

- Data2X is partnering with UN Global Pulse and individual academic researchers to conduct pilot projects on ways big data can close gender data gaps.
- Example pilots include:
 - Cell phones: Construction of a model to predict cell phone users' sex based on usage patterns; if successful, inference of women's socio-economic welfare and mobility patterns using sex-disaggregation algorithms.
 - Internet: Inference and prevalence of adolescent depression using Twitter feeds; disaggregation of post-2015 opinions (sentiments) by sex.
 - *Remote sensing:* Maternal morbidity due to malaria.
- In each case, 'ground truth' studies will be conducted to understand extent of bias.
- Pilots will help UN Global Pulse institutionalize gender and big data capacity



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Key Takeaways

- Gender data gaps are large, reflecting bias and traditional social norms that see women as "reproducer."
- No data and bad data on women and girls have costly development consequences: errors in program design and failure to break cycle of disadvantage.
- To think differently about women's lives and potential, we have to measure differently.
- Better, more comprehensive information can improve *inclusive* and *informed* public policy and programs
- We're on the way, and have some timely opportunities around data revolution to improve gender data



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