11th World Telecommunication/ICT Indicators Symposium (WTIS-13)

Mexico City, México, 4-6 December 2013

Contribution to WTIS-13

Document C/14-E
6 December 2013

English

SOURCE: Women in Global Science and Technology (WISAT)

TITLE: Measuring Gender and ICT

Measuring Gender and ICT

Nancy J Hafkin, PhD
UNCTAD consultant on behalf of the Partnership.

11th World Telecommunications/ICT Symposium
5 December 2013
Mexico City

Why are gender and ICT statistics important?

- ❑ Women are the majority of the unconnected
- ❑ ICTs tend to exacerbate existing divides
  - ✓ Girls and women already on wrong side on income, literacy, scientific education divides
  - ✓ Failure to access and use ICTs will result in further marginalization
  - ✓ Question of equal rights, democracy, social and economic inclusion
- ❑ To ensure economic efficiency and national development
  - ✓ Full utilization of human resources especially important in global knowledge society
  - ✓ Every women added to the information society is an addition to national economic growth

Measurement of gender and ICT

- Concern of Partnership since 2004
- Without data, there is no visibility: without visibility, no priority
  - ✓ Lack of statistics often reflected in lack of policy
- Need for greater awareness of ICT on the part of gender statistics

Purpose of this report

- Builds on earlier gender-related statistics work of the Partnership
- Underlines gaps in collection of core access and use indicators
- Identifies main gaps based on needs and demand for indicators
- Identifies potential new gender-related ICT indicators

Current gender-related indicators

- ❑ 57 Core ICT indicators
- ❑ 12 gender-related indicators
  - ✓ Seven on individual use
  - ✓ Three on education
  - ✓ Two on e-government
  - ✓ None yet in employment or business

Demand for gender-related indicators

Categories of ICT indicator collection	Topics of demand for gender-related indicators
Household access and individual use	Accessing and using ICTs Gender barriers to the Internet
Education	ICTs and education at all levels
Employment	Employment in ICT occupations ICT in the work force ICT skills
Business	Employment in the ICT sector ICT in entrepreneurship, especially in micro-small businesses (MSEs) Use of mobile phones and Internet
E-government	Gendered access, use of e-government Availability of appropriate e-government content for women

Principles of identifying additional indicators

- National, regional and international information society policy importance
- Simple, realistic and measurable
- High probability of country response
- Minimal burden of data collection

Existing Household and individual use indicators

ID	Indicator definition	Further work needed
HH5	Proportion of individuals using a computer	No change
HH7	Proportion of individuals using the Internet	No change
HH8	Proportion of individuals using the Internet, by location	No change
HH9	Proportion of individuals using the Internet, by type of activity	No change
HH10	Proportion of individuals using a mobile cellular telephone	No change
HH12	Proportion of individuals using the Internet, by frequency	No change
HH15	Individuals with ICT skills, by type of skills	No change

Need for household/individual data

- ❑ On use of mobile phones—
  - ✓ To know the extent of M/F differentials in ownership, seen as a measure of women's empowerment
  - ✓ To look at differentials in use by M/F
  - ✓ Mobile phone activities more important than Internet in developing countries
- ❑ On individual barriers to Internet use
  - ✓ To see gender differentials and identify problem areas

Household access and Individual Use Additional Indicators

Additional indicator	Further work needed
Proportion of individuals who own a mobile phone	Definition of mobile phone ownership
Proportion of individuals using a mobile phone, by type of activity	Development of responses on mobile phone activities
Proportion of individuals not using the Internet, by type of barriers	Development of list of barriers to Internet access by individuals

Existing Education indicators

Indicator	Definition
ED6	Proportion of learners who have access to Internet at school
ED7	Proportion of learners enrolled at post-secondary level in ICT-related fields
ED8	Proportion of ICT-qualified teachers in schools

Education data needs

- Need to assess gender differentials in preparing next generation, at all levels for information society
  - Teaching and learning using ICTs
  - Global competitiveness advantage for countries that are able to institute this
  - *Leaky pipeline* phenomenon with girls and women in scientific and technical fields

Additional education indicators

Indicator definition	Further work needed
Proportion of primary and secondary school teachers trained to teach subjects using ICT facilities (ISCED 1-3) (sex disaggregated)	Based on existing UNESCO (non-Core indicator)
Proportion of pupils enrolled in programmes offering computer-assisted instruction (ISCED levels 1-3) (sex disaggregated)	Based on existing UNESCO (non-Core indicator)
Proportion of pupils enrolled in programmes offering Internet-assisted instruction (ISCED levels 1-3) (sex disaggregated)	Based on existing UNESCO (non-Core indicator)
Proportion of pupils enrolled in programmes offering courses in basic computer skills or computing (ISCED 1-3) (sex disaggregated)	Based on existing UNESCO (non-Core indicator)
Proportion of graduates in ICT-related fields at post-secondary non-tertiary and tertiary levels (sex disaggregated)	Based on existing UNESCO (non-Core indicator)

Employment data needs: ICT occupations

- ❑ Strong demand for data, especially disaggregated by sex, on employment in ICT occupations
- ❑ High policy relevance
- ❑ Work needed on accepted definition of ICT employment
- ❑ Knowledge of gender distribution of ICT employment critical to national economic growth and competitiveness

Proposed ICT employment/occupations indicator

Indicator	Methodological work needed
Proportion of employees in ICT occupations (sex disaggregated)	Definitions and measurement of ICT occupations

- No existing indicators on ICT occupations

Data needs on the ICT sector

- ❑ The ICT sector comprises the production of ICT goods and services (OECD definition)
- ❑ Disaggregation of data by sex would indicate:
  - ✓ women's share of employment in this sector

Existing ICT sector indicator

Existing indicator: ICT1	Further work needed
Proportion of total business sector workforce involved in the ICT sector	Member States agreement on classification of ICT sector and sex disaggregation

- This indicator collected by UNCTAD since 2004, with scarce but improving data availability, but not disaggregated by sex

Need for data on women in business

- ❑ **Business use** indicators
  - ✓ To measure the access to and use of ICT by women in the business sector
  - ✓ Collected through enterprise surveys
  - ✓ Are there differences in workforces composed primarily of men or primarily of women in their access to and use of ICT?

Existing business indicators

Proposed revision		
All business access indicators	Addition of filter question on gender composition of business employees	Precise formulation of filter question to be determined: male/female dominated, gender neutral

B1	**Proportion of businesses using computers**	**B7**	**Proportion of businesses receiving orders over the Internet**
B2	Proportion of persons employed routinely using computers	B8	Proportion of businesses placing orders over the Internet
B3	Proportion of businesses using the Internet	B9	Proportion of businesses using the Internet by type of access
B4	Proportion of persons employed routinely using the Internet	B10	Proportion of businesses with a local area network (LAN)
B5	Proportion of businesses with a Web presence	B11	Proportion of businesses with Extranet
B6	Proportion of businesses with an Intranet	B12	Proportion of businesses using the Internet, by type of activity

Need for data on women entrepreneurs

- Entrepreneurship
  - ✓ Interest from the development community in ICTs and women's entrepreneurship
  - ✓ ICTs seen as major catalyst to accelerate women's entrepreneurship
  - ✓ Concentration on micro and small enterprises, where women entrepreneurs most prevalent
  - ✓ Are women entrepreneurs as likely as men to exploit the capacities of the technology to further their productivity for the success of the enterprise?

Proposed additional indicators on entrepreneurship/small business owners and ICT

Indicator	Further work needed
Proportion of micro, small business owners/entrepreneurs using Internet by sex of owner	Elaboration and implementation of a survey instrument for micro and small businesses with an ICT module
Proportion of micro, small business owners/entrepreneurs using mobile phones by sex of owner	
Proportion of micro, small business owners/entrepreneurs using Internet by type of activity and sex of owner	Development of responses by type of activities
Proportion of micro, small business owners/entrepreneurs using mobile phones by type of activity and sex of owner	Development of responses by type of activities

ICT data availability problems

- Few countries, except in Europe, collect core ICT individual-level indicators
- Many NSOs in developing countries do not collect ICT indicators, especially on individual use
- Those that collect usage data normally can disaggregate them by sex since it is a standard classificatory variable in the household survey
- Gap has implications for the paucity of gender and ICT data

Recommendations

- Countries need to intensify efforts to collect data by sex for current partnership indicators
  - ✓ Especially ICT use by individuals, with sex as classificatory variable
  - ✓ More data needed especially on mobile phones
- Collecting gendered statistics need not be a burden
- Training of supervisory and field personnel on sensitivity to gender bias
- At international, regional and national level, more communication needed between ICT statistics and gender statistics

Going forward

- Possibilities for future work:
  - ✓ Gender equality in broadband access
  - ✓ ICT-related gender-based violence (impact)
  - ✓ Work force skills by occupational groups
  - ✓ Special attention to ICT employment indicators
- Work of existing groups, such as Expert Group on Household Indicators, ILO expert groups important
- Other priority areas to consider?

Thank you!!