Using Gender Statistics: a toolkit for training data users

UNSD/SIAP Workshop on Gender Statistics for SDG Indicators

Chiba, 12 November 2018

Why do we need a toolkit?

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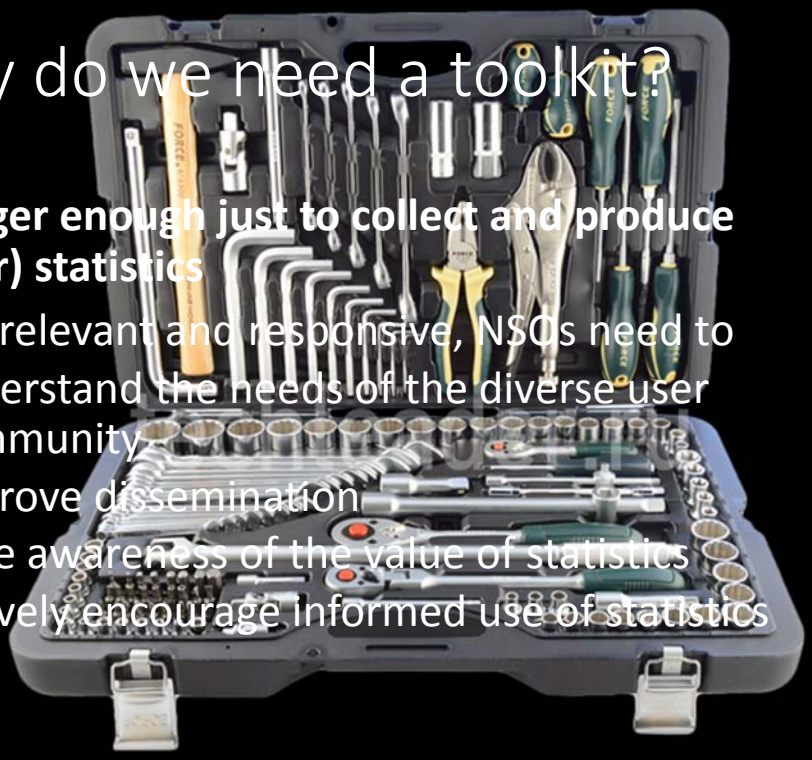


No longer enough just to collect and produce (gender) statistics

To stay relevant and responsive, NSOs need to

- understand the needs of the diverse user community
- improve dissemination
- raise awareness of the value of statistics
- actively encourage informed use of statistics

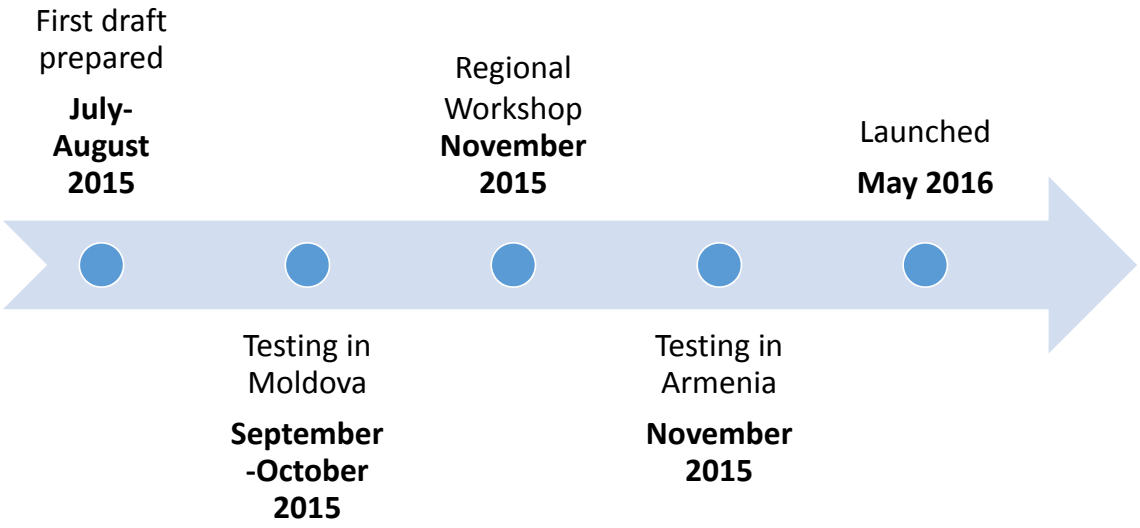
What is a toolkit?

- User-friendly explanations of concepts, definitions, indicators and data sources
- Practical exercises
- Presentation slides
- Basic tools for statistical offices to customize and re-use for their own training sessions
- Available in English and Russian

About the toolkit

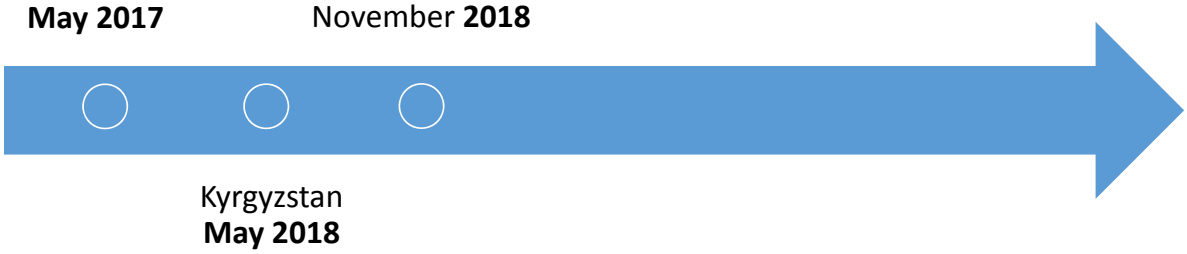
Purpose	**Support statistical systems to increase understanding and use of gender statistics**

Development of the toolkit



www.unece.org/stats/gender/toolkit

Development of the toolkit



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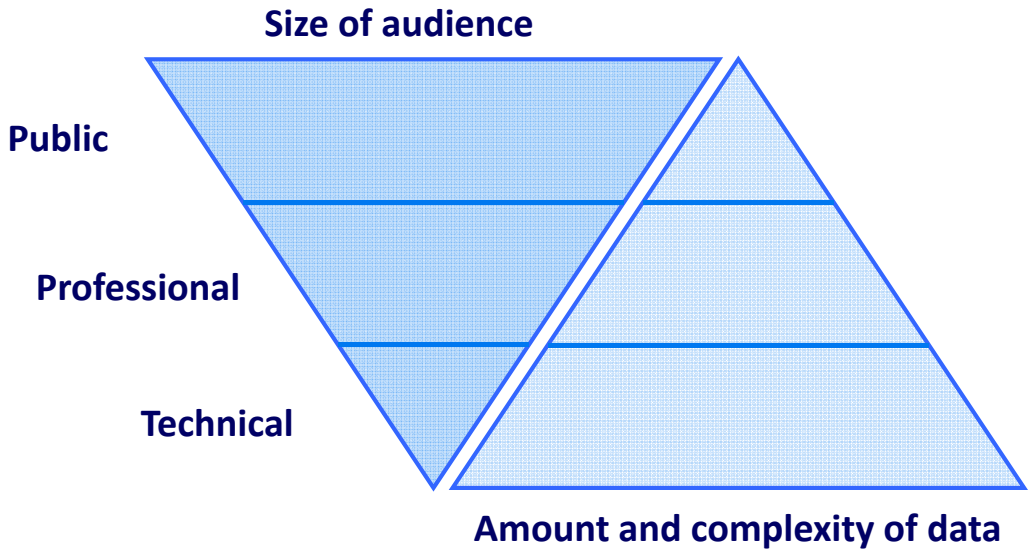
Who are the users?

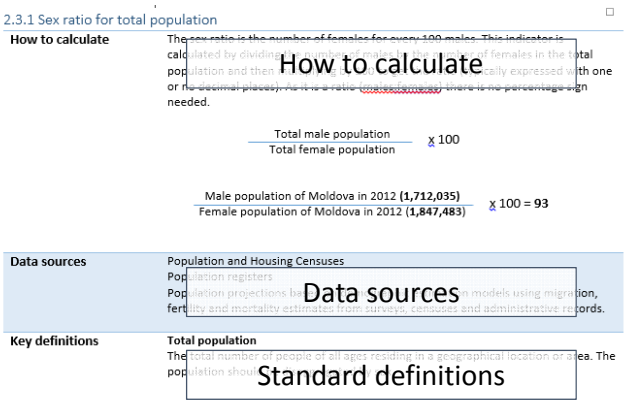


Sources: http://www.stats.govt.nz/Census/2013-census/info-about-the-census/products-services-mix.aspx
www.unece.org/stats/documents/ece/ces/ge.22/2010/zip.52.e.pdf

Module 2: Measuring the population

a) Importance of demographic indicators for gender analysis
b) Main data sources
c) Indicators

Basic overview of each indicator



Tips on what to look out for when using this indicator

Be mindful of

Sex ratios vary across sub-populations
Sex ratios can also be calculated on a sub-group of the population, e.g. people living in urban versus rural areas, on in a particular city or administrative area.

Sex ratios at birth is a different indicator
The sex ratio at birth is different from the sex ratio of the total population, and the sex ratio of the elderly population. The normal ranges for each measure are relatively consistent across populations and are due to biological differences between males and females. Biologically, a higher number of boys are born than girls (between about 104 to 107 male babies for every 100 female babies). On average, females are more resistant to disease and tend to live longer than males. Also, the tendency for males to engage in more risky and violent behaviour increases their chances of premature death.[5] So the sex ratio at birth favours males, but the sex ratio for the elderly population favours females (ratio is less than 100).

Normal ranges for sex ratio of the total population
In gender-neutral societies, where males and females are subject to the same living conditions, the sex ratio for the total population tends to be between 98 and 100.[6] In 2015, the sex ratio for total global population was 102, but ranged from 274 in the United Arab Emirates to 85 in Latvia and Lithuania (86 in Ukraine).[7]

Practical examples

Example

Total population (all ages), selected regions and countries, 2012

Data needed to calculate the sex ratio

Resulting calculation

	Female	Male	Sex ratio
European Union-28	259,339,081	247,291,379	95
Armenia	1,573,567	1,450,560	92
Azerbaijan	4,679,645	4,616,138	99
Georgia	2,349,394	2,141,304	91
Kazakhstan	8,691,313	8,100,112	93
Kyrgyzstan	2,837,242	2,770,269	98
Moldova, Republic of	1,847,483	1,712,035	93
Russian Federation	76,936,816	66,264,905	86
Tajikistan	3,909,796	3,987,516	102

Help users understand what it means

How to interpret this indicator

Basic interpretation

- Sex ratio of **less than 100** → more females than males
- Sex ratio of 100 → same number of females and males
- Sex ratio **greater than 100** → more males than females

What impacts on sex ratio?
Understanding the things that will impact on a sex ratio can guide further research and interpretation of this figure. Any event that has a disproportionate impact on the birth, death or migration of males or females will affect the sex ratio. These include biological, social and economic factors, such as:

- tendency for women to live longer
- son preference
- employment-related migration
- risks to health, such as alcohol, smoking and violence
- wars and conflicts

For example, the low sex ratio for the total population of Russia (86), is largely due to the significant gap in life expectancy between men (59 years (2009)) and women (73 years (2009)). This is thought to be caused by differences in alcohol consumption by men and women (men tend to binge drink vodka whereas women

What to do about it

Policy implications

Abnormal sex ratios can emphasise the outcomes of socio-economic factors, such as male or female tendency to migrate from rural to urban areas or to other countries to seek employment, or the preference for male children over females. Monitoring how the sex ratio changes between different populations (e.g. urban versus rural) and over time provides essential evidence that, when combined with research into the causes, can inform where policy interventions are needed to get the balance back in the normal range.

What is the added value of the toolkit?

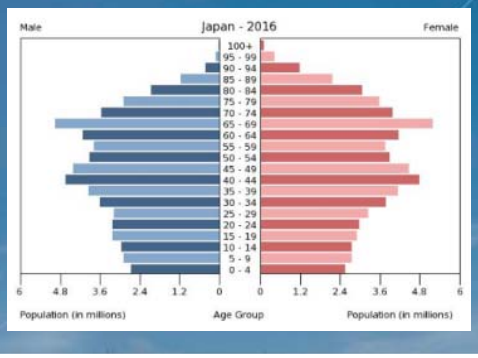
- Draws on existing resources
- Presents from a user perspective
  - Steps through what they need to know
  - Guide to interpretation
  - Connection to policy issues
- Latest data and information
- Regional examples
- Practical activities
- Basis to construct own training

Outline

1. What is demography?
2. Demography and gender
3. Data sources
4. Sex ratios
5. Fertility rates

What is demography?

- The study of human populations
- Structure and change (dynamics) of populations
- Births, deaths and migration



Demographers produce indicators such as:

- Fertility rates
- Life expectancy
- Migration rates
- Population growth estimates

Demography and gender

- Fundamental to monitoring gender relations
- Sex ratios
  - How many women are there compared to men? Overall and in different age groups?
  - Are many more boys born than girls?
  - Sex ratios can point to gender differences in health, migration…

Demography and gender

- Fundamental to monitoring gender relations
- Sex ratios
- Reproductive patterns
  - When do people marry and have children?
  - How many children do they have?
  - Can provide evidence about roles, stereotypes, reproductive rights…

Demography and gender

- Fundamental to monitoring gender relations

- Sex ratios
- Reproductive patterns
- Composition of households
  - Single-headed households
  - Grandparent-headed households
  - Rural-urban location
  - Can indicate gender differences in migration, expectations of women…

Main data sources

Main data sources in your country

- Population and housing censuses

Japan: Every 5 years, last one 2015

- Civil registration systems (births, deaths, marriages)

Varying quality across region

- Demographic and health surveys

e.g. Philippines 2017, Timor-Leste 2016, Nepal 2016, Myanmar 2015-16, India 2015-16…

- Population registers

e.g. registers of residents (Japan, India…)

What is a sex ratio?

Guide:
100 = same number of males as females
Less than 100 = more females
More than 100 = more males

	Female	Male
European Union-28	260,597,789	248,796,586
Armenia	1,570,493	1,434,095
Azerbaijan	4,843,592	4,805,749
Belarus	5,074,596	4,415,020
Georgia	1,940,790	1,776,281
Kazakhstan	9,065,624	8,478,502
Kyrgyzstan	3,008,339	2,948,932
Moldova, Republic of	1,844,443	1,709,664
Ukraine	22,922,416	19,752,854
Uzbekistan	15,603,361	15,695,568

Source: UNECE Statistical Database, compiled from national and international (Eurostat and UNICEF TransMONEE) official sources. Data refer to 2015

Sex ratio at birth

- There are 104-106 boys born for every 100 girls
- Standard biological level

Source: United Nations Population Fund. 2012. Sex Imbalances at Birth: Current trends, consequences and policy implications.

Sex ratios, Japan, 2018

Sex ratio	Females	Males	Sex ratio
Sex ratio of total population	64,934	61,532	94.8
Sex ratio at birth*	490	515	1.05
Sex ratio for older people (age 65+)	20,034	15,382	76.8
Sex ratio for oldest-old (age 85+)	3,900	1,739	44.6

Source: Statistics Bureau of Japan, Final Population estimates of 1 May 2018 (data on live births are from 2015).
Figures are in thousands

What impacts sex ratios?

- Biological differences
- Tendency for women to live longer
- Son preference
- Labour migration
- Health-related behaviours (alcohol, smoking, physical activity, violence)
- Wars and conflicts

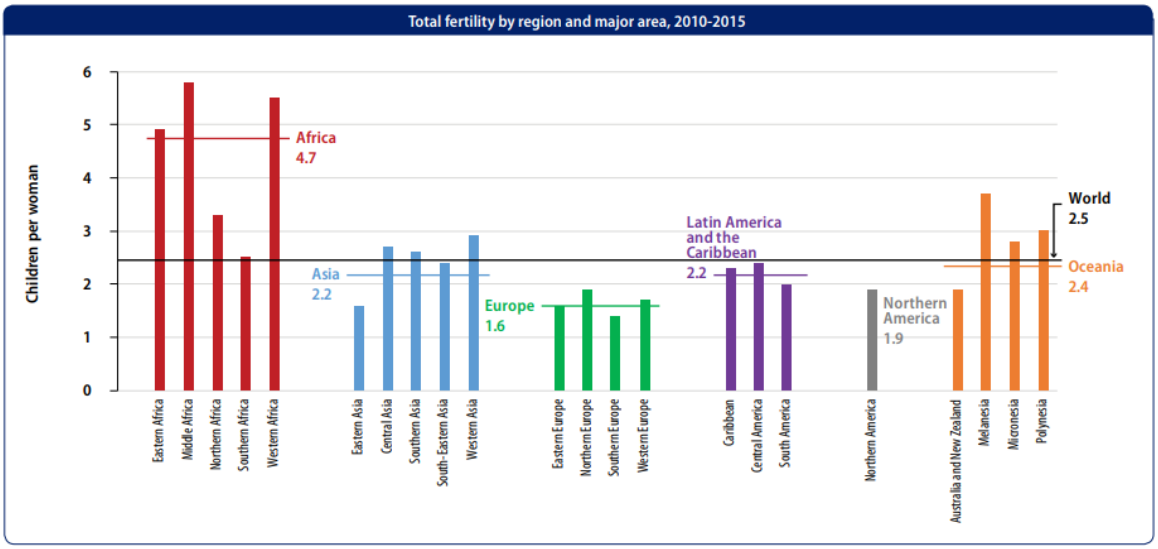
Fertility rates

- Consequences of fertility
  - Structure of population
  - Demand for services
  - Economic production
  - Burden of care in the home
  - Environmental impacts

Total Fertility Rate (TFR)

- The average number of live-born children a woman would have, in total, if she passed through her childbearing ages experiencing all the age-specific fertility rates of a given year
- Usually expressed as 'the number of children per woman'
- Not simply all babies divided by all women!
- Not the same as the lifetime fertility of a cohort, e.g. those born in 1950

Global fertility is now 2.5 children per woman



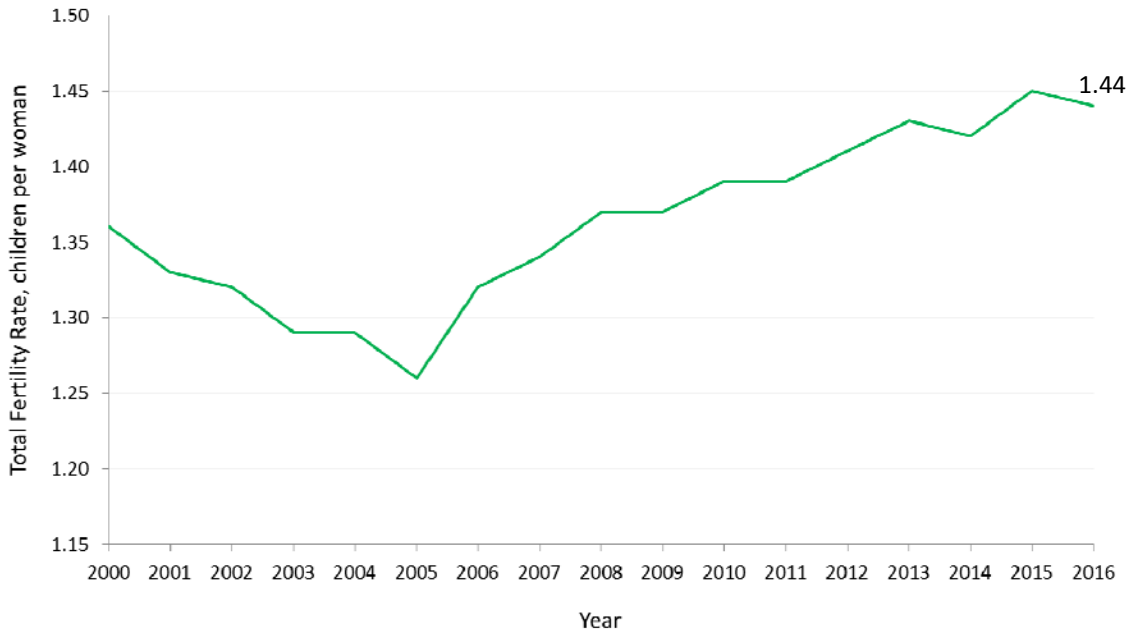
Source: UN DESA, World Fertility Patterns 2015

How to interpret the TFR

- Key factor influencing population growth/decline
- Replacement level fertility: TFR of ~2.1 children per woman

Total fertility rate		
TFR of 2.0 or lower	Low fertility	• Becoming the norm for many countries: Eastern Asia, Europe, Northern America, AUS/NZ • Population ageing & decline
TFR of 2.1 – 3.1	Moderate fertility	• Global average is 2.5 • Rest of Asia, Latin America & Caribbean, Oceania • 'window of opportunity'
TFR of 3.2 or higher	High fertility	• Eastern, Middle and Western Africa • Population growth, economic , health & environmental challenges

TFR in Japan, 2000-2015



Source: Source: Statistics Bureau of Japan, System of Social and Demographic Statistics

Fertility rates across the region

Low

- China 1.60
- Singapore 1.23
- Thailand 1.53
- Viet Nam 1.96

Moderate

- Bangladesh 2.22
- Malaysia 2.11
- India 2.44
- Sri Lanka 2.11

High

- Cambodia 2.70
- Philippines 3.05
- Pakistan 3.72
- Timor-Leste 5.91

Source: UN DESA World Population Prospects 2017 Revision

Fertility and gender

- Low fertility
  - Ageing population – caring for older people
  - Pressure to produce sons
- High fertility
  - Health risks for mother and children
  - Limits paid work opportunities; increases unpaid work
  - Reinforces lower status of women