Gender data and multi-level disaggregation: an LNOB perspective to SDG monitoring

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29 January 2019
Bangkok, Thailand

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United Nations Entity for Gender Equality and the Empowerment of Women

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GENDER EQUALITY AND WOMEN'S EMPOWERMENT

5 GENDER EQUALITY — CROSS-CUTTING PRIORITY ACROSS ALL SDGS
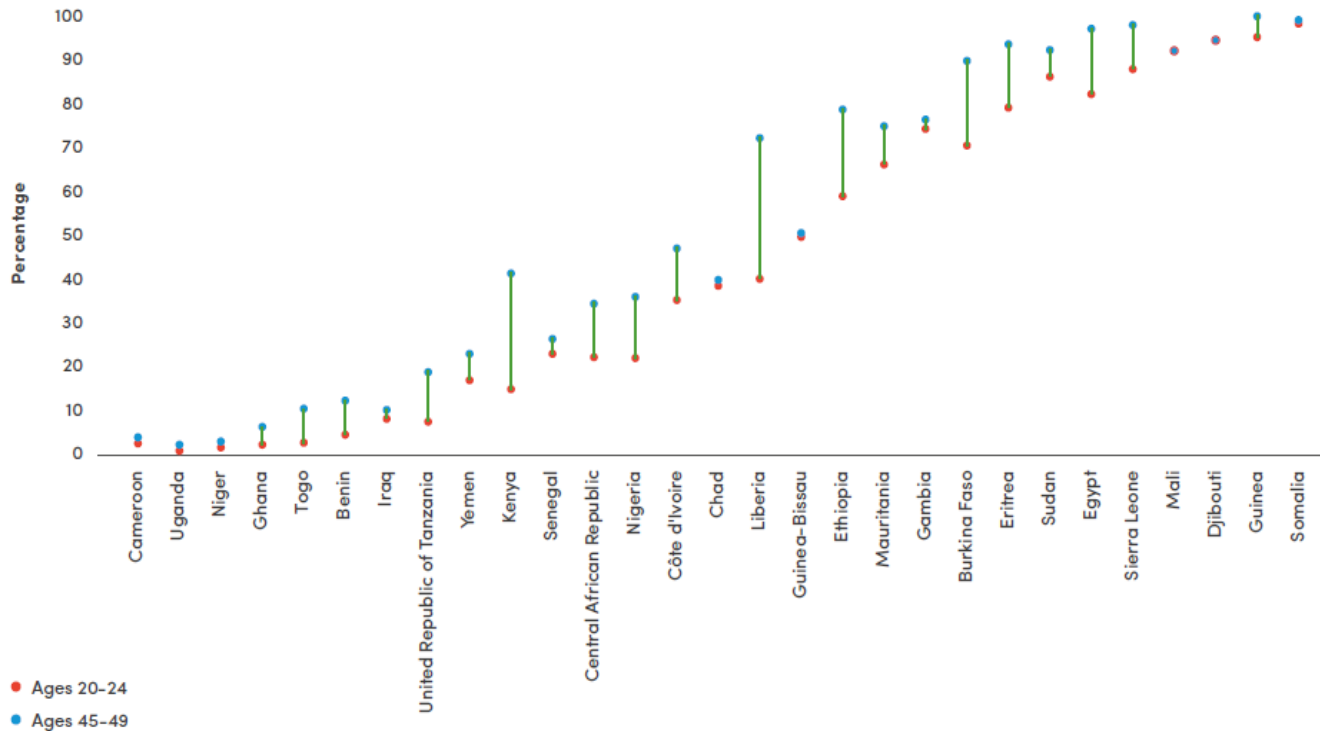
85 gender relevant

54 gender specific

LNOB

- Achieve sustainable development for women and men
- Utilize gendered indicators throughout
- Go beyond national aggregates

1) Targeted gender-specific indicators

FIGURE 3.11

PROPORTION OF WOMEN WHO HAVE UNDERGONE FGM BY AGE COHORT (20–24 AND 45-49), 2004-2016
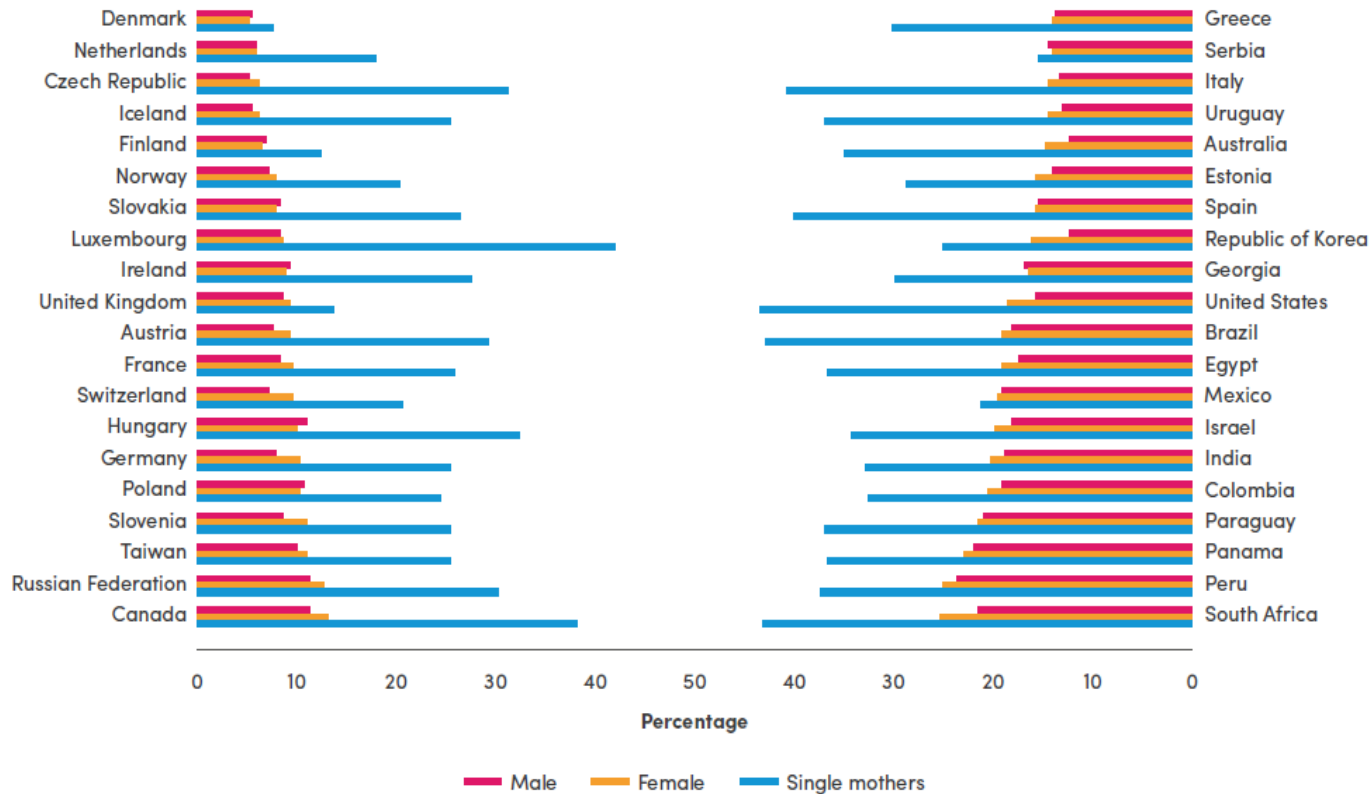

- Have to do with women or men specifically
- Currently only present in some goals
- Many available from surveys

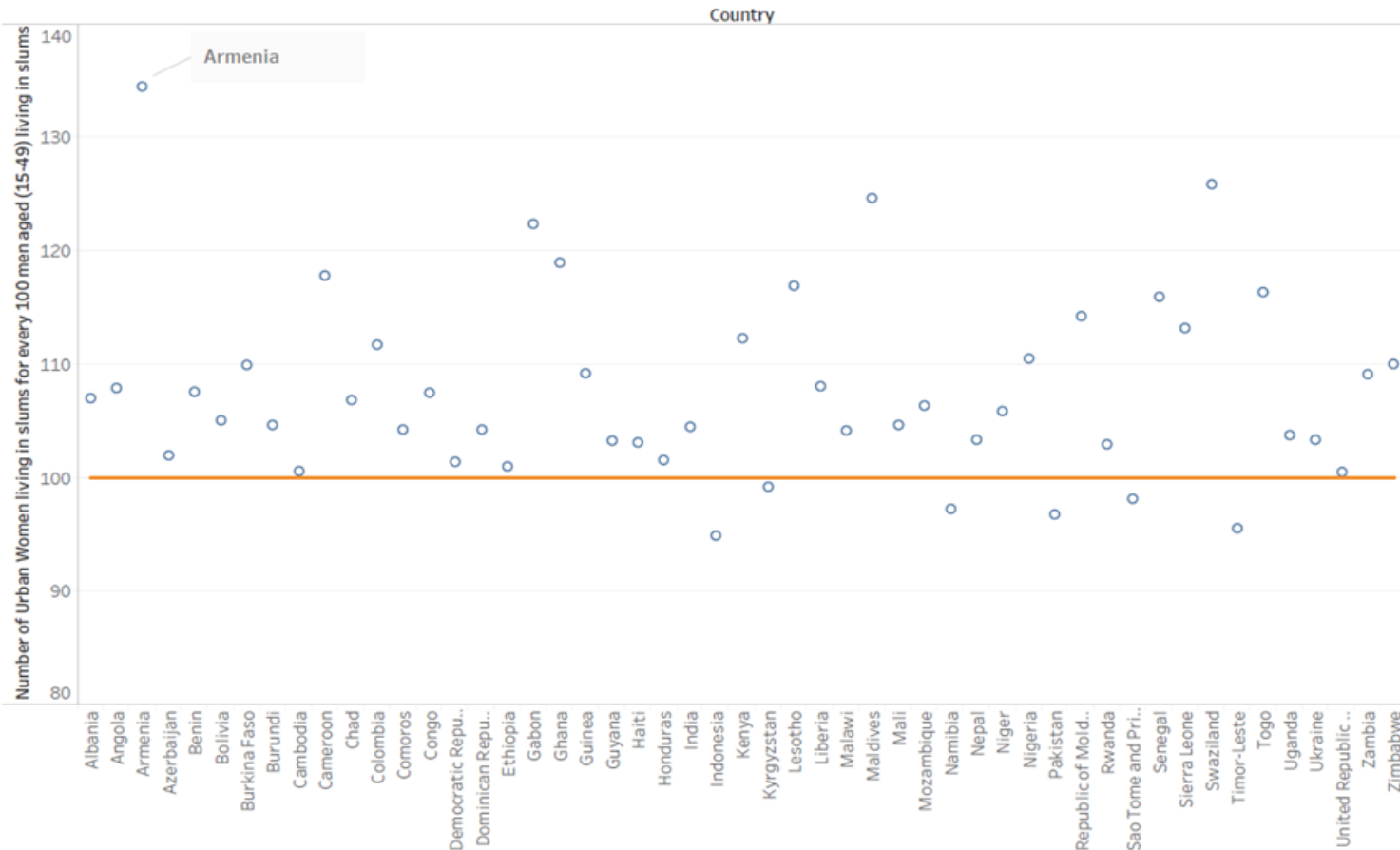## 2) Explicitly sex-disaggregated indicators

FIGURE 3.22

PERCENTAGE OF PEOPLE LIVING BELOW 50 PER CENT OF MEDIAN INCOME, BY SEX, 2007-2013

- Official indicator name explicitly indicates "by sex"
- Currently only present in some goals
- Available from surveys, census, CRVS

3) Gender-relevant indicators

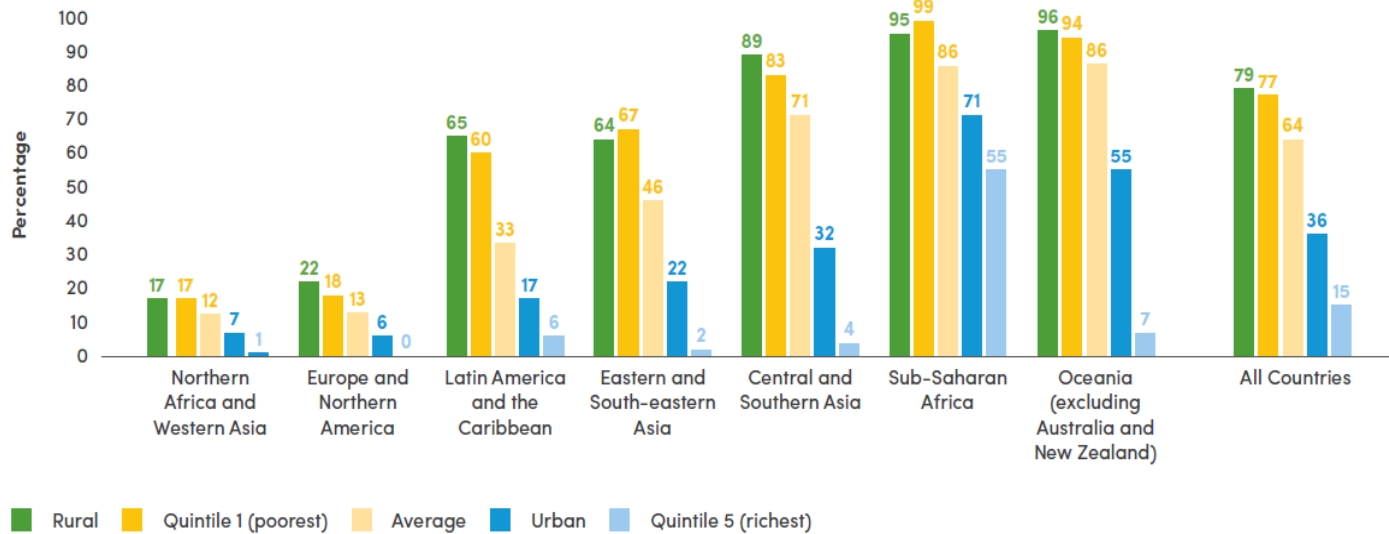Urban Women Living in Slums for 100 men living in slums

- Official indicator name does not make explicit mention of sex BUT sex disaggregation is possible
- Could be found across many goals
- Many available from surveys

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4) Additional indicators that capture a gender angle

FIGURE 3.19

PROPORTION OF HOUSEHOLDS WITH PRIMARY RELIANCE ON SOLID FUELS, BY REGION, LOCATION AND WEALTH QUINTILE, 2013-2016

- Rural
- Quintile 1 (poorest)
- Average
- Urban
- Quintile 5 (richest)

Source: UN Women calculations using data from WHO 2015b and UN Women calculations for countries where post-2013 microdata were available from DHS.

Note: Data refer to latest available in reference period for 92 countries. Regional aggregates are weighted based on the respective country population. Quintiles refers to wealth quintiles, where poorest are the bottom 20 per cent of households in the wealth distribution and richest are the top 20 per cent of households in the wealth distribution.

- Official indicator name does not make explicit mention, but the issue is relevant to women/men specifically
- Could be found across many goals
- Many available from surveys

# Considerations when choosing disaggregation variables

- Need to chose based on relevance/context

  - Sex (and gender identity)

  - Age (older/younger population)

  - Location (beyond urban/rural)

  - Migratory status (how recent, proxy variables)

  - Ethnicity (group's sample size)

  - Wealth Quintile (income or wealth index?)

  - Religion (only relevant for some indicators and countries)

  - Marital status (combined with having children)

  - Managerial level (beyond senior/not)

  - Others
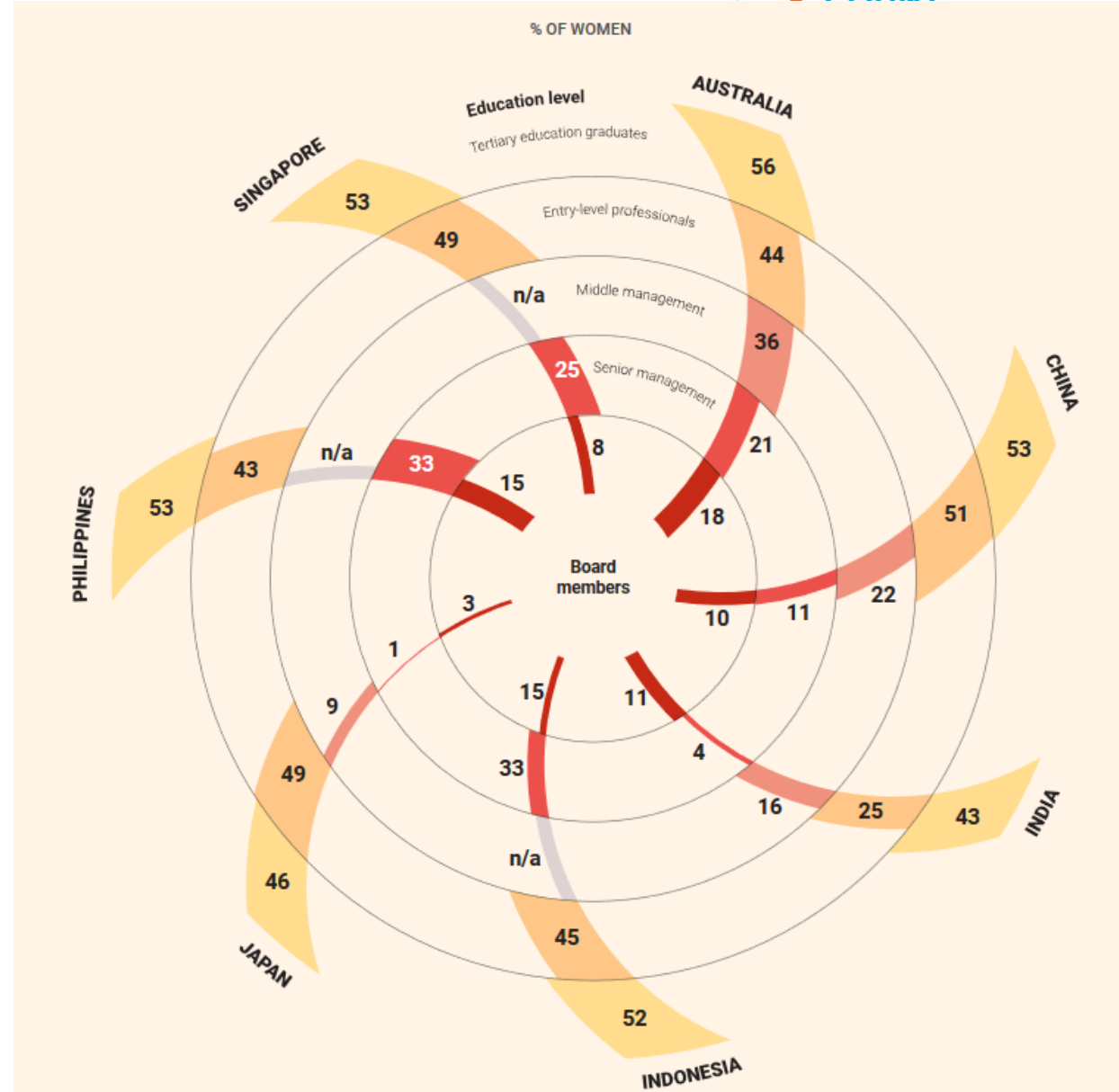
Disaggregating by more than one dimension

FIGURE 3.2

PROPORTION OF PEOPLE LIVING IN EXTREME POVERTY, BY SEX AND AGE, 2009-2013
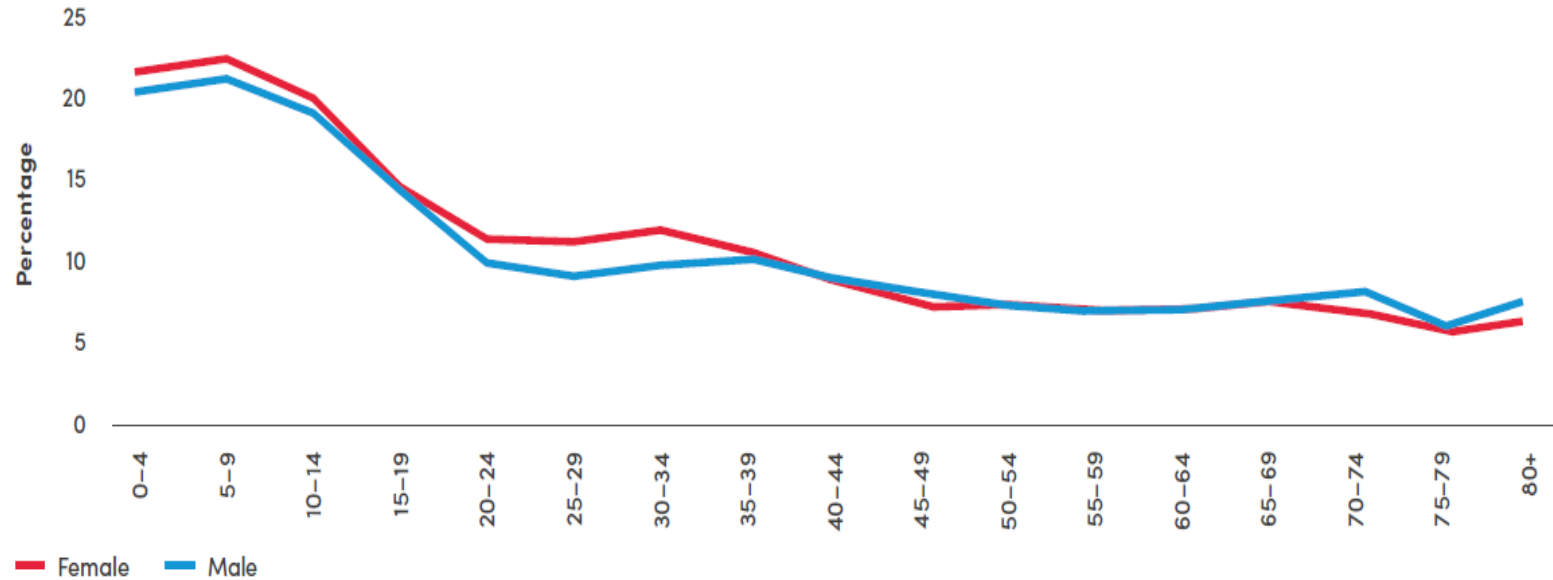
Source: World Bank calculations using Global Micro Database 2017, see UN Women and World Bank forthcoming.
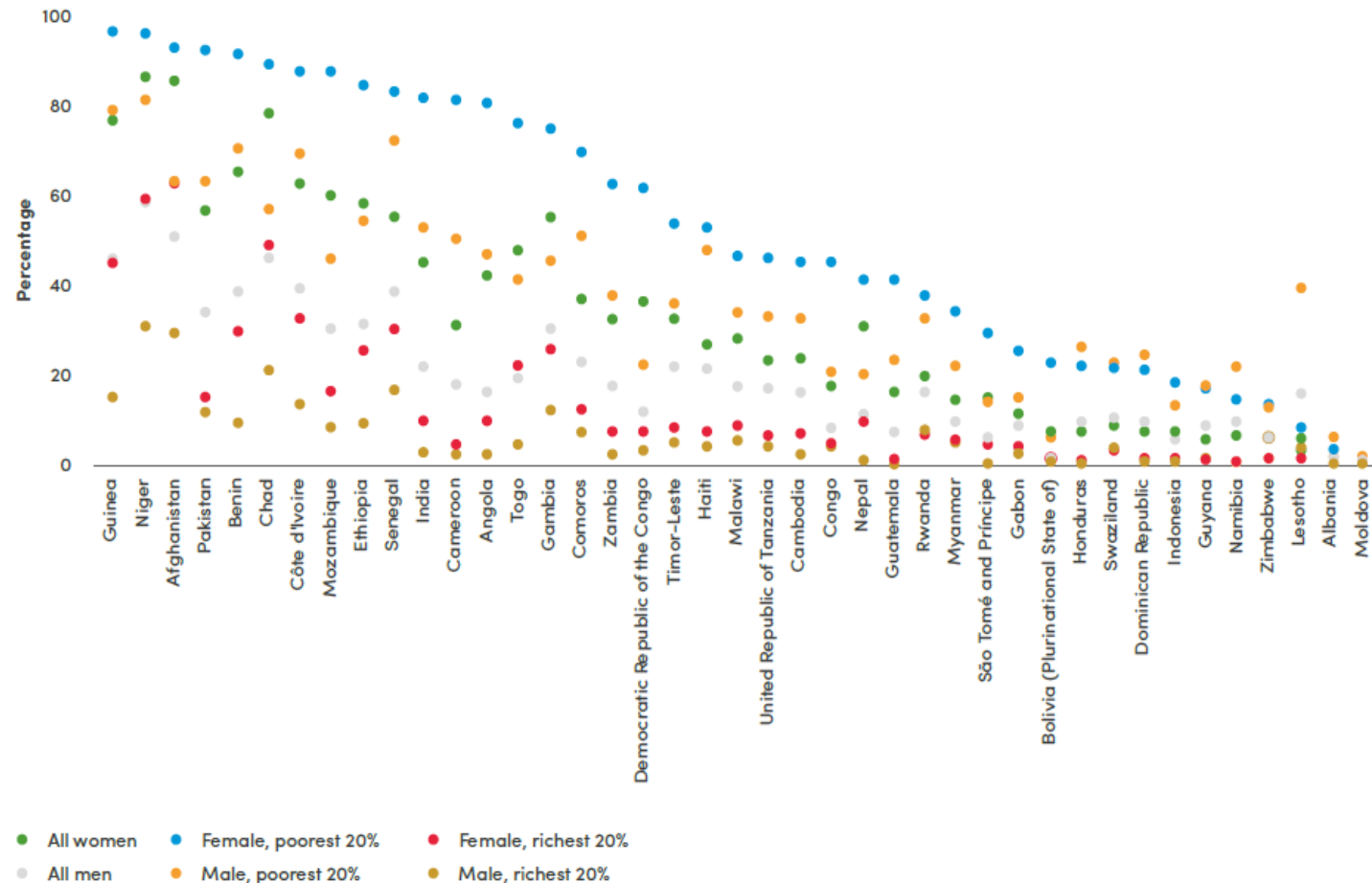
Note: Data refer to the most recent available during the period specified for 89 developing countries.

- E.g. by sex and age, (official indicator indicates many disaggregation variables but not necessarily simultaneous)
- Disaggregation at multiple levels show groups that are lagging behind

FIGURE 3.7

ILLITERACY RATE AMONG POPULATION AGED 15-49, BY SEX AND WEALTH QUINTILES, 2005-2016

Legend:
- All women
- All men
- Female, poorest 20%
- Male, poorest 20%
- Female, richest 20%
- Male, richest 20%

An LNOB perspective: aggregates can be deceiving

Proportion of women (20-24) who were married or in a union before 18, India

Rural Poorest 42
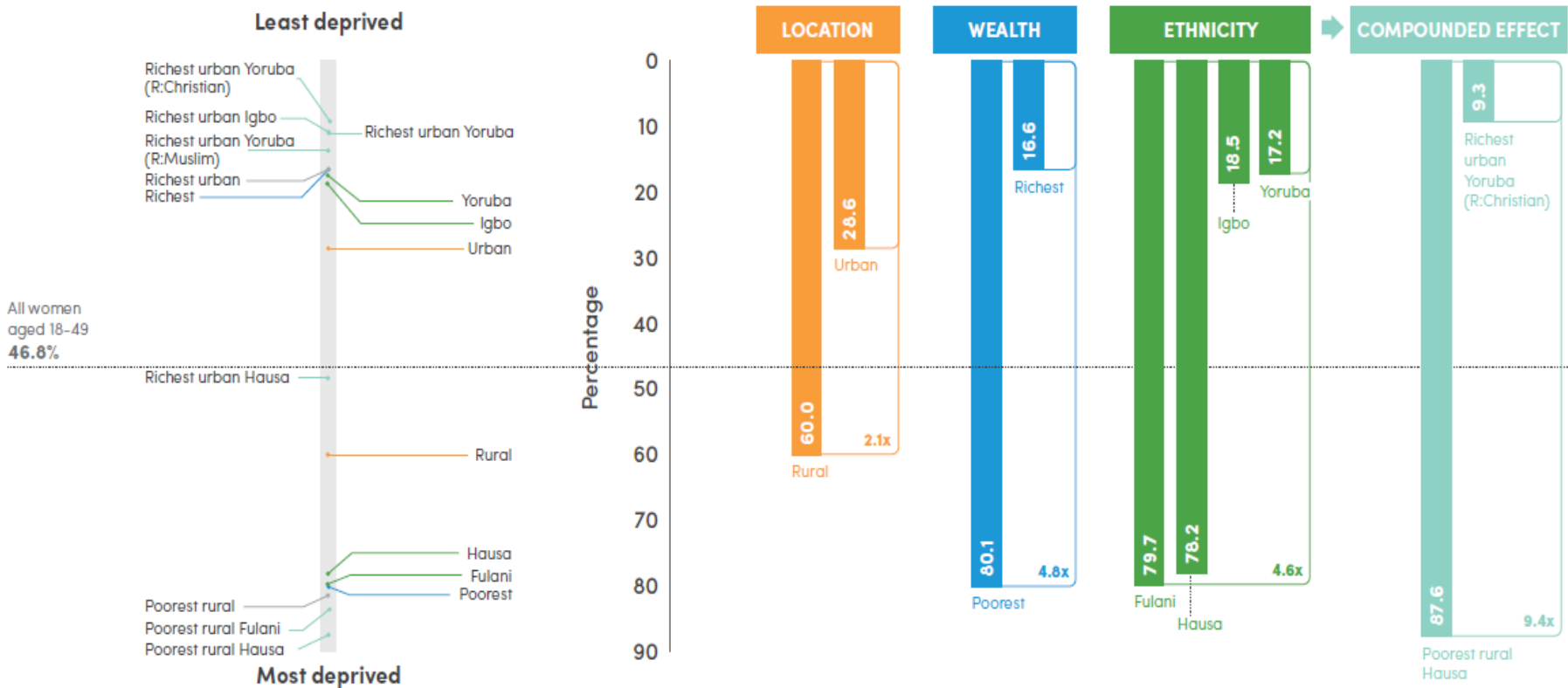
27.3

National Avg

Urban Richest 8.3

Rural Poorest Saraiki 62.7

Rural Poorest 58.5

Rural 44.8

40.2

National Avg

Urban Richest 23.9

Urban Richest Punjabi 17.9
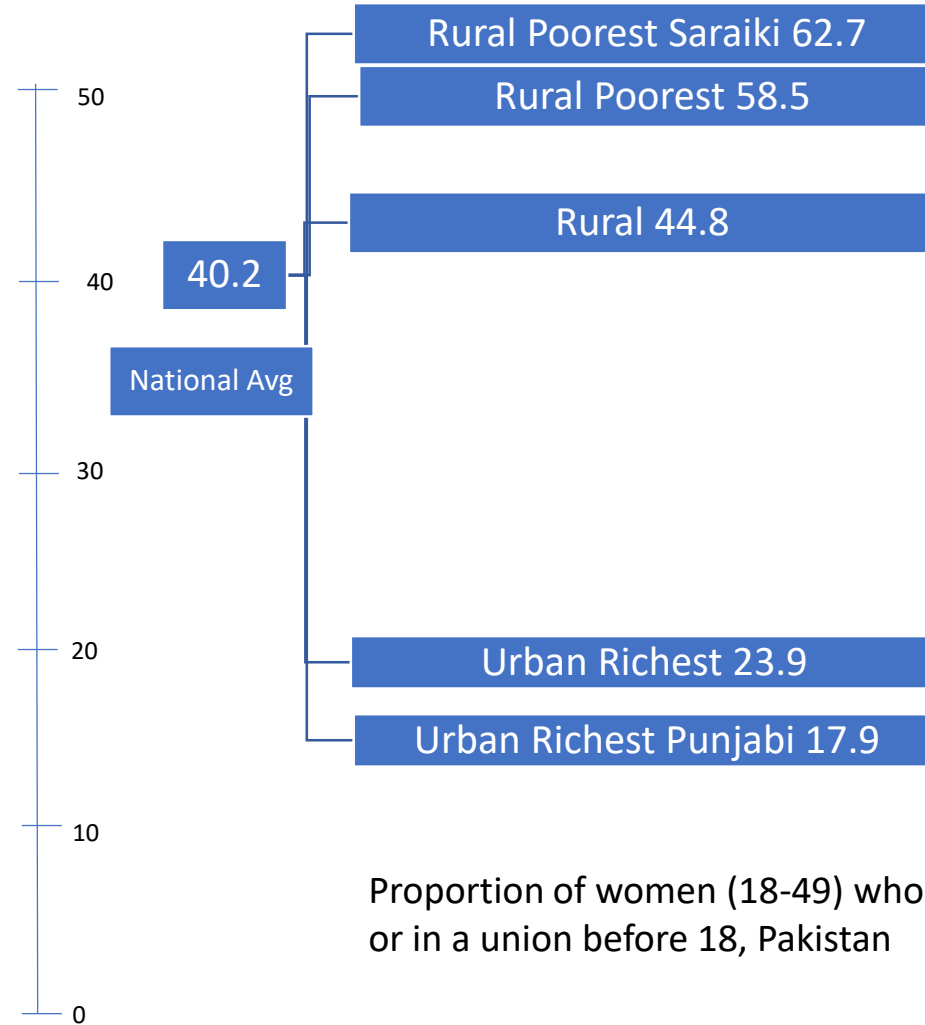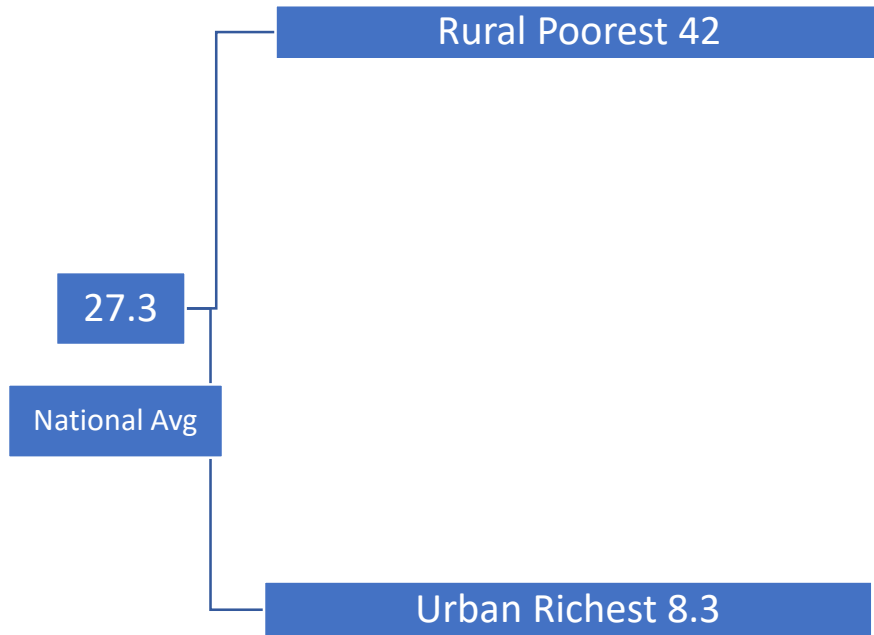
Proportion of women (18-49) who were married or in a union before 18, Pakistan

50
40
30
20
10
0

FIGURE 4.17

PROPORTION OF WOMEN AGED 18–49 IN NIGERIA MARRIED BEFORE AGE 18, BY LOCATION, WEALTH AND ETHNICITY, 2013

- Multiple forms of discrimination compound into large levels of deprivation

- To identify sectors of the population that are lagging behind, it is necessary to disaggregate at multiple levels

FIGURE 4.4

INEQUALITIES BETWEEN POOREST RURAL AND RICHEST URBAN INDIAN WOMEN, VARIOUS INDICATORS, PERCENTAGE, 2015-2016

Rural poorest
Urban richest
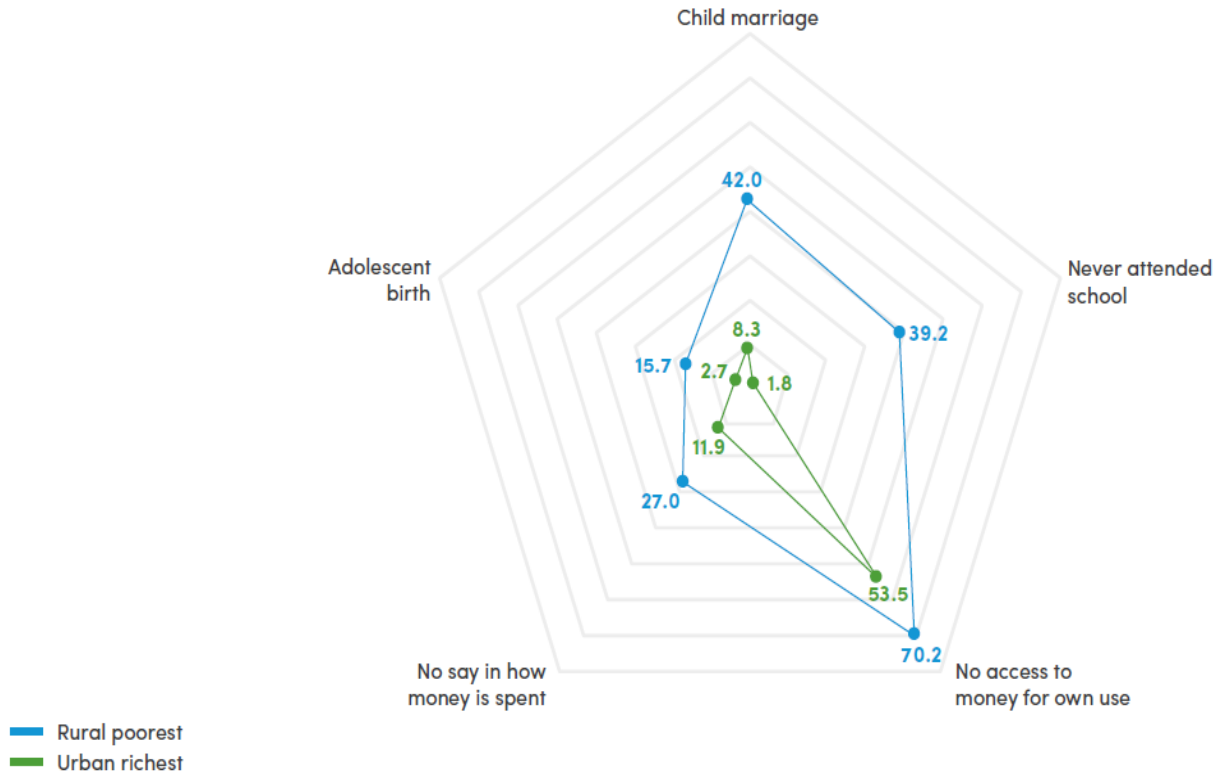
Source: UN Women calculations based on microdata from the India National Family Health Survey (NFHS-4/DHS).

- Promoting sustainable development across those groups could have a multiplying effect for SDG achievement

- Disaggregation at multiple levels for a set of indicators is often achieved through survey data analysis

INEQUALITIES IN SDG-RELATED OUTCOMES BETWEEN DIFFERENT GROUPS OF WOMEN AND GIRLS, PAKISTAN, 2012-2013
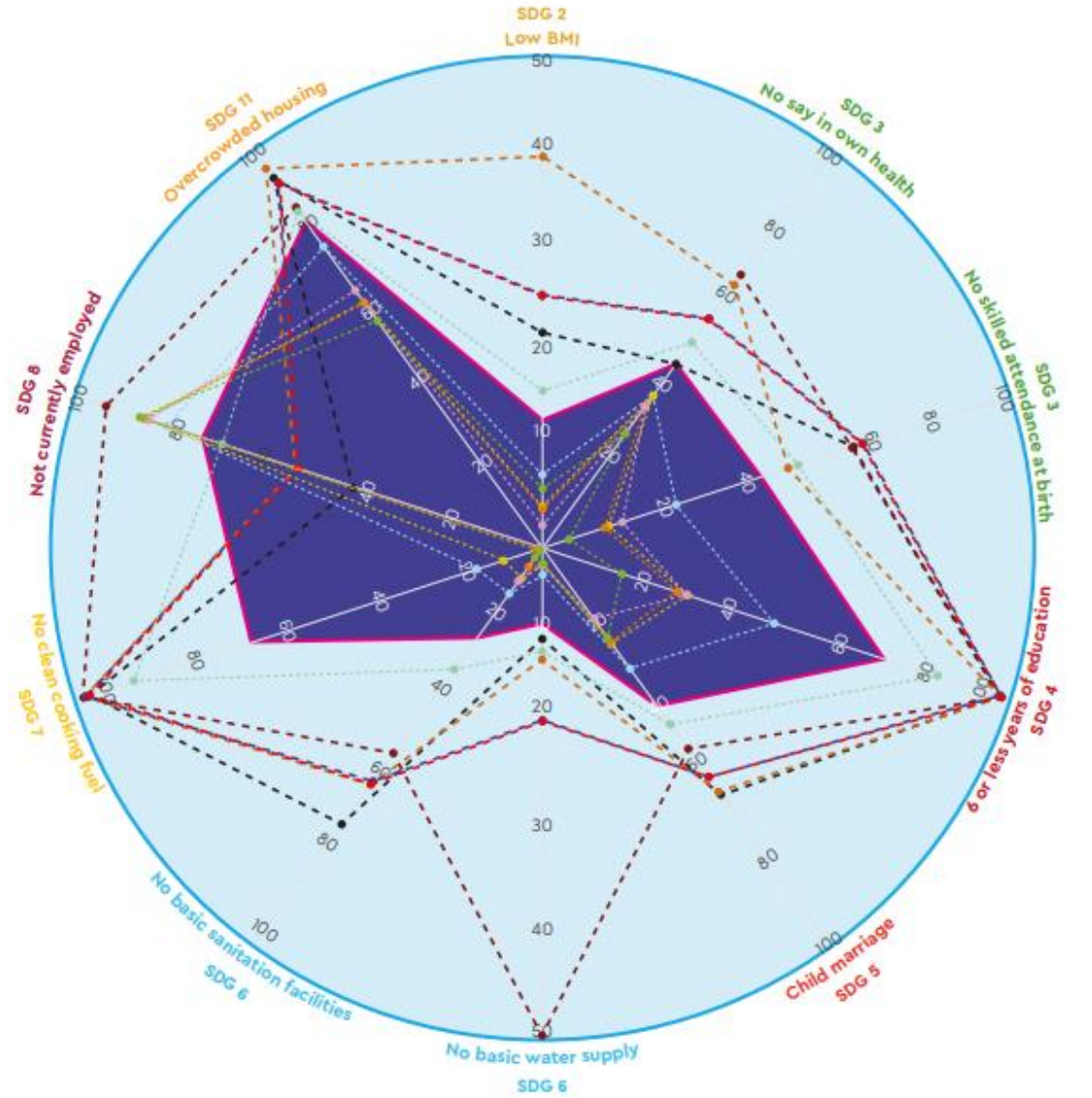
SDG 2
Proportion of women aged 18–49, who are underweight (BMI less than 18.5 kg/m2)

SDG 3
Proportion of women and girls aged 15–49 who do not have an independent/ joint say in own healthcare

SDG 3
Proportion of births not attended by skilled health personnel (births in last five years)

SDG 4
Proportion of women and girls aged 15–49 with six or less years of education

SDG 5
Proportion of women aged 18–49 who were married before age 18

SDG 6
Proportion of women and girls aged 15–49 with no access to basic drinking water services

SDG 6
Proportion of women and girls aged 15–49 with no access to basic sanitation facilities

SDG 7
Proportion of women and girls aged 15–49 with no access to clean cooking fuel

SDG 8
Proportion of women aged 18–49 currently not employed

SDG 11
Proportion of women and girls aged 15–49 living in overcrowded housing

Groups

- Poorest
- Urban
- Richest urban
- Richest urban Urdu
- Poorest rural Pashtun
- Poorest rural Saraiki
- Richest
- Rural
- Poorest rural
- Richest urban Punjabi
- Poorest rural Sindhi
- National aggregate

Deprivation exceeds the national average
Deprivation lower than the national average

FIGURE 4.24

INEQUALITIES IN SDG-RELATED OUTCOMES BETWEEN DIFFERENT GROUPS OF WOMEN, UNITED STATES, 2015
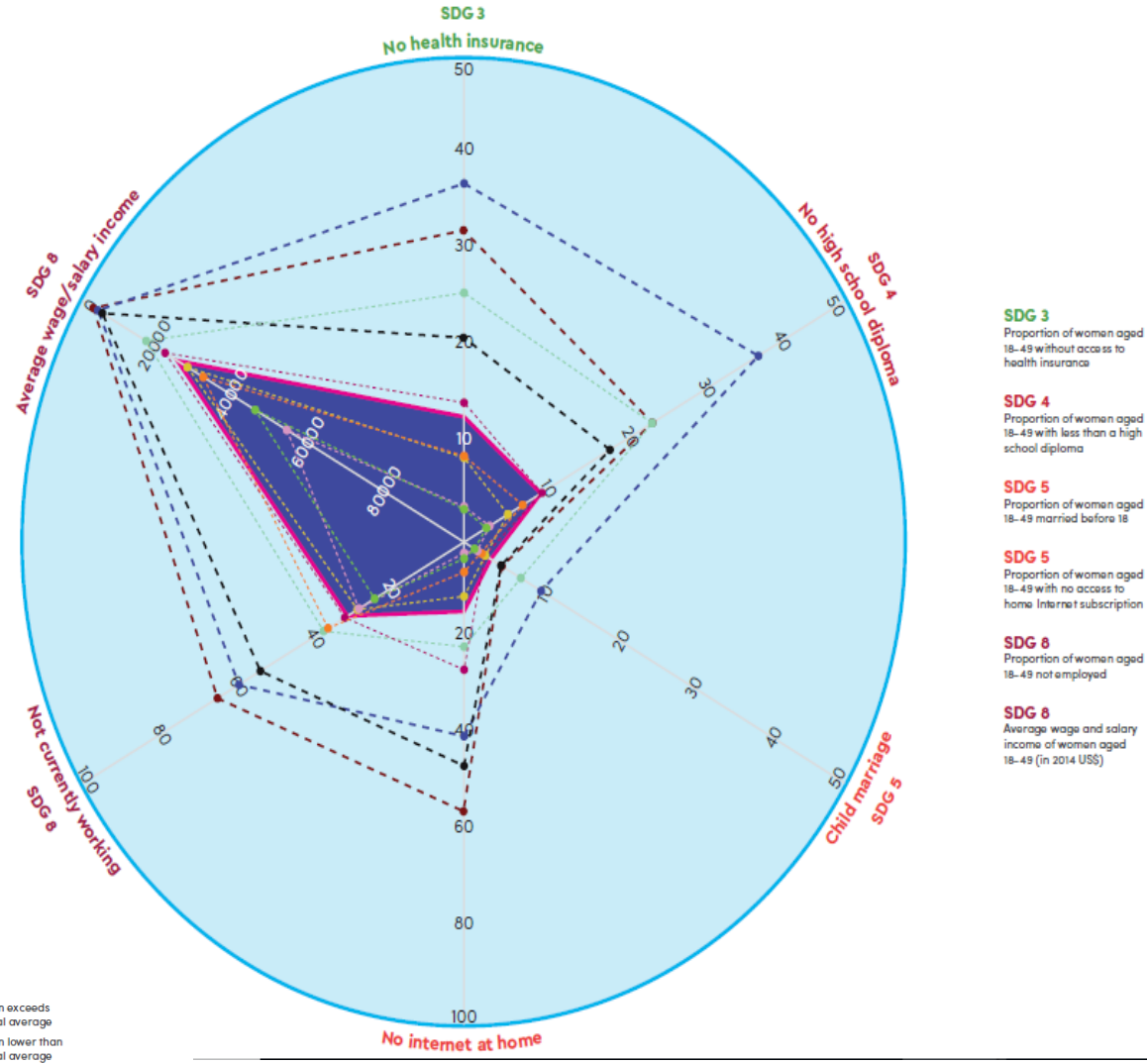
SDG 3
Proportion of women aged 18–49 without access to health insurance

SDG 4
Proportion of women aged 18–49 with less than a high school diploma

SDG 5
Proportion of women aged 18–49 married before 18

SDG 5
Proportion of women aged 18–49 with no access to home Internet subscription

SDG 8
Proportion of women aged 18–49 not employed

SDG 8
Average wage and salary income of women aged 18–49 (in 2014 US$)

Groups

- Asian
- Asian richest
- Black
- Black poorest
- Hispanic
- Hispanic poorest
- White richest
- White
- Native American/ Alaska Native poorest
- National aggregate
- Deprivation exceeds the national average
- Deprivation lower than the national average

LNOB: how to run multi-level analysis?

What to analyze?

- Set out research questions based on national priorities, qualitative research and other evidence

What SDG indicators?

- Monitor national priorities
- Report data to international statistical system
- Analyze a specific issue

What data sources?

- Can all these indicators be extracted from the same source?
- Do we have to integrate several sources?

LNOB: how to run multi-level analysis?

Using census/surveys
- Individual level records
- To identify multiple deprivation across many dimensions the survey must cover a variety of topics

Survey limitations
- Large samples needed for disaggregating at many levels
- Sampling must allow for analysis of specific groups
- If occurrence <100 observations, estimate is not reliable
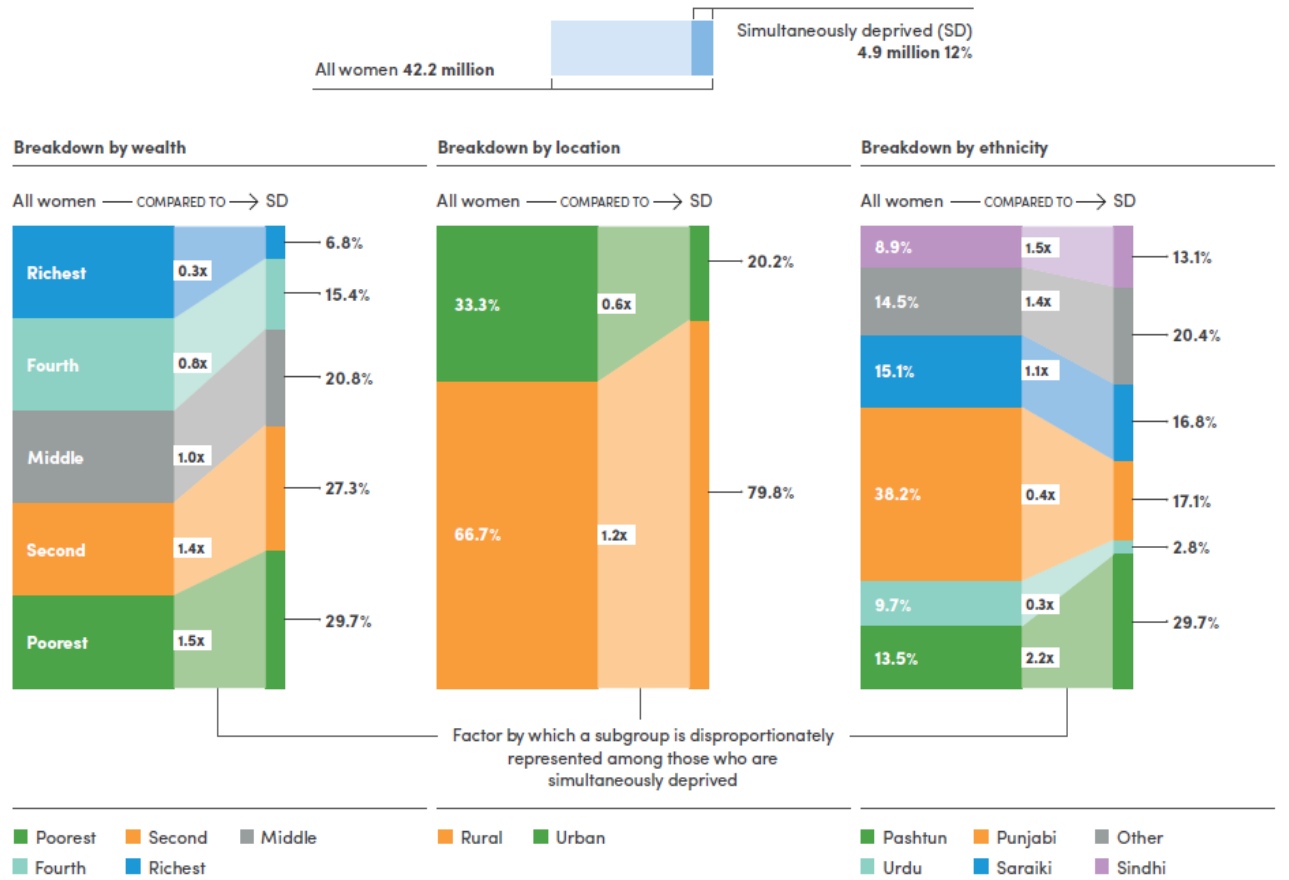
What if sample size is too small?
- Cluster groups (e.g. rarest ethnicities into "others")
- Tweak indicators (for national monitoring purposes) (e.g. age group)

To Policy Makers/Advocates

- Show select variables and/or select groups (targeted)

  - Show all variables&groups only if messaging is that same group always lags behind

- Population affected by various forms of deprivation (makes the issue more tangible)

- Simple graphs (not boring!)

  - Chose based on whether you will be able to explain (leave no room for interpretation)

  - E.g. groups that are more likely to be multiply deprived >>>

FIGURE 4.14

PROPORTION OF WOMEN AGED 18-49 IN PAKISTAN SIMULTANEOUSLY DEPRIVED IN FOUR SDG-RELATED DIMENSIONS, 2012-2013

Source: UN Women calculations based on microdata from NIPS and ICF International 2013.
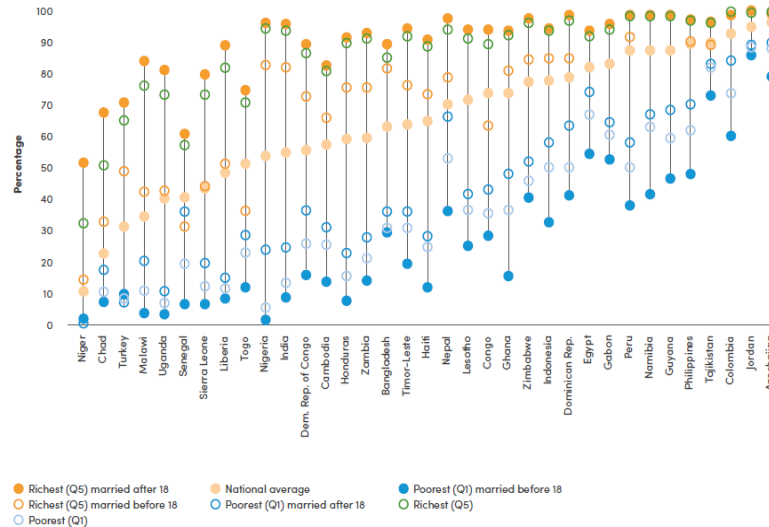
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To Statisticians/statistics experts

- Can show multiple variables and groups if the goal is to explain correlations or identifying groups

- Play with percentages, rates and totals to make your point

- Show metadata/footnotes

  - Data sources

  - Sample sizes

- Can show more than one type of graph

FIGURE 4.3

COMPLETION OF SECONDARY EDUCATION OR HIGHER AMONG WOMEN AGED 20–24, BY WEALTH AND AGE AT FIRST MARRIAGE, 2003-2016

- Richest (Q5) married after 18
- Richest (Q5) married before 18
- Poorest (Q1)
- National average
- Poorest (Q1) married after 18
- Poorest (Q1) married before 18
- Richest (Q5)

Source: UN Women calculations based on the latest round of Demographic and Health Surveys (DHS).
Notes: Based on data for 35 countries. In the case of Azerbaijan, Gabon, Guyana, Jordan, Lesotho and Namibia, the sample size for richest women married before 18 was less than 30 (not shown).

FIGURE 4.20

INEQUALITIES IN SDG-RELATED OUTCOMES BETWEEN DIFFERENT GROUPS OF WOMEN AND GIRLS, COLOMBIA, 2015