SDG 9
Scope of gender-disaggregated statistics

Romana Ransmayr
Statistics Division, UNIDO
Outline

- **SDG 9: Content and monitoring**
  The Role of UNIDO’s industrial statistics

- **SDG 9: Gender-disaggregation**
  Possibilities and data availability

- **Gender-disaggregated manufacturing employment**
  Analyses of selected countries

- **Concluding remarks**
  on gender-disaggregated (SDG 9) monitoring
SDG 9: CONTENT AND MONITORING

The role of UNIDO’s industrial statistics
SDG 9 monitoring: A new mandate of UNIDO Statistics

<table>
<thead>
<tr>
<th>What to monitor?</th>
<th>How to monitor?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of industry in sustainable development</td>
<td>▪ Manufacturing value added (VA)</td>
</tr>
<tr>
<td>Employment opportunities created by manufacturing</td>
<td>▪ Manufacturing employment share</td>
</tr>
<tr>
<td>Promotion of small scale industries</td>
<td>▪ Small-scale industries VA share</td>
</tr>
<tr>
<td>▪ Share of small-scale industries with a loan or line of credit</td>
<td>▪ Share of medium and high-tech industry VA</td>
</tr>
<tr>
<td>Role of manufacturing in innovation and technology</td>
<td>▪ CO2 emission per unit VA</td>
</tr>
<tr>
<td>Impact of industrial development on environment</td>
<td></td>
</tr>
</tbody>
</table>
SDG 9 monitoring:
Tracking progress online

UNIDO Statistics maintains data for 6 indicators related to SDG 9

Austria
High Income, Europe, Industrialized Economies

SDG 9 monitoring

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2.1 MVA share in GDP (%)</td>
<td>2016</td>
<td>17.3</td>
</tr>
<tr>
<td>9.2.1 MVA per capita (constant 2010 USD)</td>
<td>2016</td>
<td>8397</td>
</tr>
<tr>
<td>9.2.2 Manufacturing employment share (%)</td>
<td>2015</td>
<td>15.98</td>
</tr>
<tr>
<td>9.3.1 Small-scale industries VA share (%)</td>
<td>2014</td>
<td>8.54</td>
</tr>
<tr>
<td>9.3.2 Share of small-scale industries with a loan or line of credit (%)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9.4.1 CO2 emission per unit VA (kg/USD)</td>
<td>2014</td>
<td>0.13</td>
</tr>
<tr>
<td>9.h.1 Share of medium and high-tech industry VA (%)</td>
<td>2015</td>
<td>45.9</td>
</tr>
</tbody>
</table>

9.2.2 Manufacturing employment share (%)

https://stat.unido.org/SDG
Track the progress of individual countries!
SDG 9: GENDER-DISAGGREGATION

Possibilities and data availability
### SDG 9 and gender-disaggregation possibilities

<table>
<thead>
<tr>
<th>Targets and indicators</th>
<th>Disaggregation possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promote inclusive and sustainable industrialization</strong>&lt;br&gt;- Manufacturing value added (VA)&lt;br&gt;- Manufacturing employment share</td>
<td><strong>Insights into employment prospects of women</strong>&lt;br&gt;<strong>Disaggregation by sex of ownership</strong> will give insights into the quality of women’s participation in manufacturing&lt;br&gt;<strong>World Bank collects these data in enterprise surveys</strong>&lt;br&gt;<strong>The main constraint is lack of data availability</strong></td>
</tr>
<tr>
<td><strong>Promote small-scale industrial enterprises</strong>&lt;br&gt;- Small-scale industries VA share&lt;br&gt;- Share of small-scale industries with a loan or line of credit</td>
<td></td>
</tr>
<tr>
<td><strong>Support domestic technology development, research and innovation</strong>&lt;br&gt;- Share of medium and high-tech industry VA</td>
<td></td>
</tr>
<tr>
<td><strong>Clean and environmentally sound technologies and industrial processes</strong>&lt;br&gt;- CO2 emission per unit VA</td>
<td></td>
</tr>
</tbody>
</table>
2 main sources of gender-disaggregated manufacturing employment data

**UNIDO:** [http://stat.unido.org/](http://stat.unido.org/)

- Gender-disaggregated **manufacturing** employment data broken down by **individual manufacturing sectors**

  ![UNIDO data](https://example.com/unido_data)

  **Available Variables:**
  - Establishments
  - Employees
  - Wages and salaries
  - Output
  - Value added
  - Gross fixed capital formation
  - Female employees

**ILO:** [http://www.ilo.org/ilostat/](http://www.ilo.org/ilostat/)

- Gender-disaggregated employment data is not broken down by individual manufacturing sectors

**Combining data?**

- Both sources would be necessary for a comprehensive understanding of manufacturing employment
- Surveys differ. Gaps between UNIDO’s and ILO’s data are significant and data is not comparable
- Harmonization of sources is desirable but not realistic
GENDER-DISAGGREGATED MANUFACTURING EMPLOYMENT
Analyses of selected countries
Female manufacturing employment in total female employment

<table>
<thead>
<tr>
<th>Share of manufacturing employment in total female employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
</tr>
<tr>
<td>Bulgaria</td>
</tr>
<tr>
<td>Cyprus</td>
</tr>
<tr>
<td>Ecuador</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
</tr>
<tr>
<td>Lithuania</td>
</tr>
<tr>
<td>Moldova, Republic of</td>
</tr>
<tr>
<td>Turkey</td>
</tr>
<tr>
<td>Viet Nam</td>
</tr>
</tbody>
</table>

Calculation and interpretation

- Manufacturing share in female employment = \( \frac{\text{No. of female employment in manufacturing}}{\text{No. of total female employment}} \)

- SDG indicator 9.2.2 disaggregated by sex: Shows role of manufacturing in generating employment opportunities for women

- Bulgaria has achieved highest level of selected countries: More than 20% of Bulgaria’s female employees are employed in manufacturing jobs

- Many economies show decreasing share due to shift of female workers to service sectors

Source: ILO
Female manufacturing employment in total manufacturing employment

**Calculation and interpretation**

- **Female share =**
  \[
  \frac{\text{No. of female employment in manufacturing}}{\text{No. of total employment in manufacturing}}
  \]

- **Shows feminization grade of industrial employment**

- Albania, Bulgaria, Eritrea, Lithuania, Republic of Moldova and Vietnam have achieved high level of female participation in manufacturing jobs

- Analysis with better visibility of gender employment gaps will be shown on the next slide

**Source:** UNIDO
Gender gap in manufacturing employment
An analysis, which makes inequalities obvious

Difference in the number of employees by sex (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Female dominant</th>
<th>Male dominant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Azerbaijan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eritrea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kazakhstan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UNIDO

Calculation and interpretation

- Gender Gap = % of male employees – % of female employees
  Value range from 0 (= no gap) to +/-100 (= single sex dominated)

- Shows gender related employment inequalities

- Many economies show increasing gap due to shift of female workers to service sectors

- Very high level of female participation obvious in Albania and Vietnam

- Analysis of individual industrial sectors possible with UNIDO’s data and will give deeper insights
Albania: Gender gap in manufacturing employment

Interpretations

- Wearing appeal industry (low technology) drives high share of women’s employment.
- High female employment share in low technology industries while gender gap is increasing in medium and high technology industries.

Source: UNIDO
Vietnam: Gender gap in manufacturing employment

by Industry

- Wearing apparel, fur
- Leather, leather products and...
- Office, accounting and computing...
- Electrical machinery and apparatus
- Motor vehicles, trailers, semi-trailers
- Textiles
- Furniture; manufacturing n.e.c.
- Food and beverages
- Rubber and plastics products
- Printing and publishing
- Wood products (excl. furniture)
- Paper and paper products
- Chemicals and chemical products
- Tobacco products
- Non-metallic mineral products
- Machinery and equipment n.e.c.
- Fabricated metal products
- Other transport equipment
- Coke, refined petroleum...
- Basic metals

Interpretations

- High women’s participation in wearing appeal industry (low tech.) as well as in “Office, accounting and computing machinery” industry (medium and high tech.).
- Analysis of wages and/or occupations would give deeper insights (esp. “Office, accounting and computing machinery” industry), but there is a lack of data.

Source: UNIDO
CONCLUDING REMARKS

on gender-disaggregated (SDG 9) monitoring
Gender-disaggregated (SDG 9) monitoring

Concluding remarks

- Demanding gender-disaggregated data makes data collection even more challenging. Vast resources in NSOs and various UN agencies are required for national, regional, global and thematic monitoring.

- Significant gaps of gender disaggregated data seriously hampers policy making.

- SDG places high importance of data for gender mainstreaming activities.

- Active cooperation among NSOs and international organizations are essential to promote gender-disaggregated data.
THANK YOU!

For further questions:

r.ransmayr@unido.org