Using administrative data sources for producing disaggregated data

Jan. 28, 2019
Bangkok, Thailand

Insang Ryu
Legal Framework

• **Statistics Act**  
  • April 2007  
    • Article 24: The central or local government may request the administrative data from public agencies if required in order to produce official statistics
  
• **February 2018**  
  • Article 18: The head of statistics service agency shall judge in advance whether it is possible to produce statistics by utilizing administrative data before he/she obtains approval

• **Basic Law on National Taxes**  
  • February 2009  
    • Article 82: · · · National Tax Office can provide tax information · · · if any of the following conditions are met  
      5. National Statistical Office requires tax information for the purpose of producing official statistics
Use of administrative data

• Replacement, Verification, Editing

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>40</td>
<td>49</td>
<td>49</td>
<td>45</td>
</tr>
<tr>
<td>Replace all items</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Replace partial items</td>
<td>21</td>
<td>26</td>
<td>29</td>
<td>24</td>
</tr>
<tr>
<td>Verify / Edit</td>
<td>12</td>
<td>13</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>

• Official Statistics by KOSTAT

<table>
<thead>
<tr>
<th>Total</th>
<th>5yrs</th>
<th>2yrs</th>
<th>1yrs</th>
<th>1/2yrs</th>
<th>1/4yrs</th>
<th>Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>6</td>
<td>1</td>
<td>32</td>
<td>3</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>
Official Statistics
compiled by using administrative data sources

• Employment Position Statistics (2012)
• Statistics on Returned Farmers and Migrators to Rural Regions (2012)
• Business Demography Statistics (2012)
• Profit Corporation Statistics (2013)
• Statistics on Possession of Private Houses (2013)
• Newlyweds Statistics (2016)
• Retirement Pension Statistics (2016)
• Employment Position Statistics – Public Sector (2017)
• Middle-aged(ages 40-64) Statistics (2018)
Political Demands for Newlyweds Statistics

- Changes in social environment
  - Late marriage and low birth rate
  - Rising housing prices
  - High cost of wedding and child care

⇒ To make customized policies, customized Statistics are Required.
Linkage among Statistical DBs
Newlyweds Statistics

1. Basic information
   - Age for marriage
   - 1st or re-marriage
   - No. of Children
   - Nationality

2. Economic Activity
   - Occupation
   - Salary & wage
   - Single/Double-income
   - Self-employed

3. Residence
   - Type of House
   - Owned / Rent
   - No. of Possession
   - Price of House
Resident Registration Number

830422 | 1185600

YY  MM  DD  Gender  Birthplace  Serial No.  Verification No.

Birth day

20thC
1 : M
2 : F

21stC
3 : M
4 : F
17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.
<table>
<thead>
<tr>
<th>ID</th>
<th>Income</th>
<th>Gender</th>
<th>Age</th>
<th>Migratory Status</th>
<th>Disability</th>
<th>Geographic Location</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>891122-1234567</td>
<td>45,300</td>
<td>M</td>
<td>30</td>
<td>N</td>
<td>N</td>
<td>Seoul</td>
<td>12.34</td>
</tr>
<tr>
<td>700203-2468024</td>
<td>33,500</td>
<td>F</td>
<td>49</td>
<td>N</td>
<td>Y</td>
<td>Daejeon</td>
<td>13.57</td>
</tr>
<tr>
<td>790405-1357901</td>
<td>31,000</td>
<td>M</td>
<td>40</td>
<td>Y</td>
<td>N</td>
<td>Incheon</td>
<td>14.70</td>
</tr>
</tbody>
</table>
8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status

Fatal occupational injuries among employees, by sex and migrant status (per 100,000 employees)

Sources: ILOSTAT - Occupational Accidents and Injuries Records
Challenges

• Privacy protection
  • Survey : Hard to get personal information from respondents
  • Admin : Hard to get admin data from agencies

• Relation between agencies
  • Cooperation / collaboration
  • Data harmonization / standardization
Thank you

Insang Ryu
insang1@korea.kr