Panel Discussion on Impact of SWM Data in Developing Countries: An Introduction

African Clean Cities Platform (ACCP)
Yokohama, 27th August 2019

Moderator of the Panel Discussion Session
Advisor on Solid Waste Management, Global Environmental Department, Japan International Cooperation Agency (JICA)
Director/CEO, International Network for Environmental and Humanitarian Cooperation (iNehc), Nonprofit Inc, Tokyo
Reliable Data are essential for planning and implementing SWM projects

- Almost all ACCP countries and cities (82%)* could indicate the waste generation amount as well as waste generation rate, but its data source and measurement method was stated as unknown in almost all cases (89%)*.

- Many ACCP cities (79%)* showed the waste composition, however, nearly half of the cities (45%)* are unable to identify the data source; when, where, and how measured.

*Source of statistical data: ACCP Databook 2019 (Chapter 3)

Hmm......
Unreliable data may lead to inappropriate policies and plans??
## Correlation Matrix by Multiple Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>GNI(PPP)/capita USD</th>
<th>1-Support to local authorities</th>
<th>3-Effective SWM law</th>
<th>5-Policy, Strategy, Plan, and Recycle</th>
<th>7-SWM monitoring system</th>
<th>9-SWM financial system</th>
<th>HDI 2018</th>
<th>6-SWM data availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNI(PPP)/capita</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Support to local</td>
<td>0.018</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>authorities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Effective SWM law</td>
<td>0.107</td>
<td>-0.068</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-Policy, Strategy,</td>
<td>-0.018</td>
<td>-0.099</td>
<td>0.376</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan, and Recycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-SWM monitoring</td>
<td>0.181</td>
<td>0.148</td>
<td>0.084</td>
<td>0.068</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-SWM financial</td>
<td>0.009</td>
<td>-0.061</td>
<td>-0.130</td>
<td>-0.294</td>
<td>0.051</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDI2018</td>
<td>0.862</td>
<td>0.183</td>
<td>0.050</td>
<td>-0.101</td>
<td>0.239</td>
<td>-0.023</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6-SWM data availability</td>
<td>0.654</td>
<td>0.118</td>
<td>0.379</td>
<td>0.087</td>
<td>0.641</td>
<td>-0.020</td>
<td>0.625</td>
<td>1.000</td>
</tr>
</tbody>
</table>
> Availability of SWM data correlates with effective SWM law.
> It also correlates with the development status of SWM monitoring system.
How are the SWM Data used? Evidence-based Approach in SWM Project Cycle

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Reduction of environmental impacts, Waste collection coverage, Landfilling

SDG 12: Ensure sustainable consumption and production patterns
- Waste reduction, Generation rate, Recycling rate

Data Acquisition
- Descriptive Statistics of SWM Data
  - Waste generation, Waste composition, Waste stream, etc.
- Analytical Statistics of SWM Data
  - Causal Relationship, Effectiveness, Efficiency, Verification, etc.

Ensuring Social Accountability
Key Questions

How can we utilize waste data for policy intervention in SWM?

What are the challenges to establish a system for appropriate monitoring and comprehensive analysis of SWM-related SDGs in Africa?

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Waste collection coverage, Sanitary Landfill

SDG 12: Ensure sustainable consumption and production patterns
- Waste reduction, Generation rate, Recycling rate
Panelists

- **Mr. Isaac Muraya**, Director of Environment, Nairobi City County
- **Mr. Kazushige Endo**, Director, UNCRD
- **Ms. Ludgarde Coppens**, Head of Unit, SDG Data and Information Unit, Science Division, UNEP
- **Dr. Graham Alabaster**, Unit Leader, Waste Management Unit, Urban Basic Services Branch, UN-Habitat
- **Ms. Nao Takeuchi**, Waste Management Expert, Waste Management Unit, Urban Basic Services Branch, UN-Habitat