Capacity building and smart investments for innovation: What is needed in developing countries?

Johannes Jütting
Secretariat Manager, PARIS21
Context

• Huge demand on NSO’s to produce more and better data
• Existing new opportunities
• Old problems persisting

>> What role for big data – what impact on capacity development?
Big Data Paradox in development

• Great need given huge demand
  ▪ SDG’s 230 indicators

• Opportunities:
  ▪ leap-frogging
  ▪ cheaper, real-time, granular
  ▪ data in new areas
D4D project results

Model validation for literacy rates

Model results

How we see it:  How we could see it:

Big Data Paradox

- Risks
  - Same as in developed countries
  - Governance and legal framework not in place – weak to manage them

*Reality of today:* not many big data projects to produce official statistics in place
### Big data projects by NSOs

#### Percentage of NSOs with projects by Income Group

<table>
<thead>
<tr>
<th></th>
<th>HIC</th>
<th>LMIC</th>
<th>UMIC</th>
<th>LDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project(s)</td>
<td>8%</td>
<td>38%</td>
<td>54%</td>
<td>89%</td>
</tr>
<tr>
<td>No Project</td>
<td>3%</td>
<td>22%</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>No Responses</td>
<td>99%</td>
<td>71%</td>
<td>92%</td>
<td>91%</td>
</tr>
</tbody>
</table>

#### Count of projects by SDG Goal

- No Poverty
- Good Health and Well-Being
- Decent Work and... (Note: Missing label)
- Quality Education
- Zero Hunger
- Partnerships for the Goals
- Gender Equality
- Industry, Innovation and...
- Affordable and Clean Energy
- Clean Water and Sanitation
- Responsible Consumption...
- Sustainable Cities and...
- Reduced Inequalities
- Peace, Justice and Strong...
- Life on Land
- Life Below Water
- Climate Action

**Source:** 2016 Global Survey of the Task Team on “Big Data for SDGs”.
Smart investments in innovations

A working definition:

Smart investments ...

1. enable revolution, evolution and devolution of the statistical system at large
2. respond to national needs and demands
3. encourage new forms of partnerships.
Smart investments

Revolution

Building capacity for harnessing non-traditional sources of data

Evolution

Efficiency gains in traditional sources of data

Devolution

Improving public service delivery to generate admin data
Tablet-based HH surveys

- Case-study for 13,000 HH in East Africa

Paper-based data collection: $230k
- 35k Print & binding
- 5k Transport
- 146k Data processing
- 18k Office for processing
- 10k Desktops for processing
- 16k Supervisors for processing

Data collection with Android tablets: $96k
- 12k Tablets
- 9.5k Replacement & peripheral
- 62k Training & TA
- 12k Equipment field supervisor

Cost-savings in Data Processing over 3-years is 60%

PISTA: Platform for Innovations in Statistics

Identification & Classification

Statistical Capacity Assessments

Development Data Innovators

Informing Modernisation Processes

To find out more, go to pista.paris21.org
Summary

• Big Data part of the solution, in developing countries for some time smaller part
• Innovation key and critical – look at all of them: technical, institutional and governance
• Smart investment in innovation calls for supporting a comprehensive approach to capacity building
Questions

• Should NSOs in prioritise big data or statistical essentials?
• Should NSOs invest in data literacy to manage big data or leave it to the private sector?
• How do we ensure that investments in big data projects results in crowding in of national capacities?